From Source to History Studies on Ancient Near Eastern Worlds and Beyond

Dedicated to Giovanni Battista Lanfranchi on the Occasion of His 65th Birthday on June 23, 2014

Edited by

Salvatore Gaspa, Alessandro Greco, Daniele Morandi Bonacossi, Simonetta Ponchia and Robert Rollinger

> 2014 Ugarit-Verlag Münster

From Source to History: Studies on Ancient Near Eastern Worlds and Beyond. Dedicated to Giovanni Battista Lanfranchi on the Occasion of His 65th Birthday on June 23, 2014

Edited by Salvatore Gaspa, Alessandro Greco, Daniele Morandi Bonacossi, Simonetta Ponchia and Robert Rollinger

Alter Orient und Altes Testament, Band 412

© 2014 Ugarit-Verlag, Münster
www.ugarit-verlag.de

All rights preserved. No part of this publication may be reproduced,
stored in a retrieval system, or transmitted, in any form or by any means,
electronic, mechanical, photo-copying, recording, or otherwise,
without the prior permission of the publisher.

Hubert und Co, Göttingen
Printed in Germany

ISBN: 978-3-86835-101-9

Printed on acid-free paper

ZAGROS SPICE MILLS: THE SIMURREAN AND THE HAŠIMUR GRINDSTONES*

Karen Radner

Gianni Lanfranchi's research has often focused on the mountain regions encircling the Mesopotamian plain, their inhabitants and their lifestyles. In my contribution in honour of this pioneer in the study of Ancient Near Eastern highland–lowland interactions, it is argued that the evidence for the *hašimur* grindstone in Babylonian sources of the first millennium BC should be linked with the Simurrean grindstone of the Old Babylonian period and that this type of equipment is to be identified as a specialised spice mill. Both Hašimur and Simurrum are located in the Zagros flanks and the connection of these toponyms with a tool used to add flavour to the Mesopotamian cuisine provides some insight into positive perceptions associated with the mountain regions.

The Hašimur grindstone of the first millennium BC

Various Neo-Babylonian archival texts contain information about a particular type of stone instrument called the *hašimur* grinding stone and allow its description as a spice mill consisting of two separate parts whose size and weight still allowed it to be moved.

Two legal texts, one from Babylon dating to the second year of Neriglissar (558 BC),¹ the other from Borsippa dating to the 34th year of Darius the Great (488 BC),² describe the *hašimur* mill as consisting of a lower and an upper stone, the grinding slab and the handstone (*naškabu* "rider"). Two Persian-period texts highlight that *hašimur* mills could be relatively easily transported, indicating that these stone tools cannot have been very big. The first text is a legal document from Uruk, dating to the first year of Cyrus as king of Babylon (538 BC), with two statements delivered before the Eanna temple authorities regarding the theft of a *hašimur* mill within the

^{*} This study has benefited from the expertise of Barbara Böck, Michael Jursa and Frans van Koppen and the practical help of Alexa Bartelmus and Jon Taylor and I would like to thank them all cordially. The bibliographical abbreviations are those used in the *Assyrian Dictionary of the Oriental Institute of the University of Chicago* (CAD).

1 BM 30951 (76-11-17, 678) = Evetts Ner. 45: 1–3: NA₄.HAR šá haš-ši-<mu>-ur ù na-áš-ka-

¹ BM 30951 (76-11-17, 678) = Evetts Ner. 45: 1–3: NA₄.HAR *šá haš-ši-<mu>-ur ù na-áš-ka-bi šá* PN₁ *ina pa-ni* PN₂; 8–10: *pu-ut là* (written over *šá*) *hi-pí* NA₄ *na-áš-ka-bi* PN₂ *na-ši*, "A *hašimur* grindstone and (its) handstone belonging to PN₁ at the disposal of PN₂; PN₂ guarantees not to break stone and handstone." Collated 2 August 2012.

