

THE ARABAH COPPER POLITY AND THE RISE OF IRON AGE EDOM: A BIAS IN BIBLICAL ARCHAEOLOGY?

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Summary: The Arabah Copper Polity and The Rise of Iron Age Edom: A Bias in Biblical Archaeology?

In a recent article, Erez Ben-Yosef describes an ostensible bias in biblical archaeology—the emphasis on societies that left behind stone-built remains and a disregard for pastoral nomadic-based territorial polity. Ben-Yosef identifies the Iron I-IIA finds from the copper centers at Faynan and Timna as representing an early Edomite, non-sedentary kingdom. Here I deal with three issues: I begin by showing that most of Ben-Yosef's premises have already been suggested by scholars decades ago. I then turn to what I consider as major shortcomings in his theory. Finally, I present an alternative model for an Iron I-IIA territorial entity in the Arabah and neighboring areas as well as for the rise of the kingdom of Edom.

Keywords: Edom – Arabah – Copper – Faynan – Timna – State Formation – Negev Highlands – Tel Masos

Resumen: La organización política del cobre del Arabá y el surgimiento del reino de Edom de la Edad del Hierro: ¿una perspectiva sesgada de la arqueología bíblica?

En un reciente artículo, Erez Ben-Yosef señala un sesgo ostensible en la arqueología bíblica: el énfasis puesto en las sociedades que dejaron restos de construcciones de piedra y la desatención por organizaciones políticas territoriales basadas en el nomadismo pastoral. Ben-Yosef identifica los hallazgos provenientes de los centros de cobre en Feinán y Timna que corresponden a la Edad del Hierro I-IIA como representativos de un primer reino edomita, no sedentario. Aquí trato tres cuestiones: comienzo por demostrar que la mayoría de las premisas de Ben-Yosef ya fueron propuestas por estudiosos hace décadas. Luego me dedico a considerar lo que considero las mayores deficiencias en su teoría. Finalmente presento un modelo alternativo de una

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entidad territorial en el Arabá en la Edad del Hierro I-IIA y en las regiones aledañas, así como también sobre el ascenso del reino de Edom.

Palabras clave: Edom – Arabá – Cobre – Faynan – Timna – Formación del Estado – Tierras altas de Negev – Tel Masos

INTRODUCTION

Erez Ben-Yosef recently published an article titled *The Architectural Bias in Current Biblical Archaeology*.¹ He argues that Edom emerged in the Iron I in the Arabah Valley as a nomads-based kingdom that left no remains behind except for those that represented its mining and smelting activities in the copper industry centers of Timna in southern Israel and Wadi Faynan in Jordan.² From this he concludes that archaeological work in the Levant and the ensued historical interpretation have been biased, identifying state formation only in cases of developed urban centers and neglecting to accept the existence of nomadic territorial formations that leave negligible remains behind.

Ben-Yosef's work at Timna (as well as Thomas Levy's work at Faynan, where Ben-Yosef was a team-member) should be praised as being among the most important field projects that have been carried out in the Levant in recent years. Ben-Yosef's (and Levy's) contribution is in clarifying the history of copper production in the Arabah between the later phases of the Late Bronze Age and the Iron IIA (*ca.* 13th to 9th centuries BCE). In fact, their work reflects on the entire Levant and beyond.³ Yet many of the archaeological, anthropological and historical assertions which appear in the specific article reviewed here (some of the arguments appear in other Faynan and Timna-related publications) must be challenged.

This article is divided into three parts. I begin by showing that many of Ben-Yosef's premises are not new and were suggested by scholars decades ago. I then turn to what I consider as deficiencies in

¹ Ben-Yosef 2019.

² See already Ben-Yosef 2016.

³ On the work at Faynan, see the two volumes of Levy, Najjar and Ben-Yosef 2014; on Timna, Ben-Yosef *et al.* 2012; Ben-Yosef 2016; Yagel, Ben-Yosef and Craddock 2016.

Ben-Yosef's theory. Finally, I present an alternative model for an Iron I-IIA territorial entity in the Arabah and neighboring areas and for the rise of the kingdom of Edom.

IS ALL THIS NEW?

