Aspects of textile production in Iron Age Transjordan.
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Archaeological finds from different sites in Jordan demonstrate the role textile production played in Iron Age society. Today I will present some results from my archaeological research on loom weights and textile fragments from Jordan. I will present some results of textile production in Ammon and Moab during the Iron Ages between (800-600 BC). First I will concentrate on three sites in the Central Jordan Valley. And then I will discuss textile finds, loom weights and an inscription from a temple complex in a small fortification in Moab.

Central Jordan Valley
In the central Jordan Valley, Deir Alla, Mazar and Saidiyeh can be seen as a row of sister sites, situated close to each other, whose fate was linked (Yassine and Van der Steen 2012:81). Textile production in this part of the Jordan Valley was probably interconnected, each site making textiles on a different scale and producing various different types.

Mazar
Large public buildings have been found in Mazar strata V and III (Iron Age). In and around these buildings textiles were woven on a small scale. The production was limited and meant for the use of the inhabitants of the fort. Stratum V dated to 7th-6th century BC revealed one large group of loom weights and large tubs. It has been suggested (Mazow 2010) that these ‘bathtubs’ were used for the fulling of wool. Another possible function would be for dying yarn or cloth. But the ‘bathtub’ could also have been used as a bin to store grain. Stratum III– revealed 8 different groups of loom weights centred in the northern part of the fort, in and on the roof of public buildings. Later in the Persian Period (Stratum II) there were no public buildings any more at Mazar. In this period private houses have been found, in which textiles were produced on a small scale. The small numbers of loom weights suggest that the production was intended for their own household use (Boertien 2012).

Deir Alla
The southernmost of the three settlements was Deir Alla. In Iron IIB here, the production of textiles was three times more than in most of the other sites in the Southern Levant. It was a small, unwalled settlement, with the houses built close together around a temple complex. From phase IX some 650 loom weights have been excavated and 24 looms could be reconstructed within the 15 households living at Deir Alla phase IX. The village was destroyed in ca.800 BC by an earthquake followed by a fire. The loom weights were found in situ on the place where they fell from the loom. From the stratigraphy could be concluded that most of the households had more than one warp-weighted loom set up in the house, in the courtyard or on the roof of the house. The shrine was a plastered benched room, on the wall of which was a long text about the seer Balaam and the disasters that he predicted. In the text mention is made of a female deity who’s name was Shagar, and in the sanctuary compound inscribed artefacts mentioning the name Shera, and in the surroundings of the benched room some very unusual statuettes of females have been discovered. The finds and architecture reflect cultic use. The benched room was part of a cultic structure in which weaving and cooking were important activities. At Deir Alla a fragment of fine hemp fabric was found amongst the loom weights of the loom on which it was woven. The discovery of several fragments of hempen cloth and yarn in phase IX is very unusual, as hemp cloth has never before been reported from Iron Age levels
in the Levant. Linen is the most commonly used plant fibre. The presence of fine hempen fabric in a complex around a cult room with a religious inscription raises the question whether this special kind of cloth could have had a cultic use. Textile production at Deir Alla phase IX was high, which may have been due to the liturgical use of textiles in and associated with the temple, such as flags, banners, curtains or clothing, and possibly also clothes for the deity. It is also possible that textiles were traded through the temple. Given the exceptional quality of the hemp fabric and the patterned textiles, the profits from the textiles produced at Deir Alla must have been relatively high (Boertien 2004, 2007, 2008, 2009).

Sa’idiyeh
Tell es-Sa’idiyeh the northernmost of the three sister sites, was about 800 BC a major settlement with rows of identical houses. From the hundreds of loom weights could be seen that weaving was performed on a large scale (Pritchard 1985; Burke 2010). The architecture of the settlement and the finds, including hundreds of loom weights, exhibit a striking similarity to Gordion in Anatolia – which is dated to around 800 BC – where many loom weights and textile fragments have also been found. Amongst the textile fragments from Gordion some seem to be made of hemp. The loom weights from Tell es-Saidiyeh are comparable in size and weight to those from Deir Alla and Mazar. It is very likely that textiles were produced in Sa’idiyeh on an industrial scale. The settlement was probably a central place for textile production and trade within a network of cities situated in the central Jordan Valley east of the River Jordan.

