

# ENCYCLOPEDIA OF HEBREW LANGUAGE AND LINGUISTICS

Volume 3  
P-Z

*General Editor*  
Geoffrey Khan

*Associate Editors*  
Shmuel Bolokzy  
Steven E. Fassberg  
Gary A. Rendsburg  
Aaron D. Rubin  
Ora R. Schwarzwald  
Tamar Zewi



BRILL

LEIDEN • BOSTON  
2013

© 2013 Koninklijke Brill NV ISBN 978-90-04-17642-3

# Table of Contents

## VOLUME ONE

Introduction .....	vii
List of Contributors .....	ix
Transcription Tables .....	xiii
Articles A-F .....	I

## VOLUME TWO

Transcription Tables .....	vii
Articles G-O .....	I

## VOLUME THREE

Transcription Tables .....	vii
Articles P-Z .....	I

## VOLUME FOUR

Transcription Tables .....	vii
Index .....	I

\*qíbrv > \*qábr > קָבֵר *qéber* ‘grave’ (like \*kálbv > כָּלֵב *kéleb* ‘dog’) versus \*qibrī > קִבְרִי *qibrī* ‘my grave’; and feminine participles of the shape כֹּתֵבֶת *kōtēbet*;  
 זָקֵן *zāqēn* ‘old’, but construct זָקָן *zāqan*; and similarly constructs of the form *miqṭal* from *maqṭel* nouns, such as מְרַבֵּץ *mirbaš* ‘resting-place’ < absolute מְרַבֵּץ *marbēš* (Brockelmann 1908: 108, 147).

Philippi’s Law is, however, notorious for having as many exceptions as examples:

alongside imperfect תִּלְכְּנָה *tēlākṇā* we find imperative לִכְנֶה *lēknā* ‘go (fpl)’, and *e* rather than *a* in the feminine plural imperfect forms of *hifil* and some *pi’el* verbs;

with the alleged development \**bintv* > \**batt* > בַּת *bat* above, compare \**intv* > \**itt* > עֵת *ēt* ‘time’, and nearly all nouns of the pattern \**qill*, whose reflex in Tiberian Hebrew is *qēl*, not *qal* as predicted by Philippi’s Law, such as \**immv* > אֵם *ēm* ‘mother’; \**libbv* > לֵב *lēb* ‘heart’;

with the alleged development \**qíbrv* > \**qábr* > קָבֵר *qéber* above, compare \**síprv* > \**sípr* > סֵפֶר *sēper* ‘book’.

The only forms to which Philippi’s Law applies with some degree of consistency, in fact, are those of the perfect and imperfect verb paradigms in which the Proto-Semitic theme vowel \**i* in an originally closed, accented syllable appears in Tiberian Hebrew as *pataḥ*, forms such as זָקָנְתִּי *zāqāntī* and תִּלְכְּנָה *tēlākṇā*, and even in the latter the sound change to *a* is often blocked by paradigmatic pressure, especially in the derived stems.

Some Hebraists, following Philippi, have maintained that the sound rule operated early in the history of Hebrew (e.g., Bergsträsser 1918:149; Ben-Ḥayyim 1988–1989). Blau (1981; 1986), however, established a relative chronology in which pausal lengthening must precede Philippi’s Law, so that the latter must therefore be relatively late in the development of Hebrew. Likewise, in a methodologically innovative paper, Lambdin (1985) showed that the rule did not operate in all attested varieties of Biblical Hebrew (such as those exhibited by Babylonian vocalization and by the Greek transcriptions of Origen’s *Hexapla*), and thus must have operated rather late in the history of Tiberian Hebrew. Lambdin also showed that the phonetic history of the → Segholates was at least partly determined by the nature of the medial root consonant.

## REFERENCES

- Bauer, Hans and Pontus Leander. 1922. *Historische Grammatik der hebräischen Sprache des Alten Testaments*. Halle: Niemeyer.
- Ben-Ḥayyim, Ze’ev. 1988–1989. “Remarks on Philippi’s law” (in Hebrew). *Lěšonenu* 53:113–120.
- Bergsträsser, Gotthelf. 1918. *Hebräische Grammatik*. Vol. 1. Leipzig: Vogel.
- Blake, Frank R. 1950. “The apparent interchange between *a* and *i* in Hebrew”. *Journal of Near Eastern Studies* 9:76–83.
- Blau, Joshua. 1981. “On pausal lengthening, pausal stress shift, Philippi’s law and rule ordering in Biblical Hebrew”. *Hebrew Annual Review* 5:1–14 (reprinted in idem, *Topics in Hebrew and Semitic linguistics*, 36–49. Jerusalem: Magnes, 1998).
- . 1986. “Remarks on the chronology of Philippi’s law” (in Hebrew). *Proceedings of the Ninth World Congress of Jewish studies, Jerusalem, August 4–12, 1985*. Division D, vol. 1: *Hebrew and other Jewish languages*, 1–4. Reprinted in idem, *Studies in Hebrew Linguistics* (Jerusalem: Magnes, 1996), 12–16.
- Brockelmann, Carl. 1908. *Grundriss der vergleichenden Grammatik der semitischen Sprachen*. Vol. 1. Berlin: von Reuther.
- Harviainen, Tapani. 1977. *On the vocalism of the closed unstressed syllables in Hebrew: A study based on the evidence provided by the transcriptions of St. Jerome and Palestinian punctuations* (Studia Orientalia 48/1), 16–21. Helsinki: Finnish Oriental Society.
- Lambdin, Thomas O. 1985. “Philippi’s law reconsidered”. *Biblical studies presented to Samuel Iwry*, ed. by Ann Kort and Scott Morschauer, 135–145. Winona Lake, Indiana: Eisenbrauns.
- Philippi, Friedrich W. M. 1878. “Das Zahlwort Zwei im Semitischen”. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 32:21–98.