² BM 29213; edition: Waerzeggers 2010, 510–511 no. 99: 1–3: 1 NA₄.HAR.HAR ù na-áš-ka-bu ha-ši-mu-ur PN a-na É ši-bir a-na ši-ib-šú it-ta-din, "PN gave the lower and upper millstone of a hašimur mill to the grinding facility (of the Ezida temple) as šibšu tax". Correct erroneous na-áš-ba-ku in Waerzeggers' edition (surely there a typo); collated 2 August 2012.

temple precinct.³ A slave states that his master's son stole the tool: "On 28 Kislimu, PN_1 removed the *hašimur* mill of PN_2 from the gate of the Lady-of-Uruk unlawfully at night and did not replace (it)",⁴ and then the brother of the accused confirms that the instrument ended up in their father's property: "I found the *hašimur* mill of PN_2 which had been taken away unlawfully in the house of PN_3 , my father." The mobility of the *hašimur* mill is confirmed by a letter from Uruk, part of a small dossier of texts from the Eanna temple archive concerning the preparations for the visit of Cambyses to his palace in Abanu in 528 BC: "The lord shall load flour, dried spice, wool and (other) necessities, as many as there are, on boats and they shall come quickly. The lord shall send two *hašimur* mills." We find that the mills are to be supplied together with various items, including dried spice ($t\bar{a}b\bar{\nu}lu$, from the verb $ab\bar{a}lu$ "to dry"), for the preparation of the royal banquet, which would seem to indicate that the condiments were ground only shortly before consumption—the best way of ensuring the preservation of their taste.

We can be certain that this device indeed served for the grinding of spices as the lexical commentary series HAR.gud⁸ associates the *hašimur* grinding tool with a grinding stone for the $zib\hat{u}(m)$ plant, an instrument that is well attested in archival and lexical texts from the Old Babylonian onwards.⁹ The identification of $zib\hat{u}(m)$ with *nigella sativa* "black cumin, Schwarzkümmel" is based on the logographic writing ú.tin.tir.gi₆.sar in the lexical series HAR- $ra = hubullu^{11}$ and on the well attested use of the plant for medical purposes. The Mesopotamian appreciation for the $zib\hat{u}(m)$ plant recalls that the medicinal qualities of black cumin, a standard condiment in Middle Eastern everyday diet, are very highly regarded in Islam, with the saying "There is healing in black cumin for all diseases except death" attributed to the prophet; called the "blessed seed" (*habbatul barakah*), its use in traditional Middle Eastern medicine has led to a number of recent studies on the pharmacological effects of *nigella sativa* which have confirmed the antibacterial effects of its seed.¹²

There is also a plant with the name $ha\check{s}imur$, identified by the plant determinative \acute{u} , which is attested in several Assyrian texts from the 7^{th} century BC: a drug inven-

³ YOS 7 10; edition: Holtz 2009, 103–104.

 $^{^4}$ YOS 7 10: 5–8: U $_4$ 28-KÁM sá ITI.GAN NA $_4$.HAR ha-ši-mur sá PN $_2$ ul-tu muh-hi ba-ab sá d GAŠAN sá UNUG ki ina sa-ar-tu $_4$ ina mu-si PN $_1$ it-ta-sa-ah la il-ta-kan.

⁵ YOS 7 10: 9–13: NA₄.HAR ha-ši-mur šá PN ina sa-ar-tu₄ na-šá-a-ta ina É PN AD-ia a-ta-mar.

⁶ Tolini 2009

 $^{^7}$ YOS 3 66: 11–17: ZÌ.DA ta-bi-lu SÍG.HI.A \grave{u} hi- $\check{s}ih$ - tu_4 ma-la i-ba- $\acute{a}\check{s}$ - $\check{s}u$ - \acute{u} GIŠ.MÁ.MEŠ EN lu- $\check{s}e$ -el-li \grave{u} kap-du lil-li-ku 2 NA4.HAR.MEŠ $\check{s}\acute{a}$ ha- $\check{s}i$ -mu-ru EN lu- $\check{s}e$ -bi-la. Cf. Tolini 2009, 246.

⁸ Hg. D ii 144: $na_4.ur_5$ zi-e-bi (var. zi-bu-um) = e-ru-u zi-i-bi = ditto ha-ši-mur; see Reiner – Civil 1970, 140.

