

מחרשת/מחרשה

plough, hoe (?)

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Introduction

Grammatical type: n.f.

Occurrences: 3× HB (0/3/0); 0× Sir; 0× Qum; 0× Inscr. (Total: 3)

Nebim: 1 Sam 13:20 (2), 21 (1).

Qumran: — (see B.1 [below](#))

A.1 While the first occurrence of מחרשתו in 1 Sam 13:20 (מַחְרֶשֶׁתּוֹ, with *pataḥ* as the third vowel) is a form of *מַחְרֶשֶׁת/*מַחְרֶשָׁה, the second occurrence (מַחְרֶשֶׁתּוֹ, with *ṣ^erē* as the third vowel) is a form of *מַחְרֶשָׁה. The Masoretic vocalisation of 1 Sam 13:20-21 suggests that the second occurrence of מחרשתו is a form of the same noun as מַחְרֶשֶׁת in 13:21.¹ T^J supports the Masoretic vocalisation and translates the two forms with *ṣ^erē* by forms of the same noun (עוֹשֶׁפָּא), while it represents the single form with a *pataḥ* instead of the *ṣ^erē* with a form of a different noun (פְּרֶשָׁא). However, most of the ancient versions treat the first occurrence of מחרשתו in 13:20 and מַחְרֶשֶׁת in 13:21 as forms of the same noun (see [section 4](#)). The latter option becomes more attractive as soon as one notices that the series of agricultural implements in 13:20 (מַחְרֶשֶׁתּוֹ, אָתוּ, קַרְדָּמוֹ, קַרְדָּשׁוֹ) partially corresponds to the series in 13:21 (מַחְרֶשֶׁת, דְּרָבָן, קַרְדָּמִים, [שֶׁלֶשׁ קִלְשׁוֹן], אֲתִים). Consequently, the first occurrence of מחרשתו in 13:20 and מַחְרֶשֶׁת in 13:21 are sometimes treated as forms of the same noun.²

A.2 Of course, the twofold occurrence of מחרשתו in a single series of utensils (1 Sam 13:20) has raised questions. Since part of the utensils mentioned in 13:20 reoccur in the same order in 13:21 (מחרשת/מחרשה, אַת, קַרְדִּים, אֵת), the latter verse was sometimes used as a basis for emending the text of 13:20. Julius Wellhausen (1871: 84) assumed that the second מחרשתו, the fourth item of the list in 13:20, originally corresponded to הַדְרִבָּן at the end of 13:21. He pointed to the fact that the ancient Gk. and Syr. translations read forms of the same noun (LXX: δρέπανον, 'sickle'; s: ܪܫܫܘܢ, 'ox goad') where MT reads מַחְרֶשְׁתּוֹ (13:20) and הַדְרִבָּן (13:21). Wellhausen's proposal to read דְרִבָּנּוֹ at the end of 13:20 was taken over by many others.³ Other scholars, however, assumed that the reading τὸ δρέπανον αὐτοῦ, 'his sickle', goes back to Heb. הַרְמֶשׁוֹ, since δρέπανον represents Heb. הַרְמֶשׁ, 'sickle', in Deut 16:9; 23:26 (= 23:25^{LXX}). These scholars regarded the reading מחרשתו as secondary.⁴

Dominique Barthélemy argued that there is insufficient reason to replace מחרשתו by a different word on the basis of the readings of LXX and s. The earliest translators seem to have experienced the same problems with the Hebrew text as modern scholars. They translated the second occurrence of מחרשתו differently from the first. The translators of LXX and s decided to use a noun that they used also to render הַדְרִבָּן, the last utensil mentioned in 13:21. Barthélemy maintained that the first and second מחרשתו in 13:20 derive from two different nouns, *מַחְרֶשֶׁת and *מַחְרָשָׁה. The two nouns must have had different meanings, but neither the earliest translators nor modern scholars could retrieve exactly to what kind of sharp utensils the two terms initially referred.⁵ DCH shares Barthélemy's suggestion that the two occurrences of מחרשתו in 13:20 refer to two different agricultural utensils and translates them as 'plough' and 'goad', respectively.⁶

B.1 The sectarian composition Serekh ha-Yahad (Community Rule, ca. 100 BCE?) contains the following enigmatic phrase: בִּיא בְּסֵאוֹן רִשְׁעֵי מַחְרָשׁוֹ.⁷ The passage describes the characteristics of those who may not enter the community of the faithful. Although the interpretation of the phrase is disputed, it is clear that מחרשו is not an alternative form of מחרשתו.⁸ It has been proposed to regard מחרש as a noun meaning 'ploughing'.⁹ If סֵאוֹן is taken as equivalent to Aram. סוּן/סִיין, 'mud', the whole phrase can be taken as a proverbial saying: 'For in the mud of wickedness (is) his ploughing.'¹⁰

1. Root and Comparative Material

A.1 ROOT: Both *מַחְרָשָׁה and *מַחְרֶשֶׁת/*מַחְרָשָׁה are commonly assumed to derive from מַחַרַּשׁ, 'to plough', 'to engrave'.¹¹ These nouns have some Semitic cognates

denoting an agricultural implement, as will be shown below. The Heb. verb **חרש** I stems from proto-Semitic *hrt* and has cognates in Ug., Akk., and many other Semitic languages (see below).¹² It must be distinguished from **חרש** II, ‘to manufacture’,¹³ which stems from proto-Semitic *hrš*, just like Ug. *hrš* and Phoenician *hrš*, ‘craftsman’, ‘artisan’.¹⁴ Contrary to Heb. **חרש** I, ‘to plough’, ‘to engrave’, Heb. **חרש** II refers to the work of the craftsman or artisan. Stephen Cook (1994) supposed that **מְחַרְשָׁה** derives from **חרש** I, ‘to plough, to engrave’, but that **מְחַרְשָׁת**/**מְחַרְשָׁה** derives from **חרש** II, ‘to manufacture’ (see below). Aaron Koller (2012: 86-89) distinguished a third root, *hrś*/**חרש**, ‘to scratch’, assuming that **חרש** I means only ‘to plough’, not ‘to engrave’ or ‘to scratch’. He regarded the form **חָרוּשָׁה**, ‘scratched’, in Jer 17:1 as a form of this verb (with **ש** erroneously pointed as *śin* instead of *śin*; cf. **חָרַשׁ** in Job 2:8). Koller saw **מְחַרְשָׁה** as a derivative of **חרש** I, ‘to plough’, but **מְחַרְשָׁת**/**מְחַרְשָׁה** as deriving from **חרש**, ‘to scratch’ (see below). However, note that in the Babylonian Talmud **מחרישה** denotes a ‘strigil’, an instrument for scraping the skin (see below).