JOHN HUEHNERGARD  
 (University of Texas at Austin)

## Phoenician/Punic and Hebrew

## 1. INTRODUCTION

Hebrew and Phoenician (along with Punic, on which see below) belong to the Canaanite group of North-West Semitic (→ Northwest Semitic Languages and Hebrew), though no consensus exists on how closely related the two dialects/languages may be. According to dialect geography, Garr (1980) speaks of a dialect chain sweeping across all the Canaanite and Aramaic dialects (before the Persian period), with Phoenician at one linguistic extreme, Aramaic at the other and Hebrew as a minor linguistic center. In historical perspective, Ginsberg

(1970) places Phoenician and Ugaritic in the Phoenic sub-group within Canaanite, with Hebrew and the Transjordanian dialects classified together in the Hebraic sub-group; while Rainey (2007), somewhat in line with Ginsberg (though not concerning Ugaritic), sees even stronger links between Hebrew and the Transjordanian dialects, with a concomitant argument against a close Hebrew-Phoenician relationship. In any case, after Hebrew, Phoenician/Punic is the best known dialect/language of the Canaanite group. Moreover, regardless of which classification schema one adheres to, almost all scholars would agree that Hebrew and Phoenician were characterized by a certain amount, if not a high degree, of mutual intelligibility.

The first known Phoenician inscriptions belong to the 11th century B.C.E. (cf. Lemaire 2006–2007; Rollston 2008, against Sass 2005). As such, Phoenician is attested slightly earlier than Hebrew, whose first inscriptions date to the 10th century B.C.E. Hebrew eventually achieved a long and extensive literary tradition (cf. the biblical books especially), while Phoenician is known only from inscriptions. The Phoenician epigraphic corpus comprises several hundred texts from the Levant and neighboring lands, some of which (e.g., Karatepe and Incirli) are quite extensive, and reaches approximately 7000 texts when one includes the Punic material. The epigraphic material has been published over the course of more than a century in the two series *Corpus Inscriptionum Semiticarum* (CIS I; 1881–) and *Répertoire d'Épigraphie Sémitique* (RÉS; 1900–), with selections of the most important texts collected in works such as KAI and Gibson 1982.

The Greeks referred to the inhabitants of coastal Lebanon and northern Israel, and presumably of inland southern Syria as well, as Phoenicians—though they probably called themselves Canaanites. The language and its speakers spread quickly: by the 9th century B.C.E. Phoenician travellers had already reached southern Anatolia, Egypt, Cyprus, Crete, Rhodes and other Aegean islands, and probably Mainland Greece. From the first half of the 8th century B.C.E., they founded towns ('colonies') on Cyprus and in the Western Mediterranean, most importantly Carthage, near modern-day Tunis (founded according to tradition in 814 B.C.E.). Eventually the people of these western

Phoenician colonies would be called *Poeni* by their Latin-speaking Roman neighbors; and from this term derives the modern scholarly term 'Punic' to refer to the stage of the Phoenician language used in the West under Carthaginian hegemony (Amadasi Guzzo 2005).

In Phoenician/Punic we recognize different dialects and phases distinguished by orthographic (in many cases representing phonological), morphological, and, to a lesser degree, lexical features. In Phoenicia proper, Standard Phoenician (or Tyro-Sidonian) is attested from about the 9th to the 2nd (or perhaps 1st) century B.C.E., though some of the important inscriptions in this dialect come from Cyprus and Anatolia (e.g., the aforementioned Karatepe). However, attested earlier is the Byblian dialect (Amadasi Guzzo 1994; Gzella forthcoming) which has two phases: a) an ancient one attested mainly in the 11th-century (?) Aḥīrōm sarcophagus (more archaic than the following documents), and by a group of royal inscriptions from the 10th–early 9th century; and then, after a gap, b) a series of Persian-period (late 6th–late 4th century B.C.E.) inscriptions reflecting the influence of Standard Phoenician. In the West, a Punic phase developed from Phoenician starting with the early/mid-6th century B.C.E. After the destruction of Carthage (146 B.C.E.), we speak of Late Punic for the language which is still written in Punic script until the 2nd century C.E. (as proven by KAI 173 from Sardinia, mentioning the name of the emperor Antoninus Pius [r. 138–161]; cf. Amadasi Guzzo 1999; Sznycer 1999; Jongeling 2008). The language survived for at least three more centuries, however, since the writings of St. Augustine (354–450), who hailed from Hippo in modern-day eastern Algeria, demonstrate that Punic was still spoken in his day. Proposals for more detailed dialect divisions than that offered here (see, e.g., Garbini 1988) are based mainly on the geographic distribution of the inscriptions.