⁹ For attestations see AHw 1525 s.v. zībum III, zibû(m) I, CAD E 324 s.v. erû B, CAD Z 107 s.v. zību C and Heiss et al. 2012–13,151–152.

¹⁰ Suggested already by the pioneers of the field: e.g. Küchler 1904, 85 and Thompson 1925, 50. Most recently discussed in Heiss *et al.* 2012–13, 151.

¹¹ Hh. XVII 302; see Reiner – Civil 1970, 94.

¹² e.g. Bakathir – Abbas 2011 with references to earlier literature.

tory from Assur¹³ and manuscripts from Nineveh and Assur of the pharmacological lexicon Uruanna = $ma\check{s}takal$.¹⁴ What plant precisely this is and whether it was also used as a spice, in addition to medical purposes, remains entirely unclear from these attestations.¹⁵ The association of $ha\check{s}imur$ with $atkam\ Ka\check{s}\check{s}\hat{i}$ in Uruanna¹⁶ does not help as this plant cannot be identified either and in any case, the exact relationship implied by the entry in the lexicon is unclear: is it a synonym or a substitute plant?¹⁷ That a mill for $zib\hat{u}(m)$ is equated with the $ha\check{s}imur$ mill makes sense because they are both used for grinding spices but of course does not permit the equation of the $ha\check{s}imur$ plant with $zib\hat{u}(m)$, despite the fact that most commentators have assumed this.¹⁸

Hašimur is also the name of a mountain range which is attested both in Assyrian and Babylonian texts from the 12th century BC onwards. Based on the topographical information contained in the campaign reports of the Assyrian kings Shalmaneser III in 834 BC¹⁹ and Šamši-Adad V in 814 BC,²⁰ it can be identified with the southern extension of the Jebel Hamrin, the part cut off from the Hamrin's main ridge by the Diyala river.²¹ The "mountains of Hašimur" are also mentioned, albeit in unclear context, in the very fragmentarily preserved epic poem celebrating how Adad-šumuuşur of Babylon pacified his war-torn country in 1192 BC.²²

In the early second millennium BC, this mountain range—whose contemporary name is not known—constituted the southern border region of the kingdom of Simurrum (or Šimurrum), as is clear from the rock relief and inscription of a ruler of Simurrum at nearby Sar-i Pol-i Zohab.²³ With a recorded history of close to half a

 $^{^{13}}$ VAT 8903 = Köcher 1955, no. 36: ii 36: ú.ha-si-u-ru; for the context of this text see Tavernier 2008.

¹⁴ From Assur: VAT 13679 = Köcher 1955, no. 2: i 31: ú.*ha-ši-bur*. For the parallels from Nineveh see fn. 16. Note that the supposed attestation for ú.*ha-áš-[mur]*, hence AHw 334 s.v. *haš(i)mur*, in Köcher 1955, no. 2: iv 15 should instead be read ú.*ha-ás-[su]* (courtesy Barbara Böck).

¹⁵ Although Bottéro 1957–1971, 341 included the plant in his list of spices.

¹⁶ CT 14 22: v–vi 52–54 (spelled ú.*ha-ši-im-bur* and ú.*ha-ši-in-bar*) // CT 37 32 // VAT 13679 = Köcher 1955, no. 2; cf. Balkan 1954, 140.

¹⁷ On the nature of the entries in Uruanna see Böck 2011, 693–694.

¹⁸ e.g. Meißner 1937, 42; Balkan 1954: 133; Bottéro 1957–1971, 341: "variété de cumin ou de fenouil".

¹⁹ Grayson 1996: A.0.102.14: 110–112 (Black Obelisk) // A.0.102.16: 195'–196' (Nimrud statue; very fragmentary): "I crossed the Lower Zab, crossed Mount Hašimur (KUR.*ha-ši-mur*) and went down to the land of Zamri". For this campaign see Fuchs 2011, 267.