Moab
Khirbet al-Mudayna is an Iron Age site in the Wadi ath-Thamad, on the northern border of ancient Moab. It was a fortified compound measuring 140x80 m surrounded by casemate walls. A huge six-chambered gate with two towers protected the northern entrance to the settlement. Behind the gate there was an open plaza and a broad road leading into the settlement. To the east of the plaza was a temple complex. To the south of the temple complex on the east side of the road were two pillared buildings. The entrances to the different buildings were alongside the road. Mudayna yielded many unique discoveries, including pieces of textile, textile impressions, loom weights, spinning bobbins, spatulas and large limestone vessels. The temple was located directly behind the big six-chambered gate and was part of a temple complex with a cistern, a weaving room, a kitchen and a courtyard with ovens. The temple complex of Khirbet al-Mudayna had a weaving room, a kitchen and a courtyard with ovens. This is a unique combination suggesting cooking, baking and weaving in association with the shrine. In the weaving room stood a warp-weighted loom with more than 50 donut shaped loom weights. The position of the loom weights makes clear that four rows of loom weights were used on this loom. Next to the loom stood a basket made of coiled reed plaited with linen yarn. Textiles were probably produced to cover the needs of the temple, such as liturgical vestments. However, other woven products needed for worship, such as banners, flags, rugs and curtains, could also have been produced at the site. The temple was identified as such because of the architecture and the finds (Daviau and Steiner 2000:1). The sanctuary at Khirbet al-Mudayna measures 5.50x5.50 m and is divided by a freestanding bench into a main room and an annex at the northeastern side of the room. The freestanding bench was plastered, as were the benches running alongside the walls of the building. A large, smoothly polished flat stone formed a small podium in the southeastern corner of the room. Three lime stone altars were found on and around this podium: an inscribed incense altar, a decorated libation altar, and an undecorated fire altar. The incense
altar is well made, and unique in shape. It is 96 cm high, conical and consists of five segments. On top is a cup-shaped depression stained with soot. The altar is made of fine limestone, with incised pendants and crosses and painted with a red and black pattern of triangles. One face of the shaft is decorated from top to bottom with diagonal red lines. Some paint is preserved on the petals of the altar’s upper cone. The inscription is mounted on the upper cone of the altar (Daviau 2002). The inscription reads ‘Incense altar made by Elishama for Josefa the daughter of Awat’. It is a unique inscription, firstly because for the first time it is clearly stated that the object is an incense altar. Until then, no one knew what such altars looked like. Secondly, the inscription on the altar tells us who the maker was. And thirdly, the altar was made for a woman. In addition, this woman is also referred to as the daughter of a person named Awat, which is most likely a woman’s name (Dion and Daviau 2000).

At Khirbet al-Mudayna all the finds were unearthed in public buildings, such as the six-chambered gate and two large buildings with pillars. Pillared buildings consist of three sections, separated by two rows of pillars. In pillared building 200, the limestone basins stood in between the pillars. The floors of the aisles were paved and a thick layer of plaster had been applied around the bins. This kind of large public building with pillars was until recently considered to be exclusively Jewish, but apparently they were also used in Moab. Such a building has even been found in Ebla (Tell Mardikh) in Syria (Matthiae 2004). In Ebla this building is regarded as a stable, an interpretation also advocated by some archaeologists for a similar building at Megiddo in Israel. For a long time this building was known as ‘the stables of Solomon’. The remains of Khirbet al-Mudayna convincingly demonstrate that the tripartite pillared buildings at this site did not function as stables. Weaving was performed inside the buildings and on the roofs. The basins situated between the pillars were probably used for the tinting of fabrics. This is indicated by the thick layers of plaster on the structure around the basins between the pillars and the many freestanding limestone basins. One of these large limestone basins bore incised motifs depicting a palm tree, an animal and patterns suggesting the structure of looms. The various minerals that were found in the buildings and a pallet with copper residue were probably used for making paint. The textiles produced were meant for common (public) use and/or benefit. Whether the weaving output outside the temple complex, in the large public buildings, had something to do with the temple is not clear. In any case, the textiles made at Khirbet al-Mudayna and the proceeds were not intended for private use (Boertien 2013)

Loom weights and textiles
At Khirbet al-Mudayna, a total of 278 loom weights were registered of which 250 could be studied. The loom weights indicate that 8 looms, at the most, could have been operated at the site. The spindle whorls found at Mudayna are limited in number, only 33 whorls were found in area A and B. Several fragments of textile and yarn have been found at Mudayna. A fragment of wool fabric was found in pillared building 200. The fabric was used to cover the contents of a small bowl. The material from inside the bowl has not been analysed. In the weaving room of the temple complex fragments of plaited linen thread were found together with basketry, all belonging to a basket made of coiled reed and plaited with linen. The material was found near a warp-weighted loom.

The location of the site and the communal activities performed within the public buildings suggests that textiles were sold to the local population (living outside the enclosure), or to traders passing by Mudayna on the north-south route. However, because of the very limited production capacity it is more likely that yarn was spun and textile was woven and probably dyed at the site to be used within the fortification of Mudayna.
The textile finds from Deir Alla and Khirbet al-Mudayna is of great importance for our knowledge of textile production in Iron Age Transjordan. They are a unique source for the study of textiles in the archaeology of the entire Southern Levant.

Bibliography