The Phoenicians used a 22-letter alphabet, which in turn was borrowed by the Israelites and all others in the Levant (Arameans, Ammonites, Moabites, Edomites, Philistines). In the West, a Punic variant of the Phoenician script developed, especially under Carthaginian influence. The script which prevailed in the Late Punic phase is a cursive variant of the Phoenician alphabet, called Neo-Punic. It is

important to note that while the scribes who wrote Hebrew, Aramaic, etc., developed *matres lectionis* to indicate vowels, especially long vowels, this practice was not adopted by Phoenician scribes, who apparently were much more conservative in their approach. As a result, a form such as מלכת *mlkt* is ambiguous, with possible meanings including (but not limited to) ‘I ruled’ and ‘you ruled’, though, fortunately, context usually helps to resolve potential ambiguities. Only in the Late Punic texts do vowel letters appear, most likely under the influence of Greek and Latin orthography.

Other sources for Phoenician include the transcriptions of personal names in Egyptian, Assyrian, Greek, and Latin. We also have a ten-line speech in Punic preserved in Plautus’ Latin comedy *Poenulus* (Szyner 1967; Gratwick 1971), some Punic inscriptions written in the Greek alphabet, and about fifty so-called ‘Latino-Punic’ inscriptions (2nd–5th century C.E.), that is, texts written in the Punic language using Latin letters. Each of these sources provides information about the late phases of the language (Kerr 2010).

Our knowledge of Phoenician/Punic remains partial because of the limited sources, the present lack of a real literature, and the nature of the writing system. The language must be partly reconstructed based on comparison with related languages, especially with the better known Hebrew. By contrast, the contribution of Phoenician to our understanding of Hebrew is very limited. In some instances, Phoenician helps to account for specific Hebrew features, especially those characteristic of Israelian (i.e., northern) Hebrew (henceforth IH). This is due to a) the geographical proximity between northern Israel and Phoenicia, b) cultural influence between the two, especially in the direction of Phoenicia over Israel (as attested archaeologically in some northern Israelite sites), and c) the intermarriage of the royal families, as described in the Bible specifically for Ahab, king of Israel, and Jezebel, daughter of Ethbaal of Tyre (even if the Bible uses the term ‘Sidonian’ [1 Kgs 16.31]).

The best examples of features shared by Phoenician and northern Hebrew come from the Samaria ostraca: a) monophthongization of the diphthong *ay* > *ē*, as reflected in פין *yēn* ‘wine’ (cf. Biblical Hebrew [reflecting Judahite Hebrew] פין *yayin*); and b) the use of שׁ *šat* ‘year’ (< \**šatt* < \**šant*) (cf. Biblical Hebrew

שָׁנָה, *šānā* ‘year’ < \**šanat*), though one must admit that this feature is characteristic of Aramaic as well.

As noted, Phoenician and Hebrew are closely related and typologically similar. Nonetheless, many recognizable differences exist. In what follows, we list some of these distinctions, concentrating on phonology and, to a lesser extent, morphology, syntax, and vocabulary. On occasion, we cite parallels from Hebrew, especially from compositions presumed to be written in IH, such as the sections of Kings that describe the northern kingdom of Israel (Rendsburg 2002), the stories of the northern judges (Rendsburg 2003), the book of Proverbs (Ginsberg 1982:35–36), selected psalms (Rendsburg 1990), and others. These IH features represent grammatical and lexical isoglosses linking IH and Phoenician.

## 2. PHONOLOGY

Phoenician had 22 consonants, represented by 22 alphabetic signs. Hebrew possessed the additional phonemes /s/, /x/ and /ǧ/ (Blau 1982), which did not exist in Phoenician. In the course of its development, Phoenician/Punic merged /š/ with /s/; cf. the Phoenician transcriptions פתלמיס *ptlmys* and פתלמיש *ptlmyš* for Greek Πτολεμαῖος (*KAI* 19.5, 6–7 and *KAI* 42.2; 43.4, 6, 7, 8). However, some Latino-Punic inscriptions apparently distinguish between the two phonemes and use the Greek character Σ for /š/, but Latin S for /s/. Compare Latino-Punic Σumar ‘watcher’ (*KAI* 179.3), corresponding to Hebrew שומר *šōmēr* (see further *PPG*<sup>3</sup> §§43–48). Somewhat surprisingly Greek renderings of the names of the two large Phoenician city-states present different letters, even though both begin with the same Phoenician (though apparently not Proto-Semitic) consonant ʕ /s/, viz., Τύρος ‘Tyre’ (for צר *šr*) and Σιδών ‘Sidon’ (for צדן *šdn*) (*PPG*<sup>3</sup> §111 note; see also Steiner 1982:66–67). Peculiar to Phoenician/Punic is the tendency for voiced /z/ (< \**ḏ*) to become voiceless /s/, as in סכר *skr* ‘he remembered’ (Hebrew זָכַר *zākar*) and Late Punic סת *st* ‘this’ (m. and f.) (cf. Hebrew זֶאת *zōt* ‘this’ [f.]).