A.2 AKKADIAN: The Heb. verb **חרש** I has a cognate in Akk. *erēšu*, which means ‘to seed by drilling seed into a furrow by means of a seeder-plow, to cultivate or plant (a field)’.¹⁵ Among the derivatives of this verb are *mērešu* and *mēreštu*, which mean ‘cultivation’ or ‘cultivated land/field’.¹⁶ Derivatives relating to a utensil are not attested.

A.3 UGARITIC: The Ug. cognate of Heb. **חרש** I is *hrt* ‘to plough’.¹⁷ The Ug. noun *mhrtt* (*KTU* 1.6:IV.3, 14; 6.14:3) is usually interpreted as ‘ploughed field’.¹⁸ However, Oswald Loretz proposed to regard it as a *nomen instrumenti* denoting the ploughshare or the plough as a whole.¹⁹

A.4 ARABIC: The Arab. verb *ḥarata* is a cognate of Heb. **חרש** I and means ‘to plough, to cultivate’. The Arab. noun *mihrāt* designates a plough.²⁰ In Old South Arabian, however, *mhrtt* refers to ploughed, cultivated land.²¹

A.5 ETHIOPIC: The Eth. (Ge‘ez) verb *ḥarasa* is a cognate of Heb. **חרש** I and means ‘to plough’. The noun *māhras* is translated as ‘ploughshare’ or as ‘plough’.²²

A.6 POSTBIBLICAL HEBREW AND JEWISH ARAMAIC: In the Mishnah, the Tosefta and the Talmudim, the word **מְחַרְשָׁה** is virtually always spelled with a *yod* as *mater lectionis*: **מחרישה**. The term occurs ca. 70 times and denotes the plough in its entirety.²³ Not surprisingly, the word occurs in a context relating to ploughing (**חרש** qal).²⁴ The **מחרישה** is said to ‘shake’ (**זָעַזַע**, pilpel of **זוע**) clods of earth and stones.²⁵ The implement is regarded as indispensable.²⁶ The expression **יתד של מחרישה**, literally ‘the *pin* of the plough’, denotes the sharp metal plough-point.²⁷ The Tosefta refers to **יתדות המחרישה**, ‘plough-points’, that were attached to the plough’s **חרב**, ‘tail-piece, handle’.²⁸ In the Bab. Talmud, the expression **מחרישה**

דכספא does not represent a plough, but a strigil made of כספא, ‘silver’.²⁹ Such a strigil was used for scraping the skin; cf. the meaning ‘to engrave’ of the verb מחרש I. In modern Hebrew the word מחרשה means ‘plough’.

2. Formal Characteristics

A.1 *מְחַרְשֶׁת³⁰/*מְחַרְשָׁה³¹ is a *miqtal* form with a feminine termination (BL, 490 aζ).

A.2 *מְחַרְשָׁה is a *maqtil* form with a feminine termination. Many *maqtil* forms denote a utensil (BL, 492 qζ, sζ; Meyer 1969: 34-35).

3. Syntagmatics

A.1 In 1 Sam 13:20, מְחַרְשֶׁתוֹ and מְחַרְשָׁתוֹ represent the first and fourth objects of the verb לטש, ‘to forge’, ‘to hammer’, ‘to sharpen’. The other objects are (2) אָתוֹ and (3) קְרָדְמוֹ (all marked by the accusative particle אֵת). 1 Sam 13:21 indicates that the price for מְחַרְשֶׁת as well as some other agricultural utensils was a פִּימָה → פִּימָה. Apparently, the price was paid for either producing or repairing them (see [below](#)).

4. Ancient Versions

A.1 In the following survey, ‘20¹’ represents the first occurrence of מחרשתו (MT: מְחַרְשָׁתוֹ) in 1 Sam 13:20, while ‘20²’ represents the second occurrence (MT: מְחַרְשֶׁתוֹ). ‘21’ represents the word מְחַרְשֶׁת in 13:21.

- a.* Septuagint (LXX) and other Greek versions
 θερίστρον, ‘reaping-hook’:³² 20¹ (most mss of LXX).
 θεριστήριον, ‘reaping-hook’:³³ 20¹ (LXX^{Ant}³⁴).
 θερίζειν, ‘to reap’,³⁵ ‘to harvest’:³⁶ 21 (LXX).
 ἄροτρον, ‘plough’:³⁷ 20¹ (α’θ’³⁸), 21 (α’³⁹).
 ὄνις, ‘ploughshare’:⁴⁰ 20¹ (σ’⁴¹).
 δρέπανον, ‘sickle’:⁴² 20² (LXX).
 δίκελλα, ‘two-pronged fork’:⁴³ 20² (σ’⁴⁴).

b. Peshitta (s)

- מַגְגָּלָא (magg^elā), ‘sickle’:⁴⁵ 20¹, 21.
 מַסְסָא (massāsā), ‘(ox) goad’:⁴⁶ 20².

c. Targum (T^J)

פֶּרְשָׂא, ‘goad’, possibly also ‘ploughshare’:⁴⁷ 20¹.

עוּשְׂפָא, ‘adze’, ‘carpenter’s axe’, etc., used for chipping:⁴⁸ 20², 21.

d. Vulgate (v)

vomer, ‘ploughshare’:⁴⁹ 20¹, 21.

sarculum, ‘hoe’:⁵⁰ 20².