²⁰ Grayson 1996: A.0.103.3: iii 19'–20' (Assur stela): "I crossed the river Zab (= Lower Zab), traversed Mount Ebih (= Jebel Hamrin main ridge), and crossed the river Turnat (= Diyala) in flood." Destruction of various settlements controlled by the kingdom of Babylonia; 24': "I crossed Mount Hašimur (KUR.*ha-ši-mur*)." Fighting continues in Babylonian-controlled territories and centres on the city of Nemetti-šarri (also known as Ah-Sana); 37'–38': "I marched to Der (= Tell Aqar near Badra)." For this campaign and its date see Fuchs 2011, 272–273, 319.

²¹ Weidner 1933–34, 97; Levine 1973, 23. This mountain range is to be distinguished from the Pass of Hašmar (*nēreb ša Hašmar*) which corresponds to the Paikuli Pass across the Qara Dagh mountain range (and contra e.g. Liverani 1992, 52 and Fuchs 2011, 232 not the nearby gorge of Darband-i Khan which is not suitable for regular traffic).

²² Grayson 1975, 76–77: iv 21: KUR-*i šá ha-ši-mur*.

²³ Frayne 1990, E4.19.1.1001.

millennium from the 24th to the 18th century BC, Simurrum was one of the most stable political entities in the Middle East. Intensified research in its core region, the Upper Diyala region and the Shahrizor plain in Sulaymaniyah province of the Kurdish Autonomous Region of Iraq, such as the excavations in Bakr Awa where archaeological layers coinciding with the existence of Simurrum are currently being excavated,²⁴ are bound to greatly enhance our still limited grasp of its long history, which currently is reconstructed mainly on the basis of sources from the neighbouring states in southern Iraq, from Akkad to Isin and Ešnunna.²⁵

To return to the milling equipment, we shouldn't necessarily take it for granted that there is a direct connection between the *hašimur* mill and the plant with which it shares its name, although dictionaries, 26 commentators and translators 27 habitually translate the term as "grindstone/mill for (black) cumin". The term hašimur is never prefixed with a determinative when forming part of the mill's designation and the attested spellings therefore leave its nature in the dark. It is therefore just as likely that the Babylonians associated the mill with the toponym Hašimur rather than the plant. In view of the fact that one can assume that the mountain range would have been better known than a relatively obscure medicinal plant I would argue that the mill took its name from Mount Hašimur. This is further supported by the fact that also the toponym Simurrum was linked to a type of grinding stone that, according to the available evidence, was a spice mill as well.

The Simurrean grindstone of the early second millennium BC

The Simurrean grinding stone (erûm Simurrûm) is attested in Babylonian archival texts from the early second millennium BC and in the lexical lists. Marten Stol²⁸ took the designation Simurrûm "from Simurrum" to refer to the place of origin of the stone used for the device. But as there are otherwise no attestations for such a type of stone, the appellative would seem to refer to the tool rather than its material.

While the available evidence does not allow us to develop as clear an image of the Simurrean grinding device as of the Hašimur milling equipment the known attestations make it abundantly clear that it is an expensive tool. The price of two Simurrean grinding stones is recorded as six silver shekels in a legal text from Ur, dated to the 31st year of Rim-Sin of Larsa.²⁹ At three shekels a piece, these tools are therefore nine times more expensive than the grinding stones traded in great quantities during about the same period at Mari, with a price tag of just one third of a silver shekel each,³⁰ and even if we assume that bulk-buying 200 pieces reduced the cost of these items significantly their price would still be a fraction of that of the Simurrean grinding equipment. Renting, too, was not cheap as another document from Larsa, dated to the fourth year of Samsu-iluna of Babylon, informs us that it

²⁴ Miglus *et al*. 2011.

²⁵ For an overview and a discussion of its localisation see Radner in Altaweel *et al.* 2012, 9–

²⁶ AHw 334 s.v. *haš(i)mur*, *haši'ur(u)*; CAD H 141 s.v. *hašimuru*.

²⁷ e.g. Holtz 2009, 103–104; Meißner 1937, 41–42; Tolini 2009: 246, Waerzeggers 2010, 511.

²⁸ Stol 1979, 84–85.

²⁹ UET 5 459: 4–5: 2 na₄.ur₅ si-mu-ru-um kù-bi 6 gín.