Ben-Yosef complains about the “overly simplistic approach applied to the identification and interpretation of nomadic elements in biblical-era societies.”⁴ This appears again later in the article, where he points to “the prevailing simplistic approach towards the identification of social complexity in societies with non-sedentary components.”⁵ Yet, what Ben-Yosef describes here as new insights about nomadic territorial formations is decades old. Such entities have been considered in relation to the ancient Near East in general and the Levant in particular starting in the 1960s. Michael Rowton pioneered the discussion of this topic in relation to the broader region.⁶ And specifically for the Levant and the arid zones examined by Ben-Yosef, I described a territorial formation of nomadic groups in the Negev Highlands in both the Early Bronze and the Iron I.⁷

Regarding the history of the south in the Iron Age, much of what Ben-Yosef proposes was already presented by Fantalkin and me almost 15 years ago.⁸ In another article titled *Invisible Nomads*, I specifically focused on nomadic societies and nomadic entities, which are attested in historical records of the Iron II and later, but which did not leave material remains behind.⁹

Regarding the connection between the copper industry in the Arabah and the collapse and revival of copper production in Cyprus, Ben-Yosef writes that (for Edom), “the break in the Cypriot copper flow created an unprecedented opportunity for the local tribes to make

⁴ Ben-Yosef 2019: 361.

⁵ Ben-Yosef 2019: 363.

⁶ E.g., Rowton 1973; 1976.

⁷ Finkelstein 1995; already 1988; 1991; for the highlands see Finkelstein 1992a.

⁸ Fantalkin and Finkelstein 2006.

⁹ Finkelstein 1992b.

immense profit by producing copper for the starving local and global markets. The reestablishment of Cypriot hegemony over the Eastern Mediterranean copper production and trade, which was probably facilitated by the Aramaeans, was one of the main reasons for the end of the Aravah copper industry.”¹⁰ As a reference for this historical reconstruction Ben-Yosef cites his own article with Omer Sergi, published two years ago.¹¹ But the idea is not theirs; Axel Knauf proposed this almost thirty years ago.¹² The Cyprus-Arabah pendulum was then picked-up and expanded by Fantalkin and me.¹³

MAJOR DEFICIENCIES

Is this early Edom? I agree with Ben-Yosef that the remains at Faynan and Timna represent a territorial formation of desert groups. But why to see this as evidence of the early emergence of Edom of the Bible and the Assyrian records?

Ben-Yosef argues that “the relevant historical and biblical sources allow, if not support, the emergence of Edom in the geographical area of the Aravah, and that there is no basis for the prevailing notion that the core of Edom was in the area called today the Edomite Plateau already in its early days.”¹⁴ Yet, the biblical material clearly puts the heartland of Edom in the south Jordanian highlands. Both Sela (2 Kings 14:7a) and the capital of Edom Bozrah (e.g., Amos 1:12; today’s Buseirah) are located there. Ben-Yosef continues, saying that the region [the Arabah-I.F.] “was referred to as ‘Edom’ as early as the 13th century BCE ... and the people inhabiting it as ‘Edomites’ not later than the late 9th or early 8th centuries BCE...; thus, identifying the society reflected by the early Iron Age archaeology of the region as

¹⁰ Ben-Yosef 2019: 373.

¹¹ Ben-Yosef and Sergi 2018.

¹² Knauf 1991: 185; 1995: 112–113; the latter article is in fact cited by Ben-Yosef, but not in the Cyprus copper connection.

¹³ Fantalkin and Finkelstein 2006. Incidentally, this article also discussed the idea of possible connection between Gath and the copper industry, later revisited by Ben-Yosef and Sergi 2018.

¹⁴ Ben-Yosef 2019: 371.

Edom is evidently the simplest interpretation.”¹⁵ Not really; why not place the Shosu of Edom of Papyrus Anastasi VI¹⁶ in the highlands? Also, if there are biblical verses which hint at the extension of Edom to areas west of the Arabah, they belong to late-monarchic or later times, when this situation was indeed a reality.

Still, could the Iron I-IIA Arabah people refer to their territorial entity as “Edom” after all? Since Ben-Yosef sees this copper producing polity as dominating large parts of the south—the entire Arabah and probably the south Jordanian highlands to its east and the Negev Highlands to its west¹⁷—I suppose that this is not impossible. But what about other options? Why not Midian, Amalek,¹⁸ Kedar (*e.g.*, Isa 21:16), Paran, Teman? We simply do not know the origin (including geographical extent) of these toponyms in the centuries *before* the composition of the biblical texts to which they are related.