A.2 As the surveys show, the two occurrences of מחרשתו in 1 Sam 13:20 MT have two different counterparts in all the ancient translations. α', s and v treat the first occurrence of מחרשתו (20¹) as a form of the same noun as מחרשת (21) and translate the second form (20²) differently. In LXX, the words representing מחרשתו (20¹) and מחרשת (21) are derivatives from the same root. On the other hand, the translation of T^J suggests that the second occurrence of מחרשתו (20²) is a form of the same noun as מחרשת (21). This corresponds with the Masoretic vocalisation.

A.3 T^J translates each of the implements mentioned in 1 Sam 13:20-21 consistently: *מְחַרְשָׁה/*מְחַרְשֵׁת is translated by פֶּרְשָׂא (1x); אֵת is translated by סִבְתַּת פְּדָנָא (2x); קָרְדָּם is translated by כּוּלְבָה (2x); *מְחַרְשָׁה is translated by עוּשְׂפָא (2x); דְּרָבָן is translated by זִקְתָּא. The fact that Heb. אֵת was rendered as סִבְתַּת פְּדָנָא, ‘plough-point’ (→ אֵת), seems to suggest that *מְחַרְשָׁה/*מְחַרְשֵׁת was not interpreted as such. Therefore, it may be best to translate פֶּרְשָׂא as ‘goad’.

A.4 Most of the ancient translations assume that the first occurrence of מחרשתו in 1 Sam 13:20 represents an implement used for ploughing (α', σ', θ', v, possibly T^J). LXX and s, however, interpret the word as an implement used for harvesting. In the case of LXX there is reason to believe that the translators of 1 Samuel misinterpreted the verb חרש as relating to harvesting instead of ploughing.⁵¹ In 1 Samuel, the only phrase in which the verb חרש I has the meaning ‘to plough’ occurs in 8:12: וְלַחְרֵשׁ וְלִקְצֹר קְצִירוֹ (MT), literally: ‘to plough the ploughing and to harvest the harvest’. Most mss of LXX render the phrase as και θερίζειν θερισμὸν αὐτοῦ και τρυγᾶν τρυγητὸν αὐτοῦ. Both θερίζειν θερισμὸν and τρυγᾶν τρυγητὸν can be translated as ‘to reap the harvest’, not as ‘to undertake the ploughing’.⁵²

There is insufficient reason to suppose that the Gk. translation of 1 Sam 8:12 goes back to a Heb. text that differs from MT.⁵³ The translation of the first occurrence of מחרשת/מחרשה in 13:20 by θέριστρον, ‘reaping-hook’, and the rendering of מחרשת in 13:21 by θερίζειν, ‘to harvest’, seem to be due to the same confusion regarding the meaning of חרש and its derivatives. In LXX^{Ant} και θερίζειν θερισμὸν αὐτοῦ και τρυγᾶν τρυγητὸν αὐτοῦ is preceded by και ἀροτριᾶν τῆν ἀροτρίασιν αὐτοῦ ‘and to undertake the ploughing’.⁵⁴ Apparently, the additional phrase was inserted to assimilate the LXX to the Heb. text.⁵⁵

In 1 Sam 8:12, *s* remains close to the Masoretic reading ולחרש חרישו ולקצר קצירו (MT).⁵⁶ In the case of 1 Sam 13:20-21, however, the reading of *s* (חַלָּה, ‘sickle’) seems to have been influenced by the Gk. translation of the first מחרשה/מחרשת (13:20) by θέριστρον/θεριστήριον, ‘reaping-hook’.

5. Lexical/Semantic Fields

A.1 The noun *מְחַרְשָׁה and often also the noun *מְחַרְשֵׁת/*מְחַרְשָׁה are regarded as derivatives of the verb *חַרַשׁ*, ‘to plough’, ‘to engrave’. In the Hebrew Bible, the verb is used ten times for ploughing in a literal sense⁵⁷ and four or five times for ploughing in a figurative sense.⁵⁸ After a → על, ‘yoke’, was fasted over the necks of two animals and attached to the plough, the animals pulled (משך qal; Deut 21:3) the plough.⁵⁹

A.2 The nouns *מְחַרְשָׁה and *מְחַרְשֵׁת/*מְחַרְשָׁה occur only in two lists of sharp utensils (1 Sam 13:20-21). The other items in the lists are → אֵת, → קָרְדָם, possibly שְׁלֵשׁ קִלְשׁוֹן (→ קִלְשׁוֹן), and → דְּרָבָן.

A.3 Koller (2012: 255) assumes that the *מְחַרְשֵׁת/*מְחַרְשָׁה was very similar to the → מַעְדָר and that the different words may even designate the same tool.

6. Exegesis

6.1 Textual Evidence

A.1 In view of the meaning of *חַרַשׁ*, ‘to plough’, ‘to engrave’, it is likely that one of the occurrences of מחרשה/מחרשת in the list of utensils in 1 Sam 13:20 denotes an implement used for ploughing. Most dictionaries interpret either *מְחַרְשָׁה or *מְחַרְשֵׁת/*מְחַרְשָׁה as ‘ploughshare’.⁶⁰ In the Mishnah, Tosefta and Talmudim, the noun מְחַרְשָׁה designates the entire plough, while the cognates in Arab. and Eth. (and possibly in Ug.) also denote a plough (see [above](#)).

Most of the ancient translations assume that the first item in the list of 13:20 represents a plough (α' , θ'), or its cutting part (σ' , ν , possibly T^j). Since the plough is one of the most important agricultural utensils, it is indeed not unlikely that it is represented by the first item in the list.⁶¹ In view of the evidence from the Mishnah, Tosefta and Talmudim, it is attractive to revocalise the first occurrence in 13:20 as מְחַרְשֵׁתו (with $\xi^{erē}$) and to maintain the vocalisation of the parallel item מְחַרְשֵׁת in 13:21 (see [above](#)).

