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# Correlating Egyptian-Levantine Connectivity in Ceramic Assemblage Profiles: Between Tel 'Erani and Mizpe Sede Ḥafir

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## *Abstract*

Analysis of new data from recent excavations at Mizpe Sede Ḥafir in the western Negev Highlands has revealed complex transformational encounters between nomadic and sedentary societies at a pivotal phase of Egyptian-Levantine connectivity. A comparative, multivariate statistical analysis of ceramic assemblages from Mizpe Sede Ḥafir and Tel 'Erani revealed unexpected correlations. The extent of contact between nomadic groups and Egyptian visitors to the region was evidently much more substantial than has previously been estimated.

**Keywords:** Early Bronze Age, Egyptian-Levantine colonial relations, Sede Ḥafir, Tel 'Erani

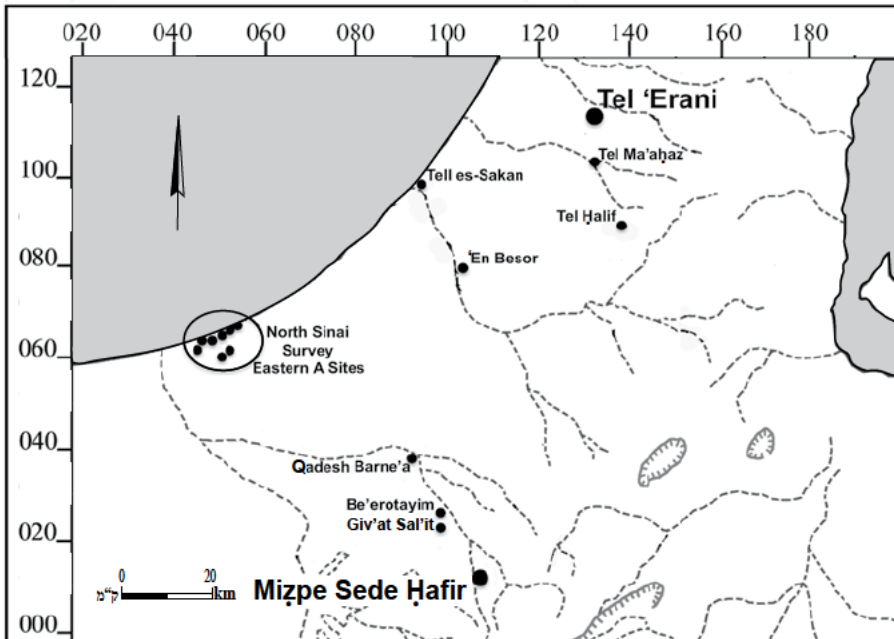
## **Introduction**

During the late fourth millennium BCE, the ties between the societies of the southwestern Levant and Egypt tightened considerably. The height of these relations was manifested by Egyptian communities settling throughout modern-day Israel's southern coastal plain and the distribution of Egyptian material culture farther afield. The establishment of Egyptian habitations in the southern Levant was large-scale at its outset. It included the foundation of a substantial, wholly Egyptian settlement at Tel es-Sakan, the import of Egyptian administration practices to 'En Besor, and the crystallization of Egyptian communities in otherwise local sites, such as Tel 'Erani (for a recent summary, see Atkins 2017).

Some scholars have argued that Egyptian-Levantine relations produced and were facilitated by a regional-scale "contact zone" that, among others, included a substantial nomadic component (Yekutieli 2004; de Miroschedji 2015). The

concept of the "contact zone" was introduced by Pratt (1991), who defined it as "social spaces in which cultures meet, clash and grapple with each other." Pratt's contact zones are dynamic areas of contention, places of innovation, creation, and social and psychological struggle. Often, they manifest as physical spaces of sustained encounters between distinct cultural actors (e.g. McFalls, Lüsebrink and Lehmkuhl 2015; Wodianka and Behrens 2017). Moreover, coupled with Turner's (1964; 1969) "liminal spaces," it was recently reconfigured to specify its constitution as a threshold of encounters (Lehmkuhl, Lüsebrink and McFalls 2015; other contributions in McFalls, Lüsebrink and Lehmkuhl 2015). It is in these areas of liminality that structures of order and interpretation dissolve and generate new meanings.

Applying these ideas to late fourth-millennium Egyptian-Levantine relations, this paper compares ceramic-assemblage profiles of an Egyptian occupation at Tel 'Erani and the Negev Highland site of Mizpe Sede Ḥafir. Doing so, we seek to investigate the scale of interactions across cultural borders and better understand the operations of the Egyptian-Levantine contact zone.



**Fig. 1.** The study region indicating key sites mentioned in the text.

## Tel 'Erani Ceramic Profiles: A New Yardstick for Egyptian-Levantine Interaction Dynamics

Due to the prolonged Egyptian presence at the site, its complex stratigraphy and the wealth of data available, Tel 'Erani offers a unique opportunity to investigate the details and intricacies of the encounter between Egyptian and Levantine societies. In 2013–2019, five seasons of excavations were conducted at Tel 'Erani by teams of Ben-Gurion University (henceforth BGU) and the Jagiellonian University (henceforth JU), Krakow.<sup>1</sup> They revealed a multi-phased sequence of Egyptian-Levantine encounters in Area D3-H, from the Egyptian arrival at the site to the end of the Early Bronze Age (EB) I (Cialowicz, Yekutieli and Czarnowicz 2016). This sequence is divided into five layers. At the sequence's base is Layer 9, a destruction layer mainly containing local ceramic types dated the late EB Ib1 "Erani C" phase. Subsequent layers, 8–5, are associated with the Egyptian colony and are marked by increasing frequencies of imported and "hybrid" ceramic types—i.e. vessels that embody a convergence of Egyptian and Levantine styles, functions, technologies, or a combination thereof.

A ceramic sample of 9,279 sherds, representing at least 1,955 vessels (henceforth MNV, i.e. minimum number of vessels), was compiled from well-defined loci. These loci consisted of spaces inside (Sq J11) and outside (Sq J12 and balk J12/K12) the main architectural complex in Area D3-H (see Fig. 2) and spanned the Egyptian colony's duration, undergoing at least three major episodes of construction (Cialowicz, Yekutieli and Czarnowicz 2016). Contexts associated with the main living floors of each layer were preferred. Pottery was also collected from several representative loci of destruction Layer 9, predating the Egyptian occupation.