Genesis 36

In order to justify the identification of the Arabah Iron I-IIA desert polity with early Edom, Ben-Yosef turns to the list of kings “who reigned in the land of Edom, before any king reigned over the Israelites.” (Genesis 36:31–39). He sees this as “authentic materials on Edom before the days of David.”¹⁹ Yet, this is a Priestly list,²⁰ and if historical (the mention of “Bela the son of Beor” and the mix of regions is sufficient to make one wonder; note that Lemaire sees it as relating to Aram rather than Edom²¹), depicts realities not earlier than the late 6th or 5th centuries BCE.²² According to Knauf the background should be sought in local strongmen in the south after the Babylonian conquest of

¹⁵ Ben-Yosef 2019: 371, n. 46.

¹⁶ Kitchen 1992.

¹⁷ Ben-Yosef 2019: 365–366.

¹⁸ Kochavi 1982: 5 suggested identifying the town of Amalek of 1 Sam 15:5 at Tel Masos.

¹⁹ Ben-Yosef 2019: 363, citing Bartlett 1989 and Avishur 2007.

²⁰ *E.g.*, Knauf 1985; recently Nash 2018.

²¹ Lemaire 2001.

²² For a different view see *e.g.*, Lipiński 2006: 388–392.

Edom.²³ Incidentally, the only securely identified town in the list—Bozrah—is located in the Edomite highlands!

The Khirbet en-Nahas Fort

Ben-Yosef asserts that “the dating of the stone-built fortress [at Khirbet en-Nahas – I.F.] to the 10th century BCE has been rejected by scholars who ... could not accept the possibility that they [the nomads, I.F.] erected some stone-built walls as part of their defense and manifestation of power.”²⁴ This is not the case. There are four reasons for rejecting a 10th century dating of the fortress: 1) One charcoal sample found under the gate and two samples associated with its construction provided dates in the 9th century BCE;²⁵ this means that the construction of the fort must postdate this datum. 2) Certain similarities in the layout of the Khirbet en-Nahas fortress to Assyrian-period fortresses in the south, especially Tell el-Kheleifeh near Aqaba.²⁶ 3) The pottery of Khirbet en-Nahas, much of which dates to the Iron IIB-C.²⁷ 4) It is illogical to construct a fortress in the center of an active industrial site, in the midst of toxic fumes, when it could be built a few hundred meters away and achieve the same strategic impact. All this means that the fort probably postdates the copper production activity at the site (which probably ended in the late 9th century).

The Role of Tel Masos

Ben-Yosef dismisses any connection between the site of Tel Masos in the Beer-Sheba Valley and the contemporary copper industry in the Arabah. In his opinion, the idea that control over the copper industry

²³ Knauf 1985.

²⁴ Ben-Yosef 2019: 375.

²⁵ Finkelstein and Piasezky 2006, based on Levy *et al.* 2004; 2005. As far as I can judge, the 2006 dates published in Levy, Najjar and Ben-Yosef 2014: 122 do not change the picture which emerged from the 2004 and 2005 articles.

²⁶ Finkelstein 2005.

²⁷ Finkelstein and Singer-Avitz 2008; 2009; *contra* Smith and Levy 2008.

was exerted from Tel Masos “is solely based on the presence of large, early Iron Age stone-built structures at this site and goes against the ceramic evidence and other considerations.”²⁸ He continues, saying that “Tel Masos is located in the eastern Beer-Sheba Valley, a region whose geography and history is distinctly separated from that of the Aravah Valley and the Negev Highlands.”²⁹ The available evidence does not support these assertions. The link between the Arabah industry sites and Tel Masos stems from three considerations: First, activity at Tel Masos dates to the Iron I and Iron IIA—in parallel to the peak period of copper production in the Arabah. Second, the excavations at the site seem to have revealed evidence for copper smelting and the site yielded an exceptionally large number of copper/bronze items.³⁰ Third, the location of Tel Masos (similar to Early Bronze Arad) at the northern limit of the arid zones, bordering on the settled land, fits interpreting it as a gateway community for the Arabah copper trade. Copper from the Arabah needed to be transported to the settled lands, including the coast, and the most convenient road passed via the Beer-Sheba Valley, with Tel Masos sitting on good wells in its midst.