³⁰ ARMT 13 82, cf. Milano 1993–97, 394.

cost 10 litres of grain per month to rent such equipment, recording the rental of a Simurrean grinding stone for one year at a cost of 120 litres of grain.³¹

Simurrean grinding stones were used at home as is clear from the document drawn up for the division of a well-to-do mercantile estate at Ur, dated to the 28th year of Rim-Sin of Larsa. Each party received an equal share of the houses, building plots, fields, slaves, sheep, precious metals and furniture being divided, and this last category included for each of the two parties "a Simurrean grinding stone, a stone for zibûm, a potter's grinding stone". 32 Here, we find the Simurrean grinding stone associated with other specialised milling equipment. The stone for nigella sativa (zibûm) is a spice grinder of the kind we encountered in our earlier discussions as associated with the Hašimur mill in the lexical series HAR.gud whereas the "potter's grinding stone" is a specialist tool used for pulverizing pot sherds and dried-up clay.³³ The lexical tradition confirms the link between these three instruments, listing them in the sequence zibûm, Simurrean and potter's grinding stone, 34 and moreover describes at least the *zibûm* mill as a tool "with its upper stone". 35 In our inheritance text, these three grinding devices are not associated with ordinary grain mills which are not mentioned at all. While such instruments are otherwise well attested, especially in dowry lists,36 they are generally not considered valuable enough to warrant inclusion in documents concerning the property of the very wealthy.³⁷ Following the conventions governing the organisations of cuneiform inventories, we can expect the Simurrean grinding equipment to be more valuable than the subsequent items, and this will be the reason why the sequence does not exactly correspond to that attested in the lexical tradition where the more common zibûm grindstone is mentioned first. The high price of Simurrean grinding equipment has already emerged from our earlier discussion and the present context allows us to conclude that it was not used for the milling of grain. That this was not the purpose of the zibûm and the potter's mill either is of course clear from the unambiguous etymologies of these terms. We can extrapolate from our present context that also the Simurrean mill was employed for private ad hoc use. The grinding of condiments is the most likely purpose although concrete evidence for this interpretation is currently lacking from Old Babylonian sources.

³¹ YOS 12 120: 1: 1 na₄.ur₅ ši-mu-ru-um.

³² YOS 8 98: 28, 57: 1 na₄.ur₅ si-mu-rum 1 na₄ zi-bi 1 na₄.ur₅ báhar.

³³ Salonen 1965, 55; Reiner – Civil 1970, 24 n. 1; Prang 1976, 20 (for references in Old Babylonian archival texts where this instrument is frequently attested as part of the inventory of private households).

 $^{^{34}}$ na₄.ur₅ zi-bu šu-sè-ga = qa-du nàr-ka-bi-šu / na₄.ur₅ si-mu-ru / na₄.ur₅ bu-uh-ru in the Ugarit edition of HAR-ra = hubullu; see Reiner – Civil 1970, 44: 192–194. The relevant passage is not preserved in the manuscripts of the canonical series, but the already discussed reference in the commentary HAR.gud makes it clear that it, too, contained this passage.

 $^{^{35}}$ šu-sè-ga = qadu(m) $narkab\bar{\imath}su$, see Prang 1976, 19 for matching references to attestations in Old Babylonian archival texts.

³⁶ Reiter 1996, 265–266.

³⁷ Cf. Prang 1976, 19–20 on the inheritance division TIM 4 1 from Nippur and Kalla 2008, 197–198 on the inheritance division UET 5 112a and 112b from Ur which also do not mention ordinary grain mills but list various specialist milling devices.

Spice mills from the Upper Diyala

The evidence for the Simurrean and the Hašimur milling equipment complements each other chronologically. I would like to propose that we must link the Simurrean grindstone of the early second millennium BC with the Hašimur grindstone of the first millennium BC. At present, it can neither be proven nor excluded that there is an etymological connection between Simurrum (or Šimurrum) and Hašimur, as Michael Astour has assumed,³⁸ but if Kemal Balkan is correct in his analysis of *hašimur* as a Kassite word,³⁹ then it would of course have to be a toponym that postdates the existence of the kingdom of Simurrum. Be that as it may, for our purposes only the observation matters that both toponyms refer to localities in the western Zagros flanks along the Upper Diyala. In view of the obvious conceptual similarities between the Simurrean and Hašimur grinding tools, I propose to interpret both terms as the contemporary Babylonian designation of a type of specialised spice grinding equipment associated with and probably originating from the Upper Diyala region.