A modified version of the ceramic coding system devised by Yekutieli (1998) for EB I datasets of North Sinai ceramics was applied to each vessel in the sample. According to this system, every vessel received a six-letter code that signifies key descriptive elements: function, form, plastic decoration, fabric, surface decoration, and manufacturing technique. Thus, for instance, the code "SWEMCA" refers to a large storage jar (S) with an inwardly inclined neck (W) and an outwardly-folded sharp rim (E), made of clay with crushed calcium carbonate temper (M), a hand-smoothed exterior (C) and wheel traces on the interior (A). The first half of the code, indicating vessel function and form, allows the quantification of typological

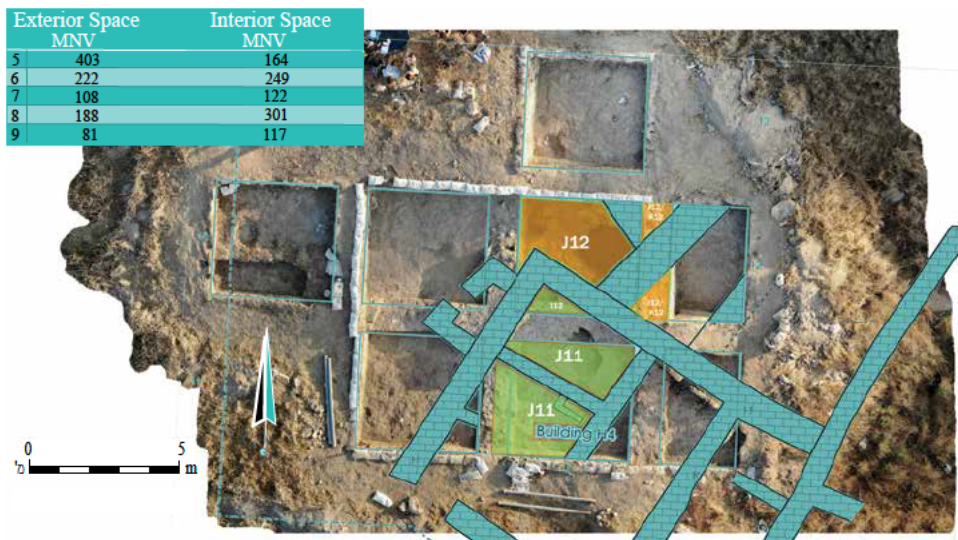
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<sup>1</sup> Renewed excavations at Tel 'Erani were conducted under the direction of Dr. Yuval Yekutieli, Prof. Krzysztof Cialowicz, Dr. Eli Cohen-Sasson and Dr. Marcin Czarnowicz.

and cultural features, while the second half, signifying vessel technology and decoration, provides access to the subtleties of cultural transference. In this manner, the constructed database allows us to generate complex statistical queries and quantitative multivariate analyses of traditionally qualitative archaeological parameters. More specifically, the database will provide approximations for the degree of hybridization. It will do so, for instance, by tracing the occurrence of straw-tempered (an Egyptian technique) Levantine vessels or wheel-thrown (a primarily Levantine technique) Egyptian vessels across layers.

Figure 2 presents the distribution of vessels (MNV) according to layer and location inside or outside the building. After collating the database, statistical queries were generated concerning functional distribution, material composition, technological change, and spatial considerations regarding cultural provenance and the extent of hybridization. The results of these queries were then analyzed to assess the form of colonial enterprise at the site and the nature of the encounter between Egyptians and locals in Area D3-H.

A detailed discussion of the results is provided elsewhere (Atkins 2021). Here, it suffices to underscore the following narrative of engagement between Egyptians and Levantines in a colonial context at Tel 'Erani:



**Fig. 2.** Area D3-H, Layer 6, at the end of the 2015 BGU-JU excavation season, indicating sampled areas inside the building (green) and outside (orange). The table on the upper left offers the minimum number of vessels (MNV) per layer and spatial attribution.

*Layer 9*, the earliest layer of the sequence, possibly prior to Egyptian habitation at the site, contained few Egyptian imports and almost no indication for hybridization of forms, fabric, decoration or manufacturing process.

*Layer 8* showed a sudden, dramatic increase in Egyptian material both inside and outside the building, accompanied by technological and aesthetic hybridizations of the ceramic traditions, including the transfer of wheel throwing and white-wash decoration in the manufacture of Egyptian types.

*Layer 7* was marked by receding hybridity that was almost eliminated, perhaps suggesting heightened tension and social anxiety.

*Layer 6* was accompanied by new spatial divisions that differentiated between internal areas used primarily for serving and storage and external areas oriented towards cooking. Also, the frequency of Levantine vessels significantly decreased inside the building while dramatically increasing outside. Hybridization also increased in this phase, proportionally doubling compared to *Layer 8*. The most convincing explanation for these patterns is that establishing clear social and spatial boundaries between Levantines and Egyptians caused a flourishing of relations.

*Layer 5* corresponds to the end of the Egyptian colony. Nevertheless, the proportion of Egyptian vessels in the assemblage remained high, and hybridization even increased by roughly 30%. We suggest that fragmenting definitions of social relations and possibly also systems of control in this phase brought out much creativity and innovations.

The temporal and spatial variations in ceramic assemblage profiles at Tel 'Erani D3-H not only reveal clear trajectories of developmental change in the pattern of relations but also establish the profiles in the ceramic database that constitute signatures of specifiable social and intercultural relations. These signatures can now be employed to explore and compare the case of Mizpe Sede Ḥafir.

### **Mizpe Sede Ḥafir: EB I Egyptian Contact in the Heart of the Desert Zone<sup>2</sup>**

In the early summer of 2017, a large site, some 2–3 ha, was identified by Lior Schwimer on a promontory at the western edge of the Sede Ḥafir plain. The site,

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<sup>2</sup> Archaeological fieldwork at Mizpe Sede Ḥafir, and subsequent laboratory studies, were carried out by a team from BGU, including Yuval Yekutieli, Samuel Atkins, Eli Cohen-Sasson, Lior Schwimer, Roy Galili, Roi Shavit and Yarden Pagelson.