On Comparison in Archaeology

Ben-Yosef states that “ethnography and textual evidence provide ample descriptions of nomadic societies, and although the typical and most common examples indeed attest to a simple form of social organization, there are exceptions. One of these is the well-documented case of the Mongol Empire, which started as a coalition of nomadic tribes under the strong leadership of Genghis Khan in the early 13th century CE.”³¹ I have already stated more than once that anthropology and ethnography can supply comparisons for every phenomenon in human history, in fact even pros and cons for a given case. Hence, resemblance

²⁸ Ben-Yosef 2019: 375–376.

²⁹ Ben-Yosef 2019: 376, n. 73.

³⁰ Kempinski *et al.* 1983: 21; Crüsemann 1983; Lupu 1983: 202–203.

³¹ Ben-Yosef 2019: 374.

should be considered only in view of unity of time and/or place.³² Comparing the Iron Age copper production in the Arabah to Mongolia is no better than linking Late Bronze Egypt-dominated Canaan, or the Iron I in the Levant to the Baringo district in Kenya.³³ In other words, in this case, too, it is advisable to stick to Rowton's articles on western Asia and to works on the Negev Highlands and vicinity, *e.g.* in the Early Bronze.³⁴

AN ALTERNATIVE SCENARIO

The surge and cessation of the Arabah copper industry in the Iron Age was indeed influenced by copper production in Cyprus and trade in the eastern Mediterranean.³⁵ Shipment of copper to the Levant by sea was easier and more efficient than land transportation through the desert. Hence, in the Late Bronze Age, with prosperity in Cyprus and peaceful marine trade in the eastern Mediterranean, production in the northern Arabah was seemingly minimal. Some activity took place at Timna in the south in the closing phase of the Late Bronze Age (13th and mainly first half of the 12th century BCE). This may signal the beginning of deterioration of eastern Mediterranean trade and the need in Egypt to find a replacement for Cypriot copper. Copper was probably transported from Timna directly to Egypt via the Sinai Peninsula.³⁶

The situation changed with the collapse of the eastern Mediterranean *koine* in the 12th century BCE. The Arabah replaced Cyprus as the main supplier of copper in the region and this, indeed, led to the emergence of a desert polity.³⁷ A major center for this activity could have been located somewhere in the Faynan area, perhaps at Khirbet Faynan. But the hub of this desert polity, that is, the seat of the

³² Finkelstein 2002.

³³ Finkelstein 2002, *contra* Bunimovitz and Faust 2001.

³⁴ Finkelstein 1991.

³⁵ Knauf 1991; 1995.

³⁶ On all this Yagel, Ben-Yosef and Craddock 2016; see also Erickson-Gini 2014.

³⁷ Ben-Yosef 2016; 2019.

tribal leaders who managed the copper economy, seems to have been located in the Beer-Sheba Valley.

Two phases in the Iron Age copper production in the Arabah can be identified; the dividing line between them was the intervention of Egypt of the 22nd dynasty in the area in the second half of the 10th century BCE.³⁸

The first phase can be described as the Formative Period, dated to the Iron I—from the late 12th to the middle of the 10th century BCE or slightly later. Two main copper transportation roads led from the Arabah to the north: one to Syria along the King's Highway in Transjordan and the other to the Mediterranean coastal plain via the Beer-Sheba Valley. Settlement activity related to copper transportation characterizes both arteries. A chain of fortified settlements in the Transjordanian highlands south of Wadi Mujib (the biblical Arnon) can be interpreted as representing an early “Moabite” territorial polity which grew along the former route in the late Iron I (late 11th and early 10th centuries BCE).³⁹ Iron I activity, which can be traced at Buseirah in the Edomite highlands “above” and close to Faynan,⁴⁰ may also be linked to this early phase of copper industry.

In parallel, a “gateway community” for the Arabah copper polity started growing at Tel Masos in the Beer-Sheba Valley, on the western copper transportation route, leading to the Mediterranean coast. The site is located on good wells, still in territory dominated by the desert groups, which allowed independence. It is also situated on the border of the settled lands, a location that was evidently advantageous economically. The tribal leaders of the desert groups could have acted from there, managing the trade affairs of their polity (similar, *e.g.* to the activity of the Rawala sheiks in Damascus in early modern times). Gradually (and perhaps not in the early beginning of the process), some of the groups, which were active in pastoral modes of life in the improved ecological niche of the Negev Highlands, began to settle

³⁸ Fantalkin and Finkelstein 2006; Ben-Yosef *et al.* 2019.