As in Hebrew, stops tended to become fricatives, without following, however, the rules established for Tiberian Hebrew (for this reason, in the conventional reconstruction of Phoenician/Punic words, these consonants are

usually transcribed, regardless of their position within the word, as stops and not as fricatives). In particular, there is not enough evidence for the entire set of the so-called *bgdkpt* letters. The development is clear for /p/, which in Late Punic was always pronounced [f], even at the beginning of words, e.g., Latino-Punic *fel* ‘he did’ (IRT 873.2) versus Hebrew פָּעַל *pā‘al*. Concerning /k/ and /t/, only in the West from the 3rd–2nd century B.C.E. do Greek and Latin transcriptions of Phoenician/Punic words attest to the regular fricative pronunciation (for details, see PPG<sup>3</sup> §37). For the other stops, the development is less certain (cf. PPG<sup>3</sup> §§38 and 41).

As in Hebrew, /n/ normally assimilates before another consonant. In Punic, however, there is a strong tendency to secondary dissimilation, as in מְנַצְבַּת *mṇṣbt* /*māṣibt*(?) ‘stele’, instead of Phoenician מַצְבַּת *mṣbt* /*māṣṣibt*(?).

Concerning vowels, along with the general Canaanite shift of (long) *lāl* > *lōl*, in Phoenician stressed (short) *lal* also developed into *lol* (long?), as revealed by transcriptions such as λαβον ‘white’ (cf. Hebrew לָבָן *lābān*) and ναδωρ ‘he vowed’ (cf. Hebrew נָדַר *nāḏar*).

Contrary to Judahite Hebrew, diphthongs were regularly monophthongized in Phoenician (see above), as in בַּת *bt* /*bēt*/ ‘house, temple’ versus Hebrew בַּיִת *bayit*, and לַל *ll* /*lāl*/ ‘night’ versus Hebrew לַיְלָה *laylā*. With some exceptions in Byblos, intervocalic /h/ was regularly elided; consequently, the system of the suffix pronouns of the 3rd masculine and feminine singular differed from the Hebrew variants. After *-u* and *-a* (the original nominative and accusative case ending), the suffixes *-hū* and *-hā* developed into the vowels *-ō* and *-ā*, respectively, though these vocalic suffix are not indicated in the Phoenician script, cf., e.g., קַל *ql* ‘his/her voice’ (though in Punic קַלָּ *ql’*). Unlike in Hebrew, after *-i* (the original genitive case ending) or a long vowel (dual/plural endings), these suffixes were written י- *-y* and, in Late Punic, sometimes יא- *-y’*, indicating a pronunciation *l-iyūl* and *l-iyāl*, e.g., בַּבְּתִי *b-bty* /*bi-bētiyūl* < *\*bi-bēti-hūl* ‘in his temple’; בַּד אֲדֹנִי *b-d* ‘*dny* /*l-bōd* ‘*adōniyāl* < *\*bi-yad* ‘*adōni-hāl* ‘from her lord’. In the dialect of Byblos (except Aḥirōm, where intervocalic /h/ was still present), only the 3rd person feminine singular preserved the original /hl/, e.g., עַמְדָּה *mdh* /*ammūdēhāl* ‘her columns’, while in the masculine, after *-i* or a

long vowel, the original *-hū* suffix was written *-w*, e.g., לְאֲדֹתוֹ *L-ḏtw* /*l-adōttiwl* < *\*la-’adōttiwl* < *\*la-’adōtti-hūl* ‘for his lady’.

In Phoenician/Punic, the suffix pronoun of the 3rd masculine and feminine plural, *l-humul* and *l-himal*, respectively, also had two variants: after an original *-u* or *-a*, these were *l-ōml* and *l-ēm̄l*, respectively, both written ם- *-m*, e.g., זָרְעָם *zr‘m* /*zar‘ōml* < *\*zar‘a-humul* ‘their (m.) seed’ and מִסְפָּרָם *msprm* /*misparēm̄l* < *\*misparahimal* ‘their (f.) number’. After *-i* or a long vowel, these suffixes were written נם- *-nm*, for masc. *l-nōml* and fem. *l-nēm̄l*, e.g., לְאֲדֹנָם *l-ḏnmm* /*l-adōninōml* ‘for their (m.) lord’; לְכַנְנָם *lknmm* /*lakōninēm̄l* ‘for their (f.) being’ (KAI 14.20). The origin of the variant נם- *-nm* is unclear. Again, Byblian preserved the original *-h*, as in עֲלֵהֶם *’lhm* /*alēhūml* ‘on them’. For the 3rd person suffixes of Phoenician, see Huehnergard (1991) and PPG<sup>3</sup> (§112).