What did this type of spice grinding tool look like? It is certainly not a large stone mortar and pestle set, as the use of the term $na\check{s}kabu$ (< narkabum) "rider" for the top part allows us to describe the mill as belonging to the typical style of Middle Eastern grinding equipment which consists of a stationary grinding slab over which a handstone is rubbed with both hands in order to pulverize material. Whether the expensive grinding equipment associated with the Upper Diyala had perhaps a modified handstone that made milling more efficient and comfortable or whether it had other characteristics that set it apart from other spice mills such as the $zib\hat{u}(m)$ grindstone must remain speculation at this point. But it is to be hoped that the archaeological exploration of the Upper Diyala region will eventually yield actual specimens of what one must assume was a common tool in the area that the Mesopotamians so prominently associated with it.

Bibliography

Altaweel M. – Marsh A. – Mühl S. – Nieuwenhuyse O. – Radner K. – Rasheed K. – Saber S. A. 2012, "New Investigations in the Iraqi Hilly Flanks: Environment, History and Archaeology of the Shahrizor", *Iraq* 74, 1–35.

Astour M. 1987, "Semites and Hurrians in Northern Transtigris", in D. I. Owen – M. A. Morrison Eds., *General Studies and Excavations at Nuzi 9/1* (Studies on the Civilization and Culture of Nuzi 2), Winona Lake, 3–68.

³⁸ Astour 1987, 41. Note that the argument that Simurrum takes its name from a supposed Akkadian word $simuru(m)/\check{s}imuru(m)$ "cumin" is circular as the only evidence for this ghostword are the attestations for the grinding equipment discussed here which, as already Stol 1979, 84 with fn. 331 stated, is a nisbe of the place name.

³⁹ Balkan 1954, 133. But note that Balkan's only argument, apart from the fact that the term is clearly not Semitic, is the already mentioned equation of the *hašimur* plant with a plant called *atkam Kaššî* "Kassite *atkam*" in the pharmacological lexicon Uruanna.

⁴⁰ Ellis 1993–97, 401. Only the Roman-Parthian period saw the spread of the rotary mill in the Middle East: Ellis 1993–97, 404.

⁴¹ For example by adding a groove in the top or side handles, for which there is archaeological evidence: Ellis 1993–97, 403.