³⁹ Finkelstein and Lipschits 2011.

⁴⁰ Bienkowski 2002, collared rim jar in Fig. 9.42, 12 and probably 17.

down. The earliest indications of this can be seen in Iron I pottery retrieved at some of the Negev sites⁴¹ and in the radiocarbon results from Atar Haroa near Sede Boqer.⁴²

The second phase in the south can be described as the full-blown activity period. It dates to the Iron IIA, starting sometime in the second half of the 10th century and lasting until the late 9th century. Copper production must have been intensified by the emergence of territorial kingdoms in the Levant.⁴³ No less important was the rise of the 22nd dynasty in Egypt. Growing demand for copper in Egypt, and possible ideology of “making Egypt great again,” led to the campaign of Sheshonq I to Canaan. The places noted in the Karnak list reveal that this campaign was directed at several specific regions, including the Beer-Sheba Valley and neighboring areas. Changes in production technology in the copper industry centers,⁴⁴ and the rare finding of a Sheshonq I scarab at Khirbet en-Nahas,⁴⁵ seem to indicate direct involvement of Egypt in the copper industry. The main goal was probably to monopolize it, including an attempt to direct much of the copper flow to the southern coastal plain and Egypt. The shift-to-the-west seems to have resulted in the decline of the early Moabite polity south of Wadi Mujib.⁴⁶ It also led to the weakening, or cessation all together, of activity at Buseirah and the region around it; so far there is no evidence of Iron IIA activity in this area.

The opposite happened west of the Arabah. Intensification in the copper industry and the rising importance of the road to the northwest brought about two processes. The first is the dramatic growth in activity and prosperity at Tel Masos in the Beer-Sheba Valley—the “gateway community” of the desert polity and, possibly, the seat of the tribal leadership. In the early Iron IIA Tel Masos (Stratum II) became the biggest settlement in the region. Its material culture—in both archi-

⁴¹ E.g., Cohen and Cohen-Amin 2004: Figs. 37: 8; 40: 4; 55: 9; *ibid.*: 133.

⁴² Boaretto, Finkelstein and Shahack-Gross 2010.

⁴³ Yahalom Mack *et al.* 2017.

⁴⁴ Ben-Yosef *et al.* 2019.

⁴⁵ Levy, Münger and Najjar 2014.

⁴⁶ Finkelstein and Lipschits 2011.

texture and pottery—indicates influence of the settled lands, but its layout, with many open areas, hints at the pastoral background of the inhabitants.⁴⁷ The second, related process was the intensification of sedentarization in the Negev Highlands, which peaked in the 9th century BCE.⁴⁸ One can think of a situation in which some members of the families/clans are active in the copper industry (production and transportation), while others slowly sedentarize in more amenable nearby areas: The extra income from participation in the copper industry enabled these groups to diminish animal husbandry and settle down. Grain was not grown in the Negev; it was probably imported from northern locations—the southern coastal plain, the Shephelah and the Beer-Sheba Valley.⁴⁹

How long Egypt continued to be present in the south depends on one's view on the 22nd dynasty's involvement in greater Canaan. Possibly, it lasted for several decades, until the early days of the 9th century BCE.⁵⁰ In the north, Egypt's dominant role was then replaced by hegemony of Omride Israel. In the south, throughout this period the main copper “trading partner” could have been Gath,⁵¹ which was the largest metropolis in the southern Levant,⁵² and one of the two hubs of alphabetic writing.⁵³ The situation gradually changed with the revival of copper production in Cyprus and the ensuing transportation of copper from the island to the Levant. As a result, the role of the Arabah centers as the leading suppliers of copper in the Levant and beyond diminished significantly. Activity in the Arabah copper centers declined and judging from the radiocarbon results ceased all together toward the end of the 9th century.

The dominant power in the Levant in the second half of the 9th century was the mini-empire of Damascus in the days of Hazael. In

⁴⁷ Finkelstein and Zilberman 1995.

⁴⁸ Boaretto, Finkelstein and Shahack-Gross 2010.

⁴⁹ Shahack-Gross and Finkelstein 2008.

⁵⁰ Ben-Dor Evian 2017: 36.

⁵¹ Fantalkin and Finkelstein 2006, followed by Ben-Yosef and Sergi 2018.

⁵² Maeir 2012.