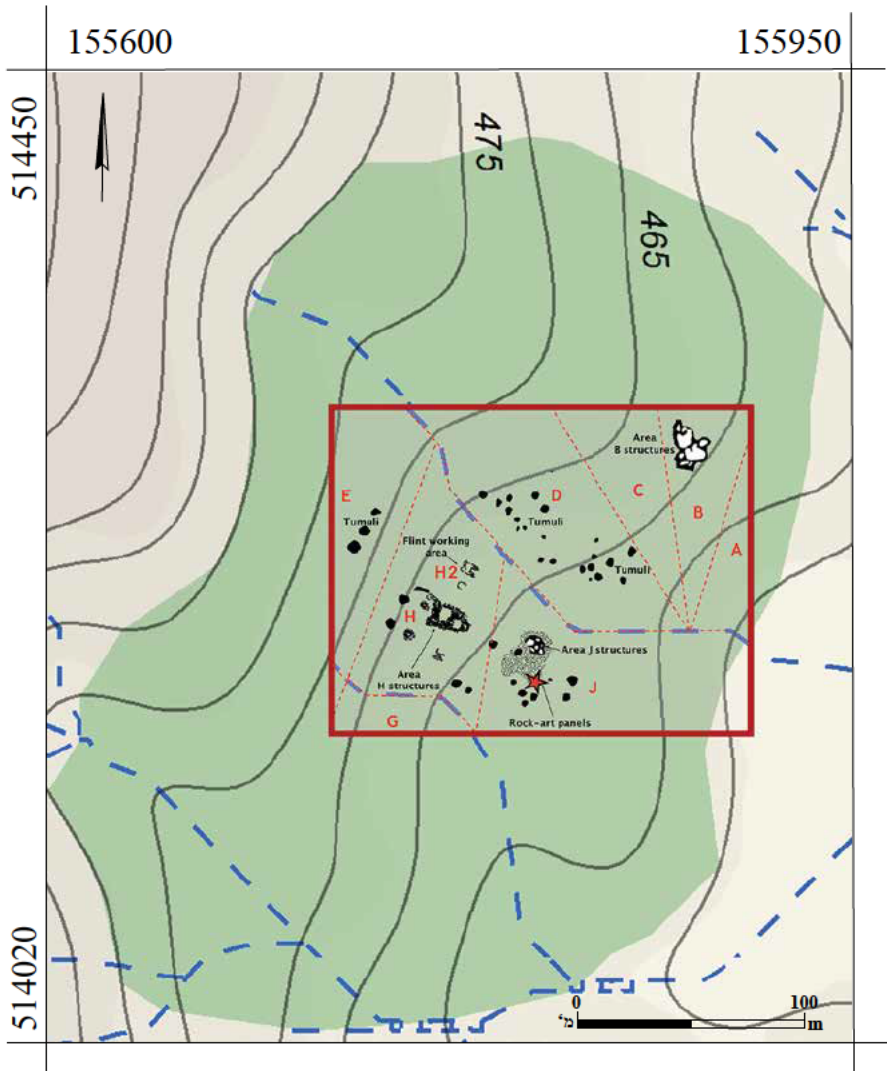
subsequently dubbed Mizpe Sede Hafir, comprised scatters of stone structures and tumuli spread across the hillside and surrounding a cluster of dark iron-rich stones. Exploring the discoloration and motifs in a rock-art panel carved into one of the large iron-rich boulders at the site, Schwimer estimated the feature ought to date from the fourth or early third millennium BCE. Subsequently, a team from BGU returned to the site and observed pottery scatters consisting of material dating from the EB I period, including an Egyptian component. As of September 2017, surface survey work and small-scale excavations have been carried out at the site, followed by analyses of materials and features in the archaeological laboratories at BGU.

The project at Mizpe Sede Hafir seeks to explore the site in the context of the regional and interregional EB I socio-economic spheres and examine Egyptian interactions with the southwestern Levant at the end of the EB I period. Results (not yet fully published) from the project indicate that this is the most significant desert zone site pertaining to the Egyptian-Levantine colonial encounters of the late fourth millennium BCE discovered to date.

The site is located on a ridge at the southwestern edge of the Sede Hafir plateau in the Western Negev Highlands, c. 10 km south of the present-day village of 'Ezuz. Naḥal Ḥoresha and Naḥal 'Ezuz pass to the site's west, while Har 'Ezuz and Har Ḥamran stand to its southwest and south, respectively. To the north, numerous streambeds cut hills and valleys as they pour into Naḥal Nizzana, where the Negev highlands descend into the sand-dunes of the southern coastal plain and northeast Sinai. The local vegetation is of the Irano-Turanian steppe, and the Sede Hafir plateau is notable for its fertility, undoubtedly a strategic location for regional nomadic tribes that provides opportunities for pasture, hunting and foraging. A wadi carves through the middle of the site, draining east into the Sede Hafir plateau. It is one of many others that feed the plain with runoff water from the surrounding hills.

At the northern end of the site, a small network of structures is arranged in a pen-and-room formation, typical of the fifth–third millennia BCE Negev highlands pastoralists (Rosen 2017). At the site's southeastern edge, three rock-art panels had been carved into large iron-rich stones, behind and to the northwest of which the scatter of collapsed structures and tumuli rise like a theatre across the hillside.

For the purposes of the surface survey and excavations, the site was divided into nine areas: Areas A–G were placed on the upper hillside around the central rock art area, while Areas H and J divided this central area to east and west (see Fig. 3). Excavations in Area H, near what was initially interpreted as a flint knapping area,



**Fig. 3.** Plan of survey and excavation of Areas B, D, E, H and J. Areas A and C are situated farther north, and Areas F and G are situated farther west (Illustration: Eli Cohen-Sasson).

produced a rich ceramic assemblage consisting of local and imported material from various regions, including the Shephelah, Egypt and Jordan.

The ceramic corpus of Mizpe Sede Ḥafir comprises 324 sherds, most of which are non-indicative and lack distinguishable stylistic characteristics. Nevertheless,



surface treatments on the vessels' interior allow us to differentiate closed vessels from open ones, and the rough poorly-fired highly-friable holemouth jars of the EB desert sites are sufficiently distinct to be recognizable by body sherds alone. Consequently, the range of types is fairly limited. The culturally characteristic Levantine assemblage consists mainly of holemouth jars, possibly produced in the Negev, and storage jars. Base diameters indicate that some storage jars were of considerable size. A few rope-decorated body sherds were found; most of them belong to holemouth jars, but two derive from storage jars made of well-fired, highly-levigated clay with calcite and grog inclusions, probably originating in the Shephelah region.