In the nominal *qatl*, *qitl*, and *qutl* patterns (‘segholate’ in Hebrew; → Noun), Phoenician did not insert, as does Tiberian Hebrew, an anaptyctic vowel. עַבְד *bd* ‘servant’, for example, was transcribed into Greek as αβδ- (cf. Hebrew עֶבֶד *‘ēbed*). Similarly, we know that מֶלֶךְ *mlk* was pronounced /*milkl*/ (cf. Hebrew \**malk* > מֶלֶךְ *melek*) (PPG<sup>3</sup> §§81a, 193b; see also Fassberg 2002:210). By Late Punic, however, there may have been a tendency to develop anaptyxis, as illustrated by קַבְעָר *qb‘r* ‘tomb’, probably /*q(a)bar*/ (ע ‘ in this period was often used to represent the vowel /a/).

Unlike Hebrew, Phoenician feminine singular nominal suffix preserved the final ת- *-t* in the absolute state, as in מַלְכַּת *mlkt* ‘queen’ /*milkot*/ (cf. Hebrew מַלְכָּה *malkā*). The form of the feminine singular suffix is thus *l-ot*, based on the aforementioned stressed *lal* > *lol* shift and the preservation of final ת- *-t*. Such forms occur in IH texts as well (note the feminine singular verbs predicated to these subjects), e.g., חֲכָמוֹת *hāk̄mōt* ‘wisdom’ (Prov. 1.20, 9.1, 24.7), חֲכָמוֹת *hāk̄mōt* ‘wise woman’ (Judg. 5.29, Prov. 14.1); see also מַצְבֹּת *maṣṣabōt* ‘pillar’ (Ezek. 26.11) in a proclamation directed at Tyre (→ Addressee-Switching).

### 3. MORPHOLOGY

For the independent personal pronoun of the 1st person singular, Phoenician/Punic had

only the older form אַנְךְ *'nk l'anōkīl* and not, like Hebrew, the apparently more recent form אַנִּי *'ānī*. In Phoenician/Punic the distinction between the independent pronoun of the 3rd person masculine and feminine consisted of a vowel alternation: /u/ for the masculine, /i/ for the feminine, while the ending was /m/ for both genders: masculine *humat(u)* and feminine *himat(u)*, both written הַמַּת *hmt*. This is contrary to Hebrew, which differentiates the genders (in the 2nd and 3rd person plural) by the consonants -וּ- *-m-* and -נ- *-n-*, respectively, while the vowel was *ē* (< \**i*) for both genders (masc. הַמָּוֶה *hēmṃā* and fem. הַמֵּנָה *hēmṃā*). The same difference between masculine and feminine appears in the suffixed pronouns, Hebrew having the ending ם- *-m* for the masculine, but ן- *-n* for the feminine, while Phoenician/Punic has ם-/נַם- *-m/-nm* for both genders, but a vowel opposition, namely *lōl* versus *lēl* (see above).

Contrary to Hebrew, the Phoenician/Punic causative was *yip'il* instead of *bif'il*, for example יִקְדֹּשֶׁת *yqdšt l'yiqdištīl* 'I consecrated'; in Punic and Late Punic the prefix was written א- *'-* or אֵי- *'y-*. Two examples of the *yif'il* may occur in the Bible (Gordon 1951:50, 59): יוֹדַעְתִּי *yōdā'tī* 'I informed' (1 Sam. 21.3); יַכִּירָנִי *yakkīrānū* 'he [Israel] recognizes us (not)' (Isa. 63.16), though, admittedly, neither one of these passages occurs in an Israelian context.

The root of the verb 'go' in Phoenician/Punic is ילך *ylk* (with initial *yod*, as also in Ugaritic), in contrast to Hebrew הלך *hlk* (with initial *he*), though note that the prefix-conjugation in Hebrew seems to be built on the root ילך *ylk*.

The passive participle probably had the pattern *qaṭīl*, as in Aramaic and against Hebrew *qaṭūl*; cf. Late Punic בעריך *b'ryk* 'blessed' and the personal names transcribed in Latin as *Barichal* and *Baric*.

As relative/determinative marker, Old Byblian had ז *z*, corresponding to Hebrew זֶה *zē* and זֹו *zū*. The Hebrew forms occur in archaic poems, e.g., Judg. 5.5, Exod. 15.13, 16 (the former is also northern), but occasionally in IH texts as well, e.g., זֶה יְלִדְךָ אָבִיךָ *'ābīkā zē yəlādeḱā* 'your father who bore you' (Prov. 23:26).