⁵³ Finkelstein and Sass in press.

order to best profit from the Cypriot copper trade to the east, Damascus had an interest in repressing copper production in the Arabah. The destruction of Gath contributed to fulfilling this goal.⁵⁴ As a result, activity at Tel Masos dwindled and finally ceased. Under Damascene auspices, Judah expanded to the Beer-Sheba Valley for the first time. The decline of the copper industry also brought about the disappearance of the many Iron IIA sites in the Negev Highlands. The miners in the Arabah, the inhabitants of the Negev Highlands sites and the groups that inhabited Tel Masos reverted to a pastoral way of life and thus disappeared from the archaeology landscape. Perhaps better said, some disappeared and some re-appeared in the highlands of southern Jordan—Edom to be.

Several processes characterize the south in the first half of the 8th century. The first is the rise to hegemony of the Nimshide dynasty in Israel. At that time, Israel dominated Judah and was active along the two desert trade routes: In the west, at Kuntillet Ajrud in northeastern Sinai. In the east, there are reasons to suggest that it dominated Edom.⁵⁵

But what was this Edom? The first appearance of Edom in the extra-biblical historical records is in the days of Adad-nirari III of Assyria, *ca.* 800 BCE. The earliest historical references to Edom in the Bible are the chronistic verses about Amaziah King of Judah's victory over Edom at Sela (2 Kings 14:7a) and Uzziah King of Judah, who "built Elath and restored it to Judah" (2 Kings 14:22)—both in the first half of the 8th century. I have recently suggested that Amaziah and Uzziah—not strong enough to act far from their hub in Jerusalem—intervened in Edom as vassals of Israel's Jeroboam II.⁵⁶ Turning to archaeology, several finds at Buseirah⁵⁷ and Tawilan⁵⁸ seem to point to activity slightly earlier than the "classical" Iron IIB-C. Tawilan produced a radiocarbon determination which falls in the late 9th/early 8th

⁵⁴ Fantalkin and Finkelstein 2006, followed by Ben-Yosef and Sergi 2018.

⁵⁵ Finkelstein 2020.

⁵⁶ Finkelstein 2020.

⁵⁷ Bienkowski 2002: Figs. 9.39, 2–4, 8–10; 9.39, 1, 6, 9–10; 9.59, 4.

⁵⁸ Bennett and Bienkowski 1995: Figs. 6.19, 11; 6.33, 1; 6.35, 3; possibly 6.24, 7, 6.34, 8.

century BCE.⁵⁹ These early Edomites were probably local (highlands) pastoralists who settled down and possibly groups of pastoral nomads from a broader area, who were previously engaged in copper production in the Arabah. Sedentarization in the highlands was supported by a new stimulant of economic prosperity—participation in the lucrative Arabian trade under first Israelite (?) and then Assyrian domination, which replaced the copper industry in the Arabah.

SUMMARY

Following are points in which Ben-Yosef⁶⁰ agrees with my past interpretations:⁶¹

- Copper industry in the Arabah and transportation of copper to the settled land in the Iron I-IIA led to the rise of a desert polity.
- Prosperity in the Arabah commenced with the collapse of the Cypriot copper industry and trade in the eastern Mediterranean in the 12th century BCE and ceased with the revival of Cypriot mining and trade to the east in the 9th century.⁶²
- Egypt's involvement in the south following the Sheshonq I campaign brought about intensification of copper production in the Arabah.

My scenario differs from Ben-Yosef's regarding the following, essential issues:

- The very foundation of Ben-Yosef's scenario is erroneous: The Iron I-IIA desert polity is **not** devoid of stone-built remains. Apart from the copper sites in the Wadi Faynan and Timna areas, this is manifested in the remains of Tel Masos and the Negev Highlands settlement system. Tel Masos served as a “gateway community” for the Arabah copper and was probably the seat of the tribal leaders, especially in the Iron IIA. The late

⁵⁹ Smith, Najjar and Levy 2014: 287.

⁶⁰ Ben-Yosef 2019.

⁶¹ Fantalkin and Finkelstein 2006; Finkelstein 2014.

⁶² First proposed by Knauf 1991; 1995.

Iron I system of forts in southern Moab may also be related to copper prosperity in the south.

