

SALT IN MESOPOTAMIA: SOME EVIDENCE FROM THE SELEUCID-SASANIAN PERIODS

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Salt is a pre-requisite of life and its extraction has played an important and well-documented economic role from medieval Europe to Africa and China [Nenquin 1961; Hopkinson 1997; Davison 1993; Tora 1993]. The extraction and use of salt have a particularly lengthy history in the Ancient Near East, possibly commencing as early as the neolithic or chalcolithic periods [Anati 1962: 29–30; 1963: 248–49; Buccellati 1990]. Third millennium and later cuneiform texts from Mesopotamia refer to salt-gathering and various uses of salt in food, medicine, incantation rituals, metallurgy, the curing of hides, preservation of fish and even possibly warfare [Butz 1984; Potts 1984; Durand 1987; 1990]. This review highlights some further evidence from the so-called “late periods” in Mesopotamia.¹⁾

The annual salt tax constituted an important source of crown revenue in Ptolemaic Egypt and parts of the Seleucid empire [Rostovtzeff 1932: 82; 1941: vol. I, 309, 470, vol. III, 1396, n.122]. Mesopotamia was no exception. Sealed bullae from the Anu-Antum temple at the city of Warka, then known as Orchoi, demonstrate the application of this tax during the second century BC [Rostovtzeff 1932; McDowell 1935: 179–98]. Further evidence derives from the eastern Seleucid capital at Seleucia ad Tigrim. The 1927–1932 American excavations at this site produced two large private archives of sealed clay and bitumen bullae from level IV of the so-called “Great House” and a small number of surface and scattered finds, dating between the reigns of Seleucus I Nicator (305–281) and Demetrius II (146–38/130–25). Many of these bullae deal with exemptions from the salt tax [McDowell 1935; Savage 1977: 19–21]. Excavations in the so-called “Archive Square” building by a later Italian expedition to Seleucia revealed a third archive of bullae referring to salt, the latest of which dated to 154/53 BC [Invernizzi 1968/69; 1976: 168–69, fig. 5; Invernizzi *et al.* 1985: 92–94, 175–78; cf. also Valtz 1990]. Fingerprint analysis of these bullae suggested that a single official was responsible for the registration of both the payments of and exemptions from this salt tax [Invernizzi and Papotti 1991].

Potts [1984], Buccellati [1990] and Durand [1990] have stressed the potential importance of salines in the southern Jazira as sources of salt in ancient Mesopotamia. However, the extent to which central government maintained a monopoly over salt extraction and sales remains uncertain. McDowell [1935] has suggested that the Seleucid Babylonian salt tax was exacted only when salt was brought to the cities for sale. The persons responsible for the primary extraction of the salt thus are likely to have been elements of indigenous rural or bedouin populations, possibly bartering or selling salt for grain, butter, wool and manufactured goods: a similar situation existed in this region during the late nineteenth century [Potts 1984; Simpson 1994].

Salt played an important role in the Palmyrene economy. The “Tariff of Palmyra”, a large stone stela inscribed in Palmyrene and Greek and dated to AD 137, was a public record of old and new laws dealing with merchandise and taxation [Browning 1979: 15–17]. Two clauses were devoted to the trade and sale of salt:

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1) No attempt is made here to explore the Achaemenid evidence but it may be remarked that, according to Polyaeus (*Strategemata* IV. 3.32), the commissariat of Cyrus (550–530) or “Great King’s breakfast and dinner” included reference to “[kitchen] salt, 10 *artabai*”, where one *artabe* equalled 55.67 litres [Bivar 1985: 638–39].

Clause XXVII Salt

It seemed a good thing that salt should be sold on the main square where gatherings take place. The Palmyrene who buys salt for his own use will pay 1 Italic *As* per *modius*. The existing tax on salt (Clause XVII) in Palmyra shall be estimated, as in the Province, on the *As*, and the salt shall be delivered to the merchants to be sold according to the custom.

Bernbeck's [1993] survey of sites along the Wadi Aḡiḡ, close to the Syrian-Iraqi border, strengthens the likelihood that sources in the southern Jazira were being exploited during this period. Further east, the large size, high quality and relative proximity of salines in the Tharthar depression suggest that salt extraction and taxation may have played an equally important role in the hitherto poorly-documented economy of Hatra [cf. Ibrahim 1986; also Cuinet 1892/94: 802–804].