Standard Phoenician/Punic used the relative/determinative marker אַ *'š*. According to some scholars, the form אַ *'š* stems from an original *ʷ š* (supposedly connected with Akkadian *ša*),

with prosthetic *'aleph* (cf. Holmstedt 2007). This would then contrast with Hebrew אֲשֶׁר *'āšer*, which is of nominal origin. However, others have argued that Phoenician אַ *'š* and Hebrew אֲשֶׁר *'āšer* are cognate, with Phoenician attesting to an abbreviated form resulting from grammaticalization (Huehnergard 2006). Regardless, we may note that IH texts use the shorter form (without prosthetic *'aleph*) -שֶׁ *šē-*, e.g., the Song of Deborah (Judg. 5.7 [2x]) and the Gideon cycle (Judg. 6.17, 7.12, 8.26) (in the first three attestations actually -שֶׁ *šā-*), both of which are geographically set in the north. Instead of אַ *'š*, Late Punic, in contrast to all other West Semitic languages, sometimes used the interrogative/indefinite pronoun מי *my l'mīl* 'who' and מ *m* (Late Punic מא *m'*) *l'mōl* > *l'mul* 'what', e.g., מַנְצַבַּת מֵא בַעֲנָא יוֹרְחַתָּן *mṃṣbt m' b'n' ywrḥtn* 'the stele which Yuraḥtan built' (Jongeling 2008: 83).

To negate nouns and verbs, Phoenician/Punic used אֵי *'y l'īl* and בַּל *bl lball* (along with the compound אֵיבַל *'ybl l'īball*), as opposed to Hebrew לֹא *lō*. For a Hebrew example from a prophet active in the north, see וְבִלְיָמָרוּ וְבִלְבָבָם *ū-bal-yōmrū li-lbābām* 'and they do not say in their hearts' (Hos. 7.12). For prohibitions, however, אַל *'l* was used, corresponding to Hebrew אַל *'al*.

#### 4. SYNTAX

In syntax, Phoenician/Punic did not make use of the ancient preterite (prefix conjugation) preceded by *w-* as a narrative tense (Hebrew *wayyiqtol*). Phoenician instead developed the usage of the (absolute) infinitive followed by an independent personal pronoun for narration, e.g., מֶלֶךְ אֲשֶׁר אֲנִי עָלָיו וְשָׂכַר *wškr 'nk l'y mlk 'šr lwa-šakor 'anōkī 'alaya mlk 'aššūr* 'and I engaged against him the king of Assyria' (KAI 24.7–8; though for a different analysis of such constructions see Lipiński 2010). Note instances of this usage in IH, e.g., וְנִפְּזוּ הַכְּדִים *wə-nāpōš hak-kaddīm* 'and the vessels shattered' (Judg. 7.19; albeit with a noun rather than a pronoun as subject), once more in the Gideon story.

#### 5. LEXICON

Some lexical differences between Phoenician/Punic and Hebrew are worth noting. Phoenician

uses כן *kn* /*kōn* ‘he was’ versus Hebrew הָיָה *hāyā*; פעל *pʿl* /*paʿal* or *paʿoll* ‘he did, made’ versus Hebrew עָשָׂה *ʿāśā* (Hebrew פָּעַל *pāʿal* is rare and poetic); חָרָץ *ḥrṣ* ‘gold’ versus Hebrew זָהָב *zāhāb* (on Hebrew חָרוֹץ *ḥārūṣ*, see below); קָרָת *qrt* ‘city’ versus Hebrew יָרַח *ir* (on Hebrew קָרַת *qeret*, see below); יָרַח *yrḥ* ‘month’ versus Hebrew חֹדֶשׁ *ḥōdēš* (on Hebrew יָרַח *yerah*, see below); אִישׁ *ʾšm* ‘men’ (based directly on singular אִישׁ *ʾš* ‘man’) versus Hebrew אַנְשִׁים *ʾānāšim* (built from a different stem from the singular form אִישׁ *ʾš*).

Traces of such forms occur in the Bible, e.g., חָרוֹץ *ḥārūṣ* ‘gold’ appears four times in Proverbs and is used in Zech. 9.3 in a judgment directed against Tyre; קָרַת *qeret* ‘city’ appears four times in Proverbs; and אִישִׁים *ʾišim* ‘men’ occurs in Ps. 141.4 and Prov. 8.4. Finally, note the presence of יָרַח *yerah* ‘month’ in 1 Kgs 6.37–38, 8.2, along with the Phoenician month names Ziv, Bul, and Etanim, suggesting that Phoenician scribes are responsible for the Temple-building account, just as Phoenician architects and craftsmen were responsible for its actual construction.