A.2 Ploughs were largely made of wood, as is shown by the burning of כְּלֵי הַבְּקָר, ‘equipment of the oxen’, which had just been used for ploughing a field (1 Kgs 19:19-21), and the use of כְּלֵי הַבְּקָר, ‘equipment of the oxen’, for its wood (עֵצִים;

2 Sam 24:22). However, 1 Sam 13:19-22 demonstrates that ploughs also comprised a sharp element made of metal, apparently the so-called ‘plough-point’. The latter passage records that in the time of Saul and Jonathan the Israelites were subject to rigid constraints. The Philistines maintained a monopoly that enabled them to dominate the Israelites and to prevent them from producing their own weapons. According to many scholars, the monopoly concerned the production and/or repair of iron implements.⁶² However, the MT does not say explicitly that the implements involved were made of iron. It reveals only that among the Israelites there was no **חָרָשׁ**, ‘craftsman’ (13:19), who produced (**לָטַשׁ**; 13:20) utensils for them.⁶³ Only the renderings of **חָרָשׁ** in LXX (*τέκτων σιδήρου*) and V (*faber ferrarius*) specify that the craftsmen concerned were iron smiths.⁶⁴ Actually, archaeological evidence from consecutive centuries demonstrates that in ancient Israel implements of bronze and implements of iron were used in the same contexts. Bronze plough-points and iron plough-points were also excavated in the same excavation layers (see [below](#)). The suggestion of LXX and V that the Philistines maintained an iron monopoly is an attractive option, but the MT may imply that the Philistines forbade all metallurgical activities among the Israelites.⁶⁵

The structure of the ancient Israelite ploughs is not described in the HB or other contemporaneous sources. However, a reconstruction is possible on the basis of contemporaneous illustrations from Mesopotamia and Egypt and archaeological finds from Israel/Palestine (see [below](#)). Further, some terminological information can be found in the Mishnah, the Tosefta and the Talmudim, especially in m. Kelim 21:2.⁶⁶ In the latter passage, the word **מַחְרֶשֶׁה** does not occur, but the following terms are used to denote elements of the plough: **עַל** (‘yoke’), **קֶטֶרֶב** (‘cross-bar?’), **עֵיִן** (‘collar-piece?’), **עֲבוֹת** (‘thick ropes?’), **חֶרֶב** (‘tail-piece’ or ‘handle’), **בִּרְדָּךְ** (‘knee-shaped beam’), **יְצוֹל** (‘handle’ or ‘cross-piece’), **עֵיִן שֶׁל מֵתָכֶת** (‘metal ring’), **לְחֵיִן** (‘guides’), **עֲרִיִין** (‘plough-flanks’ or ‘mouldboards’). Unfortunately, it remains unclear to which elements of the plough some of the Heb. terms refer.⁶⁷ Also, it is dubious whether the ancient Israelite plough consisted of the same elements as the plough type to which this section of the Mishnah refers.

A.3 Philip King and Lawrence Stager give the following description of the way in which ploughing was performed in ancient Israel (King & Stager 2001: 92; cf. 88):

Plowing prepared the ground for sowing in late October-November, after the first rain (*yôreh*) had softened the earth. A field was plowed twice, once to loosen the crusty soil before the seed was broadcast, and then at right angles to the first plowing to cover the seed. The metal-tipped scratch plow did not turn over the soil the way a moldboard plow does but simply scratched a shallow furrow by breaking and loosening the soil.

Like the ancient Egyptian and Mesopotamian ploughs, ancient Israelite ploughs were usually pulled by a pair (צֶמֶד) of oxen (בְּקָר: 1 Sam 11:7; 1 Kgs 19:21; Amos 6:12; Job 1:3, 14; 42:12). A female cow could also be used for ploughing, as is shown by the remark that in specific situations a cow that had not yet carried a yoke or pulled a plough was used (פָּרָה, ‘cow’: Num 19:2; 1 Sam 6:7; עֵגְלָה, ‘heifer’: Deut 21:3; cf. Judg 14:18; Hos 10:11). Donkeys could also be used to work the land (cf. Isa 30:24: עֵיזִים, ‘male donkeys’), but it was forbidden to let an ox (שׂוֹר) and a donkey (חֲמוֹר) pull a plough together (Deut 22:10).⁶⁸

A.4 If the second occurrence of מחרשתו in 1 Sam 13:20 is left unemended,⁶⁹ only one of the two occurrences may be assumed to designate a plough(-point).⁷⁰ A classical translation of the second occurrence is ‘mattock’.⁷¹ Eduard König interpreted *מַחְרֶשֶׁת as ‘wahrscheinlich der Schollenzerteiler, mit dem bei den Alten hinter dem Pfluge die grossen Erdklumpen zerteilt wurden’ (*HAWAT*, 219). Dominique Barthélemy decided to leave it untranslated (*CTAT* 1: 181). Stephen Cook supposed that the first of the near-homonyms derives from חרש I, ‘to plough, to engrave’, while the second derives from חרש II, ‘to manufacture’ (see [above](#)). According to Cook, the first noun clearly refers to a plough, while the second noun, which can be translated as ‘crafted/forged tool’, can best be interpreted as an equivalent of the parallel term דָּרְבָן, probably ‘goad’ (end of 13:21).⁷² However, the interpretation of the final item in the list of 13:20 remains uncertain, as Cook admits.⁷³ Actually, the interpretation as a ‘goad’ is not attractive, since the presence of a metal point at the end of goads was not essential.⁷⁴ This noun can also be seen as a derivative of חרש I and may refer to a different tool used for ‘engraving’ the soil, wood, etc. However, Aaron Koller (2012: 86-89) distinguished a third root, חרש/חרש, ‘to scratch’, assuming that חרש I means only ‘to plough’, not ‘to engrave’ or ‘to scratch’ (see [above](#)). He interpreted *מַחְרֶשֶׁת/*מַחְרֶשָׁה as deriving from חרש, ‘to scratch’, With reference to Yemeni Arab. *mhrš*, ‘harrow’, and *hrš*, ‘to till by hand’, he suggested that the noun *מַחְרֶשֶׁת/*מַחְרֶשָׁה designates a hoe or a harrow. The noun may indeed represent a tool for weeding or tilling the soil by hand (cf. *sarculum* in v).⁷⁵