- Bakathir H. A. Abbas N. A. 2011, "Detection of the Antibacterial Effect of Nigella Sativa Ground Seeds with Water", *African Journal of Traditional, Complementary, and Alternative Medicines* 8, 159–164.
- Balkan K. 1954, *Kassiten-Studien 1: Die Sprache der Kassiten* (American Oriental Series 37), New Haven.
- Böck B. 2011, "Sourcing, organizing, administering medicinal ingredients", in K. Radner E. Robson Eds., *The Oxford Handbook of Cuneiform Culture*, Oxford, 690–705.
- Bottéro J. 1957–1971, "Gewürze", in E. F. Weidner W. von Soden Eds., *Realle-xikon der Assyriologie und Vorderasiatischen Archäologie* 3, Berlin, 340–344.
- Ellis R. S. 1993–97, "Mühle. B. I. Archäologisch", in D. O. Edzard Ed., *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 8, Berlin, 401–404.
- Frayne D. 1990, *Old Babylonian Period (2003–1595 BC)* (The Royal Inscriptions of Mesopotamia: Early Periods 4), Toronto.
- Fuchs A. 2011, "Das Osttigrisgebiet von Agum II. Bis zu Darius I", in P. A. Miglus
 S. Mühl Eds., Between the Cultures: The Central Tigris Region in Mesopotamia from the 3rd to the 1st Millennium BC (Heidelberger Studien zum Alten Orient 14), Heidelberg, 229–320.
- Grayson A. K. 1975, Babylonian Historical-Literary Texts, Toronto.
- —. 1996, Assyrian Rulers of the Early First Millennium BC, II (858–745 BC) (The Royal Inscriptions of Mesopotamia: Assyrian Periods 3), Toronto.
- Heiss A. G. Stika H. P. De Zorzi N. Jursa M. 2012/13, "*Nigella* in the Mirror of Time: a Brief Attempt to Draw a Genus' Ethnohistorical Portrait", *Offa* 69/70, 147–169.
- Holtz S. 2009, Neo-Babylonian Court Procedure (Cuneiform Monographs 38), Leiden.
- Kalla G. 2008, "Ein altbabylonischer Haushalt aus Ur", in Á. Szabó P. Vargyas Eds., *De oriente antiquo et regione danuvii praehistorica in memoriam István Tóth* (Cultus deorum: studia religionum ad historiam 1), Pécs, 183–202.
- Köcher F. 1955, Keilschrifttexte zur assyrisch-babylonischen Drogen- und Pflanzenkunde, Berlin.
- Küchler F. 1904, Beiträge zur Kenntnis der assyrisch-babylonischen Medizin, Leipzig.
- Levine L. D. 1973, "Geographical Studies in the Neo-Assyrian Zagros: I", *Iran* 11, 1–27.
- Liverani M. 1992, Studies on the Annals of Ashurnasirpal II, 2: Topographical Analysis (Quaderni di Geografica Storica 4), Rome.
- Meißner B. 1937, "Studien zur assyrischen Lexikographie III", *Mitteilungen der Altorientalischen Gesellschaft* 11/1–2, Leipzig.
- Miglus P. A. Bürger U. Heil M. Stepniowski F. M. 2011, "Ausgrabung in Bakr Awa 2010", *Zeitschrift für Orient-Archäologie* 4, 136–174.
- Milano L. 1993–97, "Mühle. A. I. In Mesopotamien", in D. O. Edzard Ed., *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 8, Berlin, 393–400.
- Prang E. 1976, "Das Archiv des Imgûa", Zeitschrift für Assyriologie 66, 1-44.
- Reiner E. Civil M. 1970, *The Series HAR-ra* = hubullu: Tablets XVI, XVII, XIX and Related Texts (Materials for the Sumerian Lexicon 10), Rome.
- Reiter K. 1996, "Haushaltsgegenstände in altbabylonischen Texten unter besonderer Berücksichtigung der Kessel und Metallgeräte", in K. Veenhof Ed., *Houses and*

580 Karen Radner

- Households in Ancient Mesopotamia: Papers Read at the 40th Rencontre Assyriologique Internationale, Leiden, 261–272.
- Salonen A. 1965, Die Haushaltsgeräte der alten Mesopotamier nach sumerischakkadischen Quellen: eine lexikalische und kulturgeschichtliche Untersuchung, Teil I (Annales Academiae Scientiarum Fennicae B 139), Helsinki.
- Stol M. 1979, On Trees, Mountains, and Millstones in the Ancient Near East, Leiden
- Tavernier J. 2008, "KADP 36: Inventory, plant list, or lexical exercise", in R. D. Biggs J. Myers M. T. Roth Eds., *Proceedings of the 51st Rencontre Assyriologique Internationale* (Studies in Ancient Oriental Civilization 62), Chicago, 191–202.
- Thompson R. C. 1925, The Assyrian Herbal, London.
- Tolini G. 2009, "Les repas du Grand Roi en Babylonie: Cambyse et le palais d'Abanu", in X. Faivre B. Lion C. Michel Eds., *Et il y eut un esprit dans l'homme: Jean Bottéro et la Mésopotamie*, Nanterre, 237–254.
- Waerzeggers C. 2010, *The Ezida Temple of Borsippa: Priesthood, Cult, Archive* (Achaemenid History 15), Leiden.
- Weidner E. F. 1933–34, "Die Feldzüge Šamši-Adads V. gegen Babylonien", *Archiv für Orientforschung* 9, 89–104.