## REFERENCES

- CIS* = *Corpus inscriptionum semiticarum*.  
*IRT* = Reynolds and Ward Perkins 1952.  
*KAI* = Donner and Röllig 1966–2002.  
*PPG*<sup>3</sup> = Friedrich and Röllig 1999.  
*RÉS* = *Répertoire d'Épigraphie sémitique*.
- Amadasi Guzzo, Maria Giulia. 1994. “Lingua e scrittura a Biblo”. *Biblo. Una città e la sua cultura*, ed. by Enrico Acquaro, Federico Mazza, Sergio Ribichini, Gabriella Scandone, and Paolo Xella, 179–194. Rome: Consiglio Nazionale delle Ricerche.
- . 1999. “Quelques spécificités phonologiques du punique tardif et la question de leur chronologie”. *Numismatique, langues, écritures et arts du livre, spécificité des arts figurés. Actes du VIII colloque international sur l'histoire et l'archéologie de l'Afrique du Nord, Nice, 21–31 octobre 1996*, ed. by Serge Lancel, 183–190. Paris: Éditions du comité des travaux historiques et scientifiques.
- . 2005. “Les phases du phénicien: Phénicien et punique”. *Proceedings of the 10th Meeting of Hamito-Semitic (Afroasiatic) Linguistics (Florence, 18–20 April 2001)*, ed. by Pelio Fronzaroli and Paolo Marrassini, 95–103. Florence: Dipartimento di Linguistica, Università di Firenze.
- Avishur, Yitzhak. 2000. *Phoenician inscriptions and the Bible*. Tel-Aviv: Archaeological Center.
- Blau, Joshua. 1982. *On polyphony in Biblical Hebrew*. Jerusalem: Israel Academy of Sciences and Humanities.
- Corpus inscriptionum semiticarum. Pars prima*. 1881–. Paris: E Reipublicae Typographeo (= *CIS I*).
- Donner, Herbert, and Wolfgang Röllig. 1966–2002. *Kanaanäische und aramäische Inschriften*. 3 vols.: I<sup>5</sup> 2002, II<sup>2</sup> 1966, III<sup>2</sup> 1969. Wiesbaden: Harrassowitz (= *KAI*).
- Fassberg, Steven E. 2002. “Why doesn't *melex* appear as *ma:lex* in pause in Tiberian Hebrew?” (in Hebrew) *Lěšonenu* 64:207–219.
- Friedrich, Johannes, and Wolfgang Röllig. 1999. *Phönizisch-punische Grammatik*. 3rd edition, ed. by Maria Giulia Amadasi Guzzo with cooperation of Werner R. Mayer. Rome: Pontifical Biblical Institute (= *PPG*<sup>3</sup>).
- Garbini, Giovanni. 1988. “I dialetti del Fenicio”. *Il Semitico nordoccidentale. Studi di storia linguistica* (Studi semitici N.S. 5), 51–68. Rome: Università degli Studi “La Sapienza”.
- Garr, W. Randall. 1985. *Dialect geography of Syria-Palestine, 1000–586 B.C.E.* Philadelphia: University of Pennsylvania Press.
- Gibson, John C. L. 1982. *Textbook of Syrian Semitic inscriptions. Vol. 3: Phoenician inscriptions including inscriptions in the mixed dialect of Arslan Tash*. Oxford: Clarendon.
- Ginsberg, H. L. 1970. “The Northwest Semitic languages”. *Patriarchs*, ed. by Benjamin Mazar, 102–124, 293. New Brunswick, New Jersey: Rutgers University Press.
- . 1982. *The Israelian heritage of Judaism*. New York: Jewish Theological Seminary.
- Gordon, Cyrus H. 1951. “Marginal notes on the ancient Middle East”. *Jahrbuch für Kleinasiatische Forschung* 2:50–61.
- Gratwick, A. S. 1971. “Hanno's Punic speech in the *Poenulus* of Plautus”. *Hermes* 99:25–45.
- Gzella, Holger. Forthcoming. “The linguistic position of Old Byblian”. *Linguistic studies in Phoenician grammar*, ed. by Robert D. Holmstedt and Aaron Schade. Winona Lake, Indiana: Eisenbrauns.
- Harris, Zellig S. 1936. *A grammar of the Phoenician language*. New Haven, Connecticut: American Oriental Society.
- Holmstedt, Robert D. “The etymologies of Hebrew ʾāšer and šec-”. *Journal of Near Eastern Studies* 66:177–191.
- Huehnergard, John. 1991. “The development of the third person suffixes in Phoenician”. *Maarav* 7:183–194.
- . 2006. “On the etymology of the Hebrew relative še-”. *Biblical Hebrew in its Northwest Semitic setting: Typological and historical perspectives*, ed. by Steven E. Fassberg and Avi Hurvitz, 103–125. Jerusalem / Winona Lake, Indiana: Magnes / Eisenbrauns.
- Jongeling, Karel. 2008. *Handbook of Neo-Punic inscriptions*. Tübingen: Mohr Siebeck.
- Kerr, Robert M. 2010. *Latino-Punic epigraphy*. Tübingen: Mohr Siebeck.
- Krahmalkov, Charles R. 2000. *Phoenician-Punic dictionary*. Leuven: Peeters.
- . 2001. *Phoenician-Punic grammar*. Leiden: Brill.
- Lemaire, André. 2006–2007. “La datation des rois de Byblos Abibaal et Elibaal et les relations entre l'Égypte et le Levant au X<sup>e</sup> s. av. n.è.”. *Académie des inscriptions et belles-lettres. Comptes rendus*: 1697–1716.