B.1 Only rarely is none of the occurrences of מחרשת/מחרשה in 1 Sam 13:20-21 identified with a plough or an element of it.⁷⁶

6.2 Pictorial Material

A.1 The lack of ancient pictures of ploughs from the Levant (Syria-Palestine) is compensated by images from Mesopotamia and Egypt. The ploughs are commonly depicted as drawn by two oxen.⁷⁷ The images show two types of plough:

- Simple ploughs without a seed drill drawn by a pair of animals and guided by a single man, who may hold a stick or goad or whip to drive the animals.⁷⁸ In such cases, the seeding was done after the first ploughing. The distinction between the two procedures is illustrated by images displaying a sower who works at some distance from the ploughman and his plough.⁷⁹
- Ploughs provided with a seed drill, drawn by a pair of animals and guided by a single man, who is assisted by another man, who takes care of the seeding process.⁸⁰

The depicted ploughing scenes are Mesopotamian or Egyptian, but there are good reasons to believe that the ploughs of the Israelites were quite similar to the ploughs on the images. In ancient Israel, ploughs were not yet provided with a seed drill and the sowing took place after the first ploughing of the ground.⁸¹ Therefore, the Israelite ploughs were probably of the same type as the simpler ploughs of the Mesopotamians and Egyptians.



FIGURE 1: Egyptian ploughing scene, burial chamber of Sennedjem, 13th century BCE

The ploughs of the Mesopotamian and Egyptian depictions have the following features in common:

- A wooden beam connects the plough with a yoke that was fastened over the necks of the pulling animals.
- The essential part of the plough is a wooden beam protruding forward in the direction of the animals, at the bottom of the plough. The beam may be curved and is provided with a sharp metal point that makes furrows in the ground.
- The plough includes a wooden handle or a pair of handles, serving to steer the plough. Usually, the steering handle is part of the same beam as the wood to which the plough-point was affixed.

A.2 Photographs from the early twentieth century show traditional ploughs with construction styles that hardly differed from the ancient Near Eastern structures.⁸² Recent film recordings show a way of ploughing that gives an impression of the ways in which ploughing was performed in the ancient Near East.⁸³



FIGURE 2: Plough shop in Beersheba, October 16, 1924
Universiteitsbibliotheek Utrecht, Collectie Vriezen

A.3 *מַחְרֶשֶׁת/*מַחְרָשָׁה may denote a hoe or harrow (see 6.1 A.4). For ancient pictures of hoes from the Levant (Syria-Palestine), see → מַעְדָּר.

6.3 Archaeology

A.1 The wood of ancient Near Eastern ploughs has usually decomposed completely, but many metal plough-points have survived. The archaeological evidence from Israel/Palestine shows that in the twelfth century BCE bronze plough-points began to be replaced by iron plough-points, although the use of bronze plough-points appears to have continued for several centuries.⁸⁴ Oded Borowski offers an excellent description of the excavated plough-points:

The plow-point was an elongated tool, 20-30 cm long, with a pointed tip for soil penetration. The other end was shaped like a pipe, ca. 8-10 cm wide. A wooden shaft, which was part of the plow-handle, was inserted into this end.⁸⁵

Koller (2012: 89-90) shows that the archaeological evidence corresponds with the idea expressed in the Mishnah and Tosefta that the מְחַרְשָׁה scratches the soil to a depth of not more than ‘three handbreaths’ (שְׁלֹשָׁה טְפָחִין). He defines the מְחַרְשָׁה as ‘a piece of metal hammered into the shape of a cone and attached at the end of the wooden plow, which cuts through the soil to a depth of about 15-30 cm.’ (2012: 253). Nowadays, the designation ‘ploughshare’ is commonly used for the curved blade of the so-called mouldboard plough, which turns over the soil. It is confusing to denote the cutting element of the ancient Israelite scratch ploughs as ‘ploughshare’, since its form and function were quite different from the ploughshares of mouldboard ploughs. Therefore, Borowski’s designation as ‘plough-points’ is preferable.⁸⁶

A.2 *מְחַרְשָׁה/*מְחַרְשֶׁת may denote a hoe or harrow (see 6.1 A.4). For remains of hoes from the Levant (Syria-Palestine), see → מַעְדָּר.

7. Conclusion

A.1 In Biblical Hebrew, the noun *מְחַרְשָׁה (< חרש I, ‘to plough’) probably denotes the ancient Israelite ‘plough’. In the Mishnah, Tosefta and Talmudim, the word מְחַרְשָׁה denotes the plough as a whole. It is possible that one of the occurrences of מחרשת/מחרשה in 1 Sam 13:20 also designates the entire plough, but it cannot be excluded that at this earlier stage it represented only the metal plough-point. If in 1 Sam 13:20 the first occurrence of מחרשתו represents a plough, the form must probably be revocalised as מְחַרְשֶׁתו. The vocalisation of the parallel term מְחַרְשֶׁת in 13:21 can be retained and this form can be translated as ‘ploughs’ or ‘plough-points’.

A.2 The proposals to emend the second occurrence of מחרשתו in 1 Sam 13:20 are debatable. The noun *מְחַרְשָׁה/*מְחַרְשֶׁת may denote a hoe or harrow (see 6.1 A.4), but it is not possible to identify the designated tool with certainty.