The corpus of Egyptian pottery consists almost entirely of medium and large closed storage vessels. Only one rim of an Egyptian vessel was found, belonging to a small juglet or a drop-shaped bottle. Interestingly, notwithstanding this vessel's undeniable Naqada III Egyptian morphology, its fabric is characteristic of the Shephelah region, indicating a connection with Egyptians living further north. Another sherd contained arkosic sand temper and is petrographically attributed to the area of Faynan, Jordan.

### **Coding and Analysis of the Mizpe Sede Ḥafir Pottery Assemblage**

Altogether, the ceramic assemblage of Mizpe Sede Ḥafir was found to comprise a minimum number of 67 vessels, and these were subjected to the six-letter coding system described above. The following are the results of the comparative analyses of various aspects of this assemblage.

#### *Functional Distribution Analysis and Regional Comparisons*

The functional distribution of vessel types at Mizpe Sede Ḥafir is unlike other desert sites. While the latter have assemblages, 80%–98% of which comprise holemouth jars presumably used for cooking, at Mizpe Sede Ḥafir, holemouth jars comprise only 41% of the assemblage (see Table 1; Fig. 4.1a, b). On the other hand, at Tel 'Erani and Tel Arad, holemouth jar frequencies are even lower, comprising only 17% and 25% of the total sampled assemblages. Thus, Mizpe Sede Ḥafir clearly held a function distinct from both sedentary and pastoral nomadic encampments. Its vessel type distribution is unique among EB I sites in the Negev Highlands.

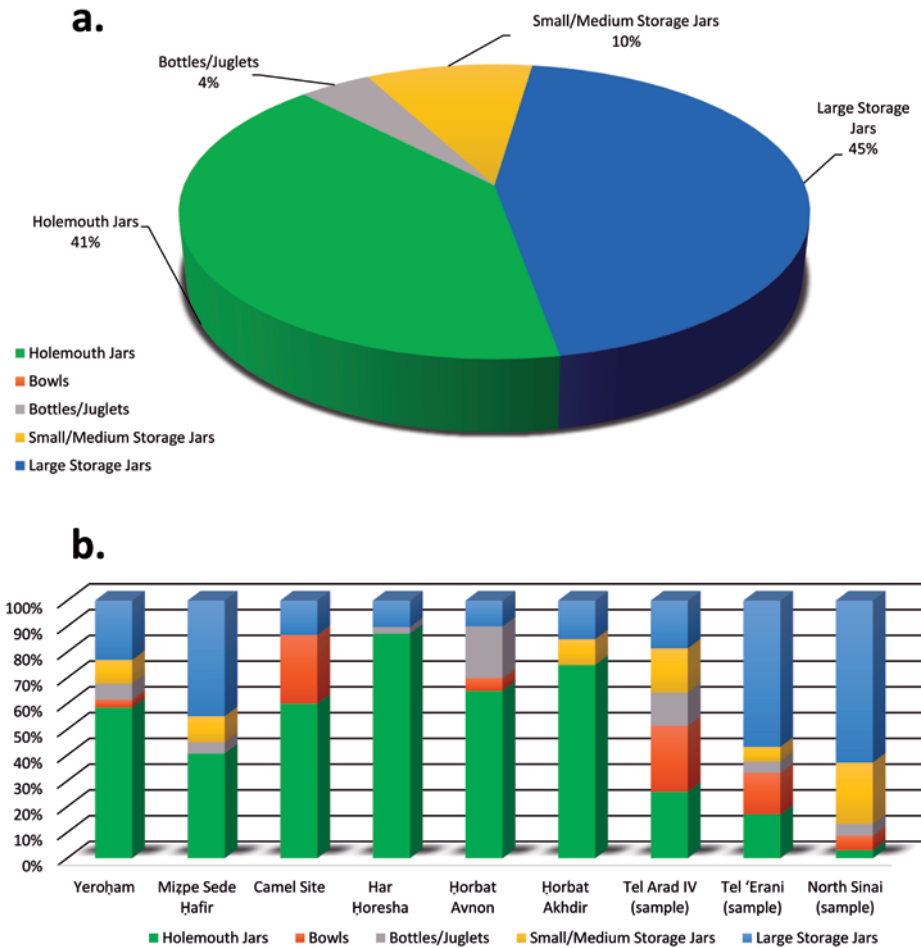
Storage vessels constitute the most substantial component of the Mizpe Sede Ḥafir ceramic assemblage, comprising 55% of the vessels. This figure seems comparable with Tel 'Erani D3-H, where 63% of the sampled assemblage from all layers was storage vessels (Fig. 4.2b); notably, the Mizpe Sede Ḥafir figure exceeds

the frequencies measured at Tel Arad IV, where storage vessels constituted 36% of the assemblage (Table 1; Fig. 4.1b). In this respect, Mizpe Sede Ḥafir resembles sedentary sites, particularly those involved in intensive trade, such as Tel 'Erani and Tel Arad, and is distinct from all other desert sites. Nevertheless, these frequencies are lower than those measured for the assemblages of North Sinai sites—presumably trading stations—87% of which were storage vessels (Table 1; Fig. 4.1b). The observation of imported Egyptian and Shephelah pottery classes at Mizpe Sede Ḥafir also suggests the existence of an exchange economy at the site. Moreover, the overwhelming majority of storage vessels were made of fabrics that could not have been obtained in the Negev. The sizeable number of storage vessels indicates an abundance of imported goods, exceeding the quantities that could be feasibly transported by small nomadic groups and implying a lesser degree of the groups' mobility and a greater degree of connectivity.

No bowls were identified in the Mizpe Sede Ḥafir assemblage. By comparison, at Tel 'Erani, they constituted 17% of the sample. This may further indicate that the

**Table 1. Quantities and frequencies of vessel types in selected EB I sites.**

Site \ Function	Cooking pots		Bowls		Bottles/Juglets		Small/Medium Storage		Large Storage		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Mizpe Sede Ḥafir	28	40.6	–	–	3	4.3	7	10.2	31	44.9	69	100
Camel Site (Rosen 2011)	9	60	4	26.7	–	–	–	–	2	13.3	15	100
Har Ḥoresha (Saidel and Haiman 2014)	34	87.2	–	–	1	2.6	–	–	4	10.2	39	100
Ḥorbat Avnon (Cohen 1999)	13	65	1	5	4	20	–	–	2	10	20	100
Ḥorbat Akhdīr (Cohen 1999)	15	75	–	–	–	–	2	10	3	15	20	100
Tel Arad IV (sample; Amiran 1978)	18	25.7	18	25.7	9	12.9	12	17.1	13	18.6	70	100
North Sinai (sample; Yekutieli 1998)	5	3.1	9	5.7	7	4.4	38	23.9	100	62.9	159	100
Tel 'Erani (sample)	326	16.9	313	16.3	81	4.2	111	5.8	1093	56.8	1924	100