- The hub of the Iron Age kingdom of Edom was in the southern Jordanian highlands. This area and the Arabah feature different (mostly conflicting) settlement histories: In the highlands, very little activity in the Iron I, no presence in the Iron IIA and prosperity in the Iron IIB-C; in the Arabah, prosperity in the Iron I and especially the Iron IIA.
- There is no way to know how the desert people related to their polity. Edom is one possibility, however unlikely. Other possibilities exist, *e.g.* Midian, Amalek, Teman.
- I see no biblical references to a historic, pre 8th century BCE Edom. Genesis 36:31–39 is a Priestly list which, if pertaining to Edom, depicts realities in the south after the Babylonian conquest. The description of David’s activity in Edom (2 Sam 8:14), taken by Ben-Yosef⁶³ as a genuine memory of affairs in the 10th century BCE, portrays the days of Jeroboam II, “retrojected” by a Judahite author back to the time of the founder of the Jerusalem dynasty.⁶⁴
- The kingdom of Edom emerged in the late 9th century, as a result of intensification of Arabian trade and as an outcome of the collapse of the Iron I-IIA desert copper polity.
- The Khirbet en-Nahas fort cannot date to the 10th century BCE.⁶⁵ It was probably constructed in the late 8th century BCE⁶⁶ and hence has nothing to do with the desert copper polity of the Iron I-IIA.

ADDENDUM

I am grateful to the editors for the opportunity to respond to Ben-Yosef’s rejoinder. Attentive reading of his article shows that many of

⁶³ Ben-Yosef 2019; also Levy *et al.* 2005.

⁶⁴ Finkelstein 2020.

⁶⁵ As argued by Ben-Yosef 2019, following Levy *et al.* 2004.

⁶⁶ Finkelstein and Singer-Avitz 2009.

my points were well-taken. But there is still a way to go before we put the issues to rest. Below I wish to emphasize a few methodological flaws in Ben Yosef's article—leftovers from his original *Vetus Testamentum* paper.

1. Ethnographic comparisons in archaeology: Ben-Yosef criticizes comparison of past Negev societies to the Bedouin inhabitants of the region in recent generations, which is based on geographical and (at least partially) subsistence unity. The reader is left to decide between the validity of this and Ben-Yosef's comparison—to Mongolia of the Middle Ages.

2. Historical comparisons: Ben-Yosef argues that textual evidence for pastoral nomadic phenomena in the Middle East presented by Rowton and others “do not provide a satisfactory solution, as they also suffer from relying on (limited) specific cases and extrapolations that do not allow any discussion of possible deviations.” I doubt it; but in any event, they provide the *only* reliable comparisons.

3. Uniqueness of the early Iron Age phenomenon in the Negev: According to Ben-Yosef this “is not simply another ‘nomadic territorial formation’ ... but rather a centralized polity that was based on a complex society and resembled an early *state*.” Fair enough; but I see no difference between the early Iron Age and evidence (including copper industry) for an Early Bronze III-early Intermediate Bronze polity in the same region.

4. Date of the Khirbet en-Nahas fort: Only three radiocarbon determinations decide the date of construction, one found under the gate and two associated with its building. All three provide results in the 9th century—the earliest possible date of construction. All other determinations can be interpreted as originating from samples taken from industry wastes associated with later fills. Moreover, the discrepancy between the radiocarbon dates for samples from the industrial waste (no later than the 9th century) and the pottery from the site (much of it dating to the Iron IIB-C) can be interpreted only in one way: industry

no later than *ca.* 800 BCE; fort not earlier than *ca.* 730 BCE.

5. Remoteness of Khirbet en-Nahas: The fort is “far from any important routes or strategic spots” only if one places it before the 8th century. Together with the contemporary fort at En Hazeva on the western side of the Arabah Valley, it guarded the highly important Assyrian-dominated Arabian trade route where it crossed the Arabah.

6. Tel Masos and a desert polity: Ben-Yosef speaks about the “disparate quality of the archaeological record of Tel Masos, which essentially represents a settled society” (to differ from a pastoral-nomadic entity). On the contrary; Tel Masos presents the ultimate evidence against Ben-Yosef “architectural bias” theory. Desert territorial polities do leave remains behind, unless an archaeologist declares these remains irrelevant to the discussion.

7. Timna and the Bible: As far as I can judge, Ben-Yosef’s work in the Arabah has no relevance for the study of Ancient Israel. In any event, dealing with this issue necessitates a different set of analytical approaches from those needed for deciphering archaeological remains in the desert, including biblical exegesis and intimate knowledge of the archaeology of the settled parts of the Levant.

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