Notes

- 1 ↑ If מחרשת in 13:21 were a plural form of *מְחַרְשָׁה/*מְחַרְשֵׁת, the expected vocalisation in 13:21 would be מְחַרְשֵׁת (with *qames*). Cf. מְעַרְכוֹת in Lev 24:6, מְאָכְלוֹת in Prov 30:14, and the similar plural forms of other nouns mentioned in BL, 490 aζ.
- 2 ↑ *DCH* V (מ-ג), 229-30. See also the discussion in 4. A.2 and 6.1.
- 3 ↑ See *BHK*¹, BDB, 361, and the literature mentioned in Barthélemy, *CTAT* 1: 180.
- 4 ↑ See *BHK*^{2/3}, KBL, 515, Ges¹⁸, 661, and the literature mentioned in Barthélemy, *CTAT* 1: 180-81. See also the critical assessment of this emendation by Koller (2012: 84-85). In other contexts, δρέπανον represents Heb. מְזַמְרָה (Isa 2:4; 18:5; Mic 4:3; Joel 4:10) or Heb. מְגַל (Jer 50:16 = 27:16^{LXX}; Joel 4:13). Remarkably, no scholars seem to have suggested reading מְזַמְרָתוּ or מְגַלּוּ instead of מַחְרְשָׁתוּ at the end of 1 Sam 13:20. Stoebe (1973: 254) proposed reading מְחַרְשֵׁתוּ instead of מַחְרְשָׁתוּ (cf. 2 Sam 12:31).
- 5 ↑ Barthélemy, *CTAT* 1: 181. Similarly: Cook (1994), who retained the MT as the *lectio difficilior*.
- 6 ↑ *DCH* V (מ-ג), 229-30.
- 7 ↑ The reading is found in 1Q28/1QS III:2 (Burrows 1951: Plate III; Charlesworth 1994: 12) and 4Q257/4QpapS^c III:3-4 (DJD XXVI, 73, damaged).
- 8 ↑ For unknown reasons, the noun מַחְרֵשׁ in the Community Rule is mentioned under the lemma *מְחַרְשָׁה/*מְחַרְשֵׁת in Ges¹⁸, 661.
- 9 ↑ DJD XXVI, 76.
- 10 ↑ See Charlesworth 1994: 13 (with different translations in n. 44); DJD XXVI, 76-77. See also the lemma *מְחַרְשׁ in *DCH* V (מ-ג), 229.
- 11 ↑ BDB, 361; KBL, 515; *DCH* V (מ-ג), 229; *HALOT*, 572.
- 12 ↑ For cognates of מַחְרֵשׁ in Old Canaanite, Aramaic, etc., see *DNWSI*, 407, 408; Koller 2012: 87.
- 13 ↑ Loewenstamm 1959; Hamp et al. 1986: 222-23; For מַחְרֵשׁ II, see Ges¹⁸, 402 (חַרְשׁ נְחֹשֶׁת וּבְרֹזָל) in Gen 4:22 and חַרְשׁ נְחֹשֶׁת in 1 Kgs 7:14; cf. the noun חַרְשׁ, ‘craftsman’, ‘artisan’.
- 14 ↑ For Ug. ḥrš, ‘craftsman’, ‘artisan’, see *WUS*, 108; *UT*, 399 (# 903); *DULAT*¹, 370-71; *DULAT*³, 366; *KWU*, 47. For Phoenician ḥrš, ‘craftsman’, ‘artisan’, see *DNWSI*, 408.
- 15 ↑ *CAD* E, 285-89. Similarly: *AHw* I, 238-39.
- 16 ↑ *CAD* MII, 23-25. Similarly: *AHw* II, 645-46).
- 17 ↑ *WUS*, 108-09; *UT*, 399 (# 905); *DULAT*¹, 371-72; *DULAT*³, 367; *KWU*, 47.
- 18 ↑ *WUS*, 108; *DLU*, 268; *UG*, 267; *DULAT*¹, 537-38; *DULAT*³, 531.
- 19 ↑ Loretz 1993. After a discussion of the various translations, the interpretation as ‘plough(share)’ is rejected in Dietrich & Loretz 2005, 228-30 (*bmḥrtt* in *KTU* 6.14:3 interpreted as ‘from the agricultural field’; cf. *TUAT.NF* 6: 86). *KWU*, 71, assumes the meaning ‘Ackerland’ (cultivated land) for the occurrences in *KTU* 1.6:IV.3, 14, but prefers the translation ‘Pflug’ (plough) for the occurrence in *KTU* 6.14:3.
- 20 ↑ Lane, 541-542; Wehr, 166.
- 21 ↑ *SD*, 71; *DOSA*, 192.
- 22 ↑ *CDG*, 243.
- 23 ↑ In addition to the occurrences mentioned in the following notes, the word מַחְרֵשָׁה occurs in m. Bava Batra 2:1, 12, 13; t. Shabbat 6:8; t. Bava Qamma 2:6; t. Bava Metzi’a 9:18; t. Bava

Batra 1:2, 14; t. Kelim Bava Metzi'a 5:7; t. 'Ohalot 15:13; b. Ta'anit 25b; b. Bava Qamma 30a; b. Bava Batra 17a, 18a, 19a, 26a, 27b, 82b; y. Pe'ah 2, 17a; 6, 19c; y. Kil'ayim 7, 30d; y. Nazir 7, 55d; y. Bava Qamma 3, 3c; y. Bava Metzi'a 9, 12b (together with קורדום; cf. → קרדם in 1 Sam 13:20-21); y. Bava Batra 2, 13ab; 7, 15c. In m. Shevi'it 5:6 and b. 'Avodah Zarah 15b, reference is made to מַחְרִישָׁה וְכָל כְּלֵיהָ, 'the plough and all its implements'.