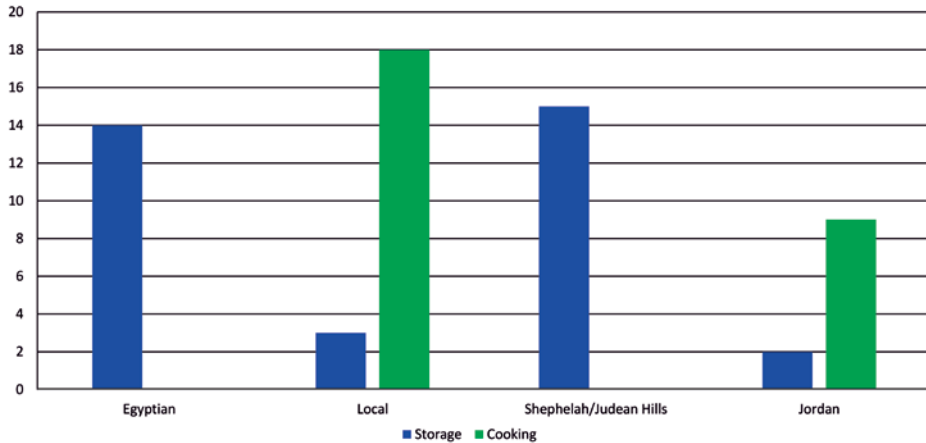
**Fig. 4.1.** Assemblage compositions according to vessel types: Mizpe Sede Ḥafir (a) and across contemporaneous sites (b) (for data, see Table 1).

connections between Mizpe Sede Ḥafir and the sedentary zone pertained to the exchange of bulk goods, probably agricultural produce. It may also indicate that the serving wares of sedentary society held little cultural currency among nomadic groups of the Western Negev.

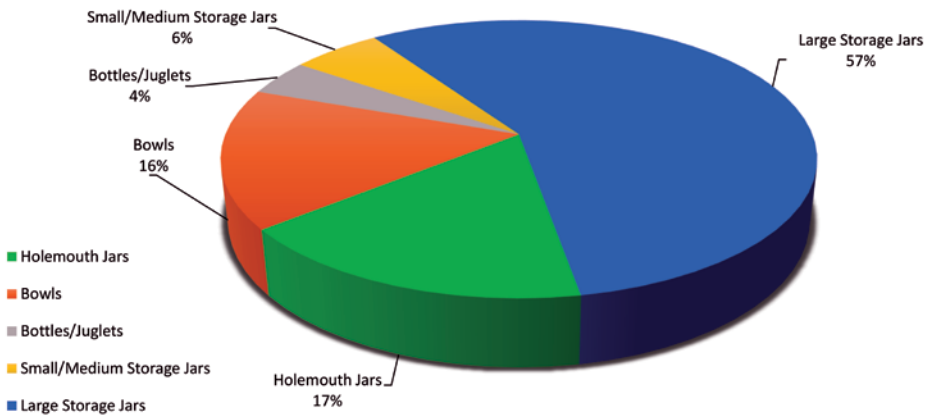
*Fabric Distribution Analysis*

Five principal petrographically-confirmed fabric groups were identified at Mizpe Sede Ḥafir, with considerable variation in the use of temper (not yet fully published).

**a.**



**b.**



**Fig. 4.2.** Mizpe Sede Ḥafir, distribution of cooking and storage vessels per fabric type (a); Tel 'Erani, assemblage composition according to vessel type (b) (for data, see Table 1).

These groups demonstrate links with four regions beyond the immediate environs of the Negev highlands: Egypt, the Shephelah, the Judean Hills and Jordan.

The quantity of pottery retrieved from the small archaeological exposure at Mizpe Sede Ḥafir is remarkably high for a desert site, and the ratio of imported pottery is especially steep. Vessels from Egypt and Jordan constitute c. 40% of the MNV—c. 22% and 18% respectively—while vessels originating in the Shephelah

and Judean Hills comprise another c. 31% of the ceramic assemblage (Table 2; Figs. 5.1a, 5.2a), including one example of an Egyptian-styled juglet. As with the functional analysis, these results support the interpretation of Mizpe Sede Ḥafir as a desert site whose main function pertained to commerce and exchange.

At Tel 'Erani, Egyptian imports constitute 36% of the sampled assemblage, although it varies considerably across layers (Table 2; Figs. 5.1b; 5.2b). Their frequency is relatively low in Layer 9 but comprises almost half of the assemblage in Layers 6 and 5. Either way, the high frequency of Egyptian vessels is best understood as naturally reflecting the colonial encounter throughout the

**Table 2. Fabric class distributions at Mizpe Sede Ḥafir and Tel 'Erani.**

Fabric code	Inclusions description	Geographic indicator	Tel 'Erani (sample)		Mizpe Sede Ḥafir	
			No.	%	No.	%
D	Dolomitic clay and calcareous sand	Israel (Shephelah/Judean Hills)	12	0.6	1	1.6
B	Basalt	Jordan	11	0.6	1	1.6
E	Calcite and Grog	Israel (Shephelah/Judean Hills)	21	1.1	3	4.8
G	Grog	Israel (Shephelah/Judean Hills)	9	0.5	–	–
L	Loess clay and grog	Israel (Shephelah/Judean Hills)	4	0.2	2	3.2
N	Grit	Egypt	262	13.5	13	21
M	Calcareous Nile clay and quartz silts	Egypt	89	4.6	1	1.6
O	Arkose sand	Jordan	–	–	10	16.2
P	Coarse wadi sand	Israel	106	5.5	2	3.2
Q	Calcite	Israel	133	6.7	16	25.8
U	Straw and stone	Egypt	118	6.1	–	–
V	Wadi sand and grog	Israel (Shephelah/Judean Hills)	734	37.8	12	19.4
W	Calcite and straw	Israel	197	10.1	–	–
A	Grog and crushed calcium carbonate	Israel (Shephelah/Judean Hills)	25	1.3	1	1.6
S	Straw	Egypt	130	6.7	–	–
R	Fiber	Egypt	92	4.7	–	–
Total:			1943	100	62	100

occupation sequence of the Egyptian colony at the site. In a similar vein, the high proportion of Egyptian vessels at Mizpe Sede Ḥafir is probably best understood as indicating direct encounters with Egyptian groups.