- Lipiński, Edward. 2010. "Le gérondif en Phénicien". *Journal of Semitic Studies* 55:1–10.
- Masson, Olivier and Maurice Sznycer. 1972. *Recherches sur les Phéniciens à Chypre*. Geneva / Paris: Droz.
- Peckham, J. Brian. 1968. *The development of the Late Phoenician scripts*. Cambridge, Massachusetts: Harvard University Press.
- Rainey, Anson F. 2007. "Redefining Hebrew—A Transjordanian language". *Maarav* 14:193–203.
- Rendsburg, Gary A. 1990. *Linguistic evidence for the northern origin of selected psalms*. Atlanta, Georgia: Scholars.
- . 2002. *Israelian Hebrew in the Book of Kings*. Bethesda, Maryland: CDL.
- . 2003. "A comprehensive guide to Israelian Hebrew: Grammar and lexicon". *Orient* 38:5–35.
- Répertoire d'Épigraphie sémitique*. 1900–. Paris: Imprimerie nationale (= RÉS).
- Reynolds, Joyce M. and John B. Ward Perkins. 1952. *The inscriptions of Roman Tripolitania*, in collaboration with Salvatore Aurigemma, et al. Rome / London: British School at Rome (= IRT).
- Rollston, Christopher A. 2008. "The dating of the early royal Byblian Phoenician inscriptions: A response to Benjamin Sass". *Maarav* 15:57–93.
- Sass, Benjamin. 2005. *The alphabet at the turn of the millennium* (Tel-Aviv. Occasional publications, 4). Tel-Aviv: Emery and Claire Yass Publications in Archaeology.
- Segert, Stanislav. 1976. *A grammar of Phoenician and Punic*. Munich: C. H. Beck.
- Steiner, Richard C. 1982. *Affricated šade in the Semitic languages*. New York: American Academy for Jewish Research.
- Sznycer, Maurice. 1967. *Les passages puniques en transcription latine dans le "Poenulus" de Plaute*. Paris: Klincksieck.
- . 1999. "Le punique en Afrique du Nord à l'époque romaine d'après les témoignages épigraphiques". *Numismatique, langues, écritures et arts du livre, spécificité des arts figurés. Actes du VIIIe colloque international sur l'histoire et l'archéologie de l'Afrique du Nord, Nice, 21–31 octobre 1996*, ed. by Serge Lancel, 171–180. Paris: Éditions du comité des travaux historiques et scientifiques.

MARIA GIULIA AMADASI GUZZO  
("Sapienza" Università di Roma)  
GARY A. RENDSBURG  
(Rutgers University)

## Phonetics of Modern Hebrew: Acoustic

### 1. INTRODUCTION TO ACOUSTIC PHONETICS

Phonetics is a branch of linguistics which focuses on the study of speech sounds from a concrete physiological and physical perspective. The sci-

ence of Phonetics is divided into two areas of speech investigation: the study of the physiology of speech production, articulatory phonetics; and the research of the acoustic output of speech, acoustic phonetics. Phonetics is related to phonology, as both fields study speech sounds. However, phonetics is distinct from phonology in that it handles tangible properties of speech, while phonology focuses on the abstract properties of speech sounds, their organization and patterning cross-linguistically.

### 2. HISTORY OF PHONETICS

Theories about speech production date back to the 18th century; however, the investigation of the acoustic output of speech began only in the late 1930's, when machines such as the spectrograph and cineradiographs became available. Acoustic phonetic research developed with the technological ability to record, measure and analyze speech.

Phonetic research in Modern Hebrew is scarce, and much of the available phonetic research is largely acoustic in nature (for few studies in articulatory phonetics see Articulatory Phonetics). Several studies can be mentioned here: Chayen (1972, 1973), whose work was mostly descriptive in nature, recorded and studied the Modern Hebrew accent of the 1960's. Devens (1980) documented the speech of Oriental Hebrew speakers at the end of the 1970's and beginning of the 1980's. Enoch and Kaplan (1969) provided measurements regarding Modern Hebrew stress. Kreitman (2008) presented data of an acoustic phonetic study of consonantal clusters in Modern Hebrew. Laufer (1994, 1995, 1998) provides data regarding the acoustic nature of Modern Hebrew consonants, particularly the nature of voicing in obstruents, while Laufer (1975, 1977) provides data regarding Modern Hebrew vowels. Lastly, Aronson et al. (1996), Most, Amir and Tobin (2000), Schwarzwald (1972) and Tene (1962) all provide acoustic measurements of vowels in Modern Hebrew.

### 3. SPEECH PRODUCTION AND ACOUSTIC OUTPUT

Speech commences when air is expelled from the lungs through the vocal tract and is released into space. As a result, the air which exits the