- 24 ↑ m. 'Ohalot 17:1-3.
- 25 ↑ m. Shevi'it 3:7; t. Shevi'it 3:4; y. Shevi'it 3, 34bd; m. 'Orlah 1:3; y. 'Orlah 1, 60c.
- 26 ↑ According to m. Bava Metzi'a 9:13, a creditor who wants to take a pledge from a debtor may take a כַּר, 'pillow', by day and must give it back by night (cf. Deut 24:12-13) and may take a מַחְרִישָׁה by night and must return it by day. Apparently, the כַּר and the מַחְרִישָׁה were seen as essential. The rule is quoted in b. Bava Metzi'a 113a, y. Bava Metzi'a 9, 12a, and b. Temurah 6a. See also Sifre Devarim 277.
- 27 ↑ m. Shabbat 17:4 quotes Rabbi Yose as saying that on the Shabbat 'all utensils may be moved except for the large saw and the plough-point' (כל הכלים נטלין חוץ מן המסר הגדול ויתד של מחרשה). The saying occurs also in t. Shabbat 14:1; b. Shabbat 123b, 157a; b. 'Eruvin 35a; y. Shabbat 17, 16a. Further, the expression יתד של מחרשה occurs also in b. 'Eruvin 86a.
- 28 ↑ t. Kelim Bava Batra 1:7, which refers also to the עיין, 'eye', as an element that could be detached from the plough. In m. Kelim 21:2 the terms הרב and עיין are also used for parts of the plough (see [above](#)).
- 29 ↑ Jastrow, *DTT*, 764, *WTM* III, 82, with reference to b. Ketubbot 68a, b. Bava Metzi'a 113b. According to b. Bava Metzi'a 113ab, Raba son of Rabbah interpreted the word מחרשה in m. Bava Metzi'a 9:13 (see [above](#)) as 'strigil', not as 'plough'.
- 30 ↑ This form is proposed in BDB, 361; KBL, 515; *HALOT*, 572; Ges¹⁸, 661.
- 31 ↑ This form is proposed in *DCH* V (ג-נ), 229.
- 32 ↑ *GELS*, 328, with reference to Van der Meer 2008: 592-96. In all the other verses (Gen 24:65; 38:14, 19; Isa 3:23; Song 5:7), θέριστρον is translated as 'light summer garment' or 'veil'.
- 33 ↑ LSJ, 793; *GELS*, 328.
- 34 ↑ Fernández Marcos & Busto Saiz 1989: 36; Taylor 1992: 42.
- 35 ↑ LEH¹, 204.
- 36 ↑ *GELS*, 328.
- 37 ↑ Adrados, *DGE*, 521; LEH¹, 62; *GELS*, 92.
- 38 ↑ Field¹, 507.
- 39 ↑ Field¹, 508.
- 40 ↑ LSJ, 1849; Montanari, *BDAG*, 2184.
- 41 ↑ Field¹, 507-08.
- 42 ↑ Adrados, *DGE*, 1167; LEH¹, 121; *GELS*, 178.
- 43 ↑ LSJ, 430; Montanari, *BDAG*, 530. Adrados, *DGE*, 1094: 1) 'azada de dos puntas, laya', 2) 'piqueta, azuela para demolición'.
- 44 ↑ Field¹, 507-08.
- 45 ↑ Payne Smith, *CSD*, 250; Sokoloff, *SLB*, 709.
- 46 ↑ Payne Smith, *CSD*, 285; Sokoloff, *SLB*, 793. *SLB* gives as a second translation 'part of plow'.

- 47 ↑ Jastrow, *DTT*, 1243, distinguishes פְּרָשָׁא I, '[driving] goad' (T^J Judg 3:31), from פְּרָשָׁא II, '[breaker, crusher,] ploughshare' (1 Sam 13:20). *WTM* IV, 145, and Dalman, *ANHT*, 354, suggest that פְּרָשָׁא means 'ox goad' in Judg 3:31 as well as 1 Sam 13:20. See further the discussion in section A.3.
- 48 ↑ Jastrow, *DTT*, 1059. *WTM* III, 711 (Heb. עוֹשֵׂף): 'der spitze Theil eines Instrumentes, welcher zum Bohren und Pflügen diene, der andere scharfe Theil dieses Instrumentes diene zum Holzspalten.' According to m. Kelim 13:3, the → קָרְדִים has an עוֹשֵׂף 'paring/chipping edge' and a בֵּית בְּקוּעַ 'splitting/chopping edge'.
- 49 ↑ Lewis & Short, *LD*, 2014; *OLD*, 2103.
- 50 ↑ *OLD*, 1691. Lewis & Short, *LD*, 1631, describe *sarculum* as 'an implement for loosening the soil, weeding, etc., a light hoe.'
- 51 ↑ For the distinctive character of the transmitted LXX text of 1 Samuel, see Hugo 2015: 129-32; Hugo 2016: 222-23.
- 52 ↑ *GELS*, 328, 689. For the precise meaning of *θερίζειν θειρισμὸν* and *τρυγᾶν τρυγητὸν*, see also Grillet & Lestienne 1997: 196-97.
- 53 ↑ Grillet and Lestienne (1997: 197) suggest that the Heb. source used by the Gk. translators read **ולחרש חרישו ולקצר קצירו ולבצר בצירו** instead of **ולחרש חרישו ולקצר קצירו** (MT). See also DJD XVII, 59. However, in addition to the deviating Gk. rendering of **מחרשת/מחרשה** in 1 Sam 13:20-21, reference must be made to a fragment of 4Q51/4QSam^a showing the letters [**ולחרש חר[ישו]**] at the expected position (DJD XVII, 58). The Gk. translation seems to be due to confusion about the meaning of Heb. **חרש**; see Wirth 2017: 5.
- 54 ↑ Fernández Marcos & Busto Saiz 1989: 22; Taylor 1992: 25.
- 55 ↑ McCarter argues that the Antiochene text of LXX reflects the initial Heb. reading (reconstructed as **ולבצר בצירו ולקצר קצירו ולחרש חרישו**). This leads to the artificial assumption that the shorter readings of MT and the rest of LXX are 'haplographic, each in its own way' (McCarter 1980: 155).
- 56 ↑ S reads **עֲבָדוּם סַבְבֵי־וּמ סַבְבֵי־וּמ גִּבְוֹת סַבְבֵי־וּמ** (*wndbrwn dbrh wnhšdwn hšdh*). The verb **גבו** (*dbr*) is a common translation of Heb. **חרש** I with the meaning 'to plough' (see Deut 22:10; 1 Kgs 19:19, etc.), while **עָבַד** (*hšd*) is a standard translation of the verb **קצר** (see 1 Sam 6:13; 2 Kgs 4:18; 19:29, etc.).
- 57 ↑ Deut 22:10; 1 Sam 8:12; 1 Kgs 19:19; Isa 28:24; Jer 26:18; Amos 6:12; 9:13; Mic 3:12; Job 1:14; Prov 20:4.
- 58 ↑ Judg 14:18, Hos 10:11, 13; Ps 129:3; Job 4:8.
- 59 ↑ For other terms used in connection with ploughing, see Borowski 1987: 48, 51-53.
- 60 ↑ Gesenius, *TPC* I, 530; BDB, 361; GB, 416; *HAWAT*, 219; KBL, 515; Zorell, 428; *DCH* V (ג-נ), 229; *HALOT*, 572; Ges¹⁸, 661.
- 61 ↑ Compare the rule in m. Bava Metzi'a 9:13 implying that a creditor may not take a **מְחַרְשָׁה** as a pledge during the day. See [above](#).
- 62 ↑ Klein 1983: 127-28; Van der Steen 2008: 67; 2009: 69.
- 63 ↑ The verb **לטש** means 'to forge', 'to hammer', 'to sharpen'. 1 Sam 13:20-21 was often assumed to relate to the repair of metal implements (e.g., McCarter 1980: 232; Klein 1983: 128), but is likelier that the passage has their production in mind. See Stoebe 1973: 254-55.
- 64 ↑ However, see also **כל מן דברזל** 'each iron implement' in 1 Sam 13:21 T^J.