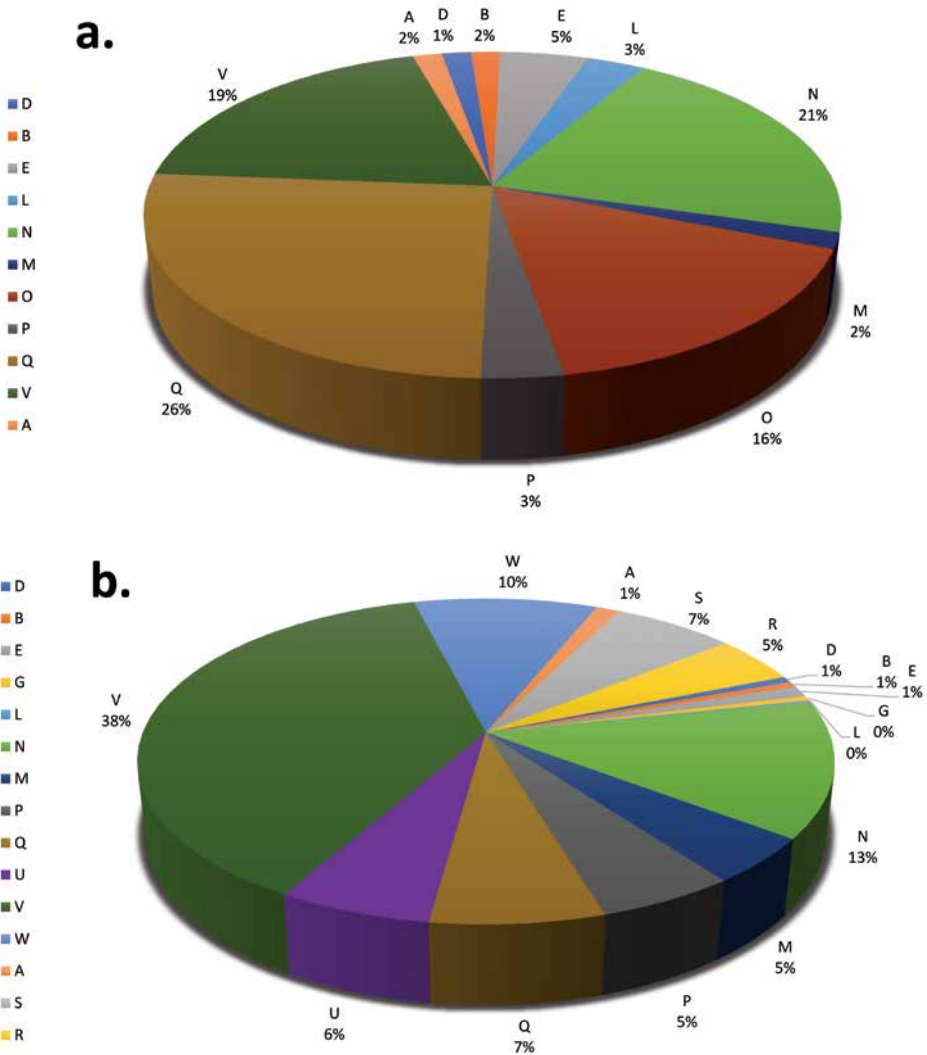
### *Surface Decoration Distribution Analysis*

The distribution of decorations across the local (Levantine, including the desert zone) and Egyptian components is remarkably similar in Mizpe Sede Ḥafir and the external areas of Tel 'Erani Layer 9 and, albeit to a lesser extent, Layer 8 (Fig. 6). The distribution of decoration types among Levantine vessels manifests this. Plain-smoothed vessels are predominant, followed by red- and white-slipped, accompanied by a few red-painted vessels. The Egyptian vessels in both Mizpe Sede Ḥafir and Tel 'Erani Layer 9 also manifest the same pattern: Most of them are plain-smoothed, while the remainder is red-slipped. The same is largely true in Layer 8, especially for the Levantine vessels.

Tel 'Erani, Area D3-H, Layer 9 apparently engaged in intensive trade with Egypt, indicated by a proportionally significant quantity of imports. It may have predated the arrival of the Egyptian community that settled at the site, although, to date, only a fraction of this phase was studied, and its stratigraphic boundary with Layer 8 is yet to be defined in the internal space. The dominance of plain-smoothed vessels in both Layers 8 and 9 probably reflects an economic rather than stylistic orientation of the manufacturing practices. Layer 9 exhibited very little hybridization, occasionally noted for Egyptian vessel types made of local fabrics. The similar distributions of decoration types in Mizpe Sede Ḥafir and Tel 'Erani D3-H, Layers 8 and 9, suggests similar Levantine-Egyptian relations were at play, manifested by high proportions of Egyptian imports (not hybridized). The most likely scenario is that Mizpe Sede Ḥafir was contemporaneous, at least, with the foundational stages of the colony at Tel 'Erani.

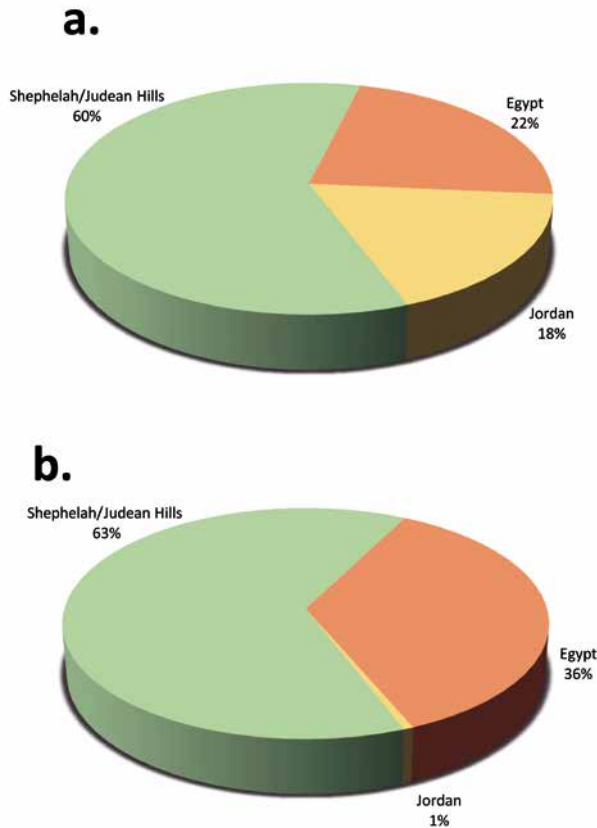
### *General Summary and Implications*

Initial phenomenological indications suggest that Mizpe Sede Ḥafir functioned as a "gathering place" for Negev desert communities. The ceramic assemblage's clear orientation towards storage and the tentative interpretation of circular architectural units as storage facilities suggest a focus on exchange, perhaps redistribution of desert products. Imported Canaanite sickle blades and several ground stone tools indicate small-scale agricultural activity at the site. Overall, it seems that Mizpe Sede Ḥafir represents a diverse desert economy.