The importance of this local resource may explain a distinctive feature of Parthian ceramic plainwares of central and northern Mesopotamia which often have pale or whitish exterior surfaces. This phenomenon has also been observed in the case of contemporary Parthian pottery from Seleucia [Matson 1971: 66–68]. This effect appears to have been caused by the migration of soluble salts to the exterior surfaces of the vessels during drying prior to kiln firing, and has also been observed on Nabataean and Early Islamic Cream Wares from Jordan [‘Amr 1992; Franken 1986: 241]. This surface effect probably stems either from the potters' deliberate attempt to improve the quality of the clay or to enhance the surface appearance of the vessels. The addition of salt water or even rock salt to potters' clay for these purposes is widely attested in recent times from Palestine, Jordan, Pakistan and Mexico [‘Amr 1987: 43, 95–96; Rice 1987: 67, 98, 119, 123; Arnold 1989: 26–28, 59–60].

There is further evidence for the exploitation and use of salt in Mesopotamia during the Sasanian period (c. AD 224–651). Stores of “fine white salt” and grain were seized by Julian's army in AD 363 at the fortified Sasanian town at Hit. This city, also known as Diacira, Dakira or Ihi dhe-Qiri, was situated on the Euphrates close to major central Mesopotamian salines [Oppenheimer 1983: 165–66, quoting Amm. Mar. XXIV. 2–3 and Zosimus III.15, 2–3; cf. also Banks 1912: 64–65]. The Babylonian Talmud, largely composed in central Mesopotamia between the third and fifth centuries AD, contains further references to uses of salt, with allusions to salted venison, bread and salt, the addition of salt to vegetable dishes, and the curative powers of salt in the case of fever, toothache, earache, snakebite and hangovers [Newman 1932: 33; Cohen 1937: 163–64, 206, 260, 262–63, 267, 270–71, 274–75; Neusner 1969: 368]. A cure for fever reported by Rab Abaye (c. AD 283–338) involved measuring out salt equivalent to the weight of a new *zuz* and tying it around the patient's neck [Cohen 1937: 267; also Neusner 1969: 349].²⁾ Tasting salt on one's finger-tip was said to facilitate memory [Cohen 1937: 315]. However, although salt and water were considered indispensable to life, caution was exercised against excessive salt intake [Cohen 1937: 259–60, 262–63, 265].

A limited amount of information can be culled from other sources: a so-called “*dehkan's* dish” consisted of slices of salted mutton with pomegranate juice served with eggs [Christensen 1936: 472; cf. Roden 1986: 31].³⁾ In c. AD 637/AH 16, an Arab army commanded by Sa'd captured the Sasanian capital at Ctesiphon. One of the anecdotes repeated by later Arab writers described how the soldiers “found camphor and, taking it for salt, put it in their cooking-pans” [al-Balādhuri = Hitti 1916: vol. I, 419] but after “we began to knead it [in our dough] ... we discovered that it made our bread taste bitter” [Tabari = Juynboll 1989: 24; cf. A'lam 1990].⁴⁾

2) Two denominations existed in Jewish silver, namely the smaller *zuz* which was equivalent to a Roman denarius or drachm and a quarter of the larger denomination, known as the *sela*, which was equivalent to a tetradrachm or shekel [Mildenburg 1984: 27].

3) The title of *dehkan* was given to a class of Persian landlord.

4) Camphor was imported to Tang China from “Po-se”, usually considered to be Persia. However, camphor trees are indigenous to south-east Asia and Laufer [1919: 478–79] concluded that in this case Po-se was Malaya, adding that the Arabic/Middle Persian word for camphor (*kafūr*) may be derived from the Sanskrit *karpūra* and that in medieval times Iran imported camphor via the Gulf port of Siraf [Laufer 1919: 585, 591; cf. also Schafer 1985: 166–68, A'lam 1990].

Finally, in Ferdowsi's *Shah-Nameh*, a tenth century collection of stories about pre-Islamic Iran, salt was recognised as a symbol of hospitality with strong preservative powers [Levy 1985: 272, 310, 342; also Arberry ed. 1963: v] and it continued to play a role in Mandaean ritual in the marshes of southern Iraq up to the present day [Drower 1937: 1956].

The extraction and salt thus clearly continued to play an important role in the Mesopotamian economy during these so-called "late" periods.

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