- 65 ↑ McNutt 1990: 19, 144, 205, 238. Cf. also Dietrich 2015: 50.
- 66 ↑ In addition to m. Kelim 21:2, see the evidence discussed in 1. A.6. t. Kelim Bava Metzi'a 5:7 mentions a מחרשה רית (ב(ו)רית, 'hoop of the plough'. The בִּרְךְ הַמְּחַרְשָׁה, 'knee of the plough', is also mentioned in m. 'Ohalot 17:1-3 and b. Ta'anit 25b.
- 67 ↑ For the disputed translation of the terms, see *WTM*; Jastrow, *DTT*; Dalman, *ANHT*; Krauss 1911: 172-73, 553-56; Danby 1933: 636; Bunte 1972: 372-75; Koller 2012: 93-94. A drawing in Albeck's edition of the Heb. text (1959: 93) shows which elements of the plough were assumed to be designated by the terms הָרֵב, בִּרְךְ, יָצוּל and עֲרִיץ.
- 68 ↑ See also Borowski 1987: 52.
- 69 ↑ For emendation proposals and Barthélemy's objections, see [above](#).
- 70 ↑ Gesenius, *TPC* I, 530, translated one of the occurrences as *vomer*, 'ploughshare', and the other as *cultrum*, 'knife', *dens aratri*, 'plough-point'.
- 71 ↑ KJV, ASV, NJPS. In these translations, not only the final item of the list in 13:20 (MT: מְחַרְשֵׁהוּ) is translated as 'mattock', but the first item of the list in 13:21 (MT: מְחַרְשֵׁת) is also translated as 'mattocks', undoubtedly because these forms have the $s^e r \bar{e}$ vowel in common.
- 72 ↑ Cook 1994. In *DCH*, where the first occurrence of מחרשת/מחרשה in 13:20 is translated as 'ploughshare', the second occurrence is also interpreted as 'goad' because of the parallelism with דִּרְבָּן (*DCH* V (ג-ב), 229-30).
- 73 ↑ Cook 1994: 252, 254, n. 11.
- 74 ↑ See Stoebe 1973: 254.
- 75 ↑ In NASB not only מחרשת/מחרשה at the end of 13:20 but also דִּרְבָּן at the end of 13:21 is translated as 'hoe'.
- 76 ↑ Fokkelman (1986: 45) identified the first occurrence of מחרשת/מחרשה in 1 Sam 13:20 with a scythe, probably due to LXX θέριστρον. Like many others (see [above](#)), Fokkelman replaced the second occurrence in the same verse by הַרְמֵשׁ, 'sickle'.
- 77 ↑ Wiggermann (1999: 189-90, 228) remarks that if one ox is depicted this must be due to artistic convention, 'since one ox cannot pull a plough in a straight line' (190). Differently: Borowski 1987: 51; Seidl 2003-2005: 514.
- 78 ↑ Egyptian: Fig. 1 in the present article; *ANEP*, 25 (fig. 84), 27 (fig. 91), 37 (fig. 122); *BRL*², 255 (fig. 66/2); Borowski 1987: 53 (fig. 5), 58 (fig. 8), 60 (fig. 10); Mesopotamian: Wiggermann 1999: 228 (fig. 7a, 7b).
- 79 ↑ Mesopotamian: Lambert 1979: 22-23, regarding Plate VII fig. 63; Wiggermann 1999: 228 (fig. 7c), 230 (fig. 9); Egyptian: Borowski 1987: 53 (fig. 5); Nicholson & Shaw 2000: 270 (fig. 11.2).
- 80 ↑ Only Mesopotamian: *ANEP*, 25 (fig. 86, cf. 88); Borowski 1987: 55 (fig. 6; cf. 56 fig. 7); Wiggermann 1999: 228 (fig. 7d); Seidl 2003-2005, 514.
- 81 ↑ Borowski 1987: 53-56. However, Borowski (47-48, 53-54) shows that also in Israel the relationship between ploughing and sowing was close, since ploughing was done for the sole purpose of sowing (cf. Isa 28:24).
- 82 ↑ See Figure 2 and Dalman, *AuS* II, plates 18-39. See also the discussion in Dalman, *AuS* 2, 64-115; Borowski 1987: 48; King & Stager 2001: 92.
- 83 ↑ Several informative recordings have been uploaded on YouTube (e.g. from [Egypt](#) and [India](#)).
- 84 ↑ For the gradual replacing of bronze implements by iron implements in Israel/Palestine during the twelfth to tenth centuries BCE, see McNutt 1990: 209-11.

- 85 ↑ Borowski 1987, 51, with several drawings of plough-points (50-51, fig. 3, 4) and a survey of the sites where they were discovered (49, 51). For a similar description as well as drawings of plough-points, see *BRL*², 255 (fig. 66/1). Excellent drawings of two iron plough-points excavated in Kinneret are offered in Fritz 1990: 366-67 (Plate 116). For a photo of an iron plough-point and other iron implements from Tel Miqne-Ekron, see King & Stager 2001: 93.
- 86 ↑ Cf. also Wright 1943: 35; Dietrich 2015: 28.

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For the abbreviations applied → [List of Abbreviations](#)

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