**Fig. 5.1.** Assemblage compositions according to fabric types (see Table 2): Mizpe Sede Hafir (a), Tel 'Erani (b).

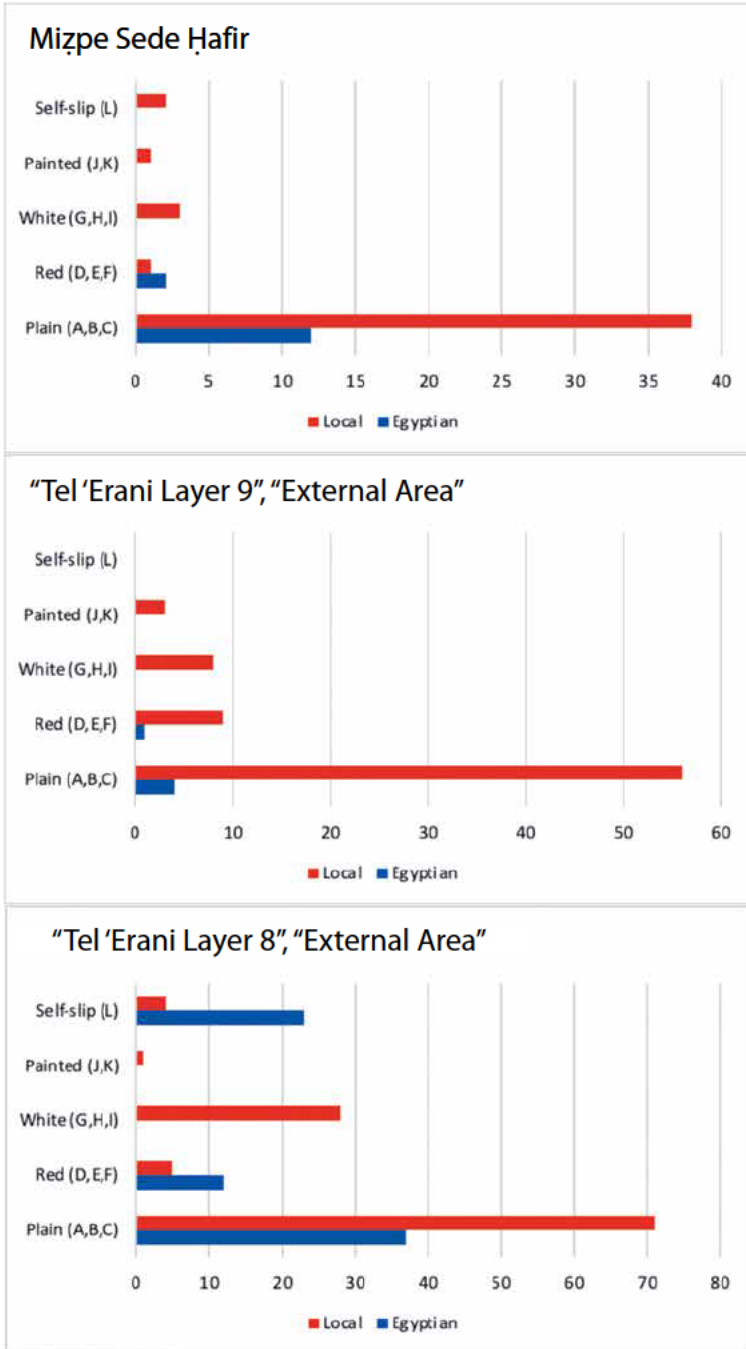
The ceramic assemblage is unusually large for an EB I Negev Highlands site. Notably, the frequencies are particularly high for Egyptian (Naqada III) pottery, as well as other imports from the Shephelah, Judean Hills and Jordan. Similar decoration distributions for Egyptian and local components in Mizpe Sede Hafir and Tel 'Erani, coupled with substantial quantities of Egyptian imports in both



**Fig. 5.2.** Assemblage compositions according to vessel provenience: Mizpe Sede Ḥafir (a), Tel 'Erani (b).

sites, indicate contemporaneity. It is, therefore, likely that there were regular trade links between Mizpe Sede Ḥafir and an Egyptian colony (or colonies) in the southwest-Levantine coastal plain and the Shephelah regions. The distribution of vessel functions in the Egyptian and Shephelah/Judean Hills pottery components indicates bulk exchange, probably exceeding quantities that EB Ib Negev pastoralist groups could transport. Therefore, it seems, trade was essential to the establishment and function of Mizpe Sede Ḥafir. Perhaps Egyptian traders arrived at the site from a colony in the coastal plain for the purpose of exchange. The site's links with the eastern side of the Arabah valley imply the site may have also been involved in copper and tabular scraper trade.





**Fig. 6.** Comparison of decoration distributions between Mizpe Sede Hafir and Tel 'Erani sample from Layers 8 and 9.

## Conclusions

Based on the very high proportion of Egyptian pottery uncovered in the small archaeological exposure at Mizpe Sede Ḥafir and the presence of an Egyptian style vessel made of Shephelah region clay, it seems clear that Mizpe Sede Ḥafir was connected to the core region of Egyptian activity in the Mediterranean littoral and sites of primarily Egyptian character in northeastern Sinai. Moreover, the apparently large volumes of produce mobilized through the site (as stated, probably exceeding quantities that could be transported by nomadic groups and/or their production potential) suggests that Egyptians arrived at Mizpe Sede Ḥafir by one of two routes. One begins in the Egypt-Levant land route along the North Sinai coast (Oren 1973; Yekutieli 2002) and proceeds southeast across the barrier of sand dunes along the Naḥal Nizzana and Naḥal Lavan streambeds. The second route begins in the colonies in the southern coastal plain and bypasses the sand dunes from the east. Albeit indirectly, these two points imply that Mizpe Sede Ḥafir was contemporaneous with the permanent Egyptian habitation in the southwestern Levant. The presupposition of such a trade route further explains the scatters of Egyptian materials at sites in the region surrounding Mizpe Sede Ḥafir: Be'erotayim, Giva'at Sal'it, and Qadesh Barne'a (Yekutieli 2004; Saidel et al. 2006).

In light of possible contacts with the region of Faynan, it seems there was Egyptian demand for desert products, perhaps including copper and tabular scrapers. The nature of inter-regional contact in Mizpe Sede Ḥafir, expressed in the ceramic assemblage, closely resembles Layers 9 and 8 at Tel 'Erani that straddled the Egyptian colony's establishment. In all likelihood, this was a time of intercultural negotiation and conceptual and material exchange.

Mizpe Sede Ḥafir has a unique profile manifested by (1) the high frequency of imported storage vessels, (2) sickle segments and grinding stones, (3) an unusual layout, (4) a high frequency of tabular scrapers (yet unpublished), and (5) the notable absence of arrowheads typical of campsites. In this sense, it answers the archaeological criteria for a "negotiated periphery" (Kardulias 1999, 2007, 2015; Morris 1999), underscoring its potential for reordering and restructuring social norms and standards of value. In the context of complex cultural encounters and considering the inherent flexibility of nomadic lifeways, considerable socio-cultural transformation may be expected.

The extent of Egyptian contact at the site further implies that its importance extended well beyond the nomadic sphere. It is evident that Mizpe Sede Ḥafir is a key site for understanding the socio-economics of late fourth-millennium desert

zone connectivity, reflected in modes of subsistence, semi-sedentary activity and perhaps also the ideation of nomadic groups.

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### References

- Amiran R. 1978. *Early Arad I: The Chalcolithic and Early Bronze City: First–Fifth Seasons of Excavations, 1962–1966*. Jerusalem.
- Atkins S. 2017. A New Inter-Regional Trajectory for Interactions between Northeast Africa and the Southwest Levant during the 4th millennium BCE. *Strata BAIES* 35:135–164.
- Atkins S. 2021. *The Role of Negev Highland Pastoral Nomadic Societies in Interactions Between Nilotic and South-West Levantine Groups During the 4th and Early 3rd Millennia BC*. Ph.D. Diss. Ben Gurion University of the Negev. Beer Sheva.
- Cialowicz K., Yekutieli Y. and Czarnowicz M. eds. 2016. *Tel 'Erani I: Preliminary Report of the 2013–2015 Excavations*. Krakow.
- Cohen R. 1999. *Ancient Settlement of the Central Negev* (IAA Reports 6). Jerusalem (Hebrew).
- Kardulias P.N. 1999. Preface. In P.N. Kardulias ed. *World-Systems Theory in Practice: Leadership, Production, and Exchange*. Boulder, CO. Pp. xvii–xxi.
- Kardulias P.N. 2007. Negotiation and Incorporation on the Margins of World-Systems: Examples from Cyprus and North America. *Journal of World-Systems Research* 13:55–82.
- Kardulias P.N. ed. 2015. *The Ecology of Pastoralism*. Boulder, CO.
- Lehmkuhl U., Lüsebrink H-J. and McFalls L. 2015. Spaces and Practices of Diversity: An Introduction. In L. McFalls, H-J. Lüsebrink and U. Lehmkuhl eds. *Of 'Contact Zones' and 'Liminal Spaces': Mapping the Everyday Life of Cultural Translation*. New York. Pp. 7–27.

- McFalls L.H., Lüsebrink H-J. and Lehmkuhl U. eds. 2015. *Of 'Contact Zones' and 'Liminal Spaces': Mapping the Everyday Life of Cultural Translation*. New York.
- Miroschedji P.R. de. 2015. Les relations entre l'Égypte et le Levant aux IVe et IIIe millénaires à la lumière des fouilles de Tell es-Sakan. *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres* 159(2):1003–1038.
- Morris I. 1999. Negotiated Peripherality in Iron Age Greece: Accepting and Resisting the East. In P.N. Kardulias ed. *World-Systems Theory in Practice: Leadership, Production, and Exchange*. Boulder, CO. Pp. 63–84.
- Oren E. 1973. The Overland Route between Egypt and Canaan in the Early Bronze Age. *IEJ* 23:198–205.
- Pratt M.L. 1991. Arts of the Contact Zone. *Profession* 91:33–40.
- Rosen S.A. ed. 2011. *An Investigation into Early Desert Pastoralism: Excavations at the Camel Site, Negev* (Cotsen Institute of Archaeology Press Monograph 69). Los Angeles, CA.
- Rosen S.A. 2017. *Revolutions in the Desert: The Rise of Mobile Pastoralism in the Negev and the Arid Zones of the Southern Levant*. London.
- Saidel B.A., Erickson-Gini T., Vardi J., Rosen S.A., Maher E. and Greenfield H. 2006. Test Excavations at Rogem Be'erotayim in the Western Negev. *JIPS* 36:201–229.
- Saidel B.A. and Haiman M. eds. 2014. *Excavations in the Western Negev Highlands: Results of the Negev Emergency Survey 1978–89* (BAR Int. S. 2684). Oxford.
- Turner V.W. 1964. Betwixt and Between: The Liminal Period in Rites de Passage. In M.E Spiro ed. *Symposium on New Approaches to the Study of Religion*. Seattle, WA. Pp. 4–20.
- Turner, V.W. 1969. *The Ritual Process: Structure and Anti-Structure*. Chicago.
- Wodianka S. and Behrens C. 2017. *Chaos in the Contact Zone: Unpredictability, Improvisation and the Struggle for Control in Cultural Encounters*. Bielefeld.
- Yekutieli Y. 1998. *The Early Bronze Age I of North Sinai: Social, Economic and Spatial Aspects*. Ph.D. Diss. Ben Gurion University of the Negev. Beer Sheva (Hebrew; English summary).
- Yekutieli Y. 2002. Settlement and Subsistence Patterns in North Sinai during the Fifth to Third Millennia BCE. In E.C.M.van den Brink and T.E. Levy eds. *Egypt and the Levant: Interrelations From the 4th Through the Early 3rd Millennium BCE*. London. Pp. 422–433.
- Yekutieli Y. 2004. The Desert, the Sown and the Egyptian Colony. *Ägypten und Levante* 14:163–171.

