Features of Aramaeo-Canaanite

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One of the sub-branches of Central Semitic, Northwest Semitic, contains a number of languages with no established hierarchical relation among them: Ugaritic, Aramaic, Canaanite, Deir Alla, and Samalian. Over the years, scholars have attempted to establish a more accurate sub-branching for Northwest Semitic or to suggest a different genetic affiliation for some languages, usually Ugaritic. In this paper, we will argue that Aramaic and Canaanite share a direct ancestor, on the basis of a number of morphosyntactic features: the fs demonstrative $*\partial a^{\gamma}t$, the direct object marker $*^{\gamma}ay\bar{a}t$, the development of dative subjects with adjectival predicates, the use of the construct state with prepositions, the G imperfect inflection of geminate verbs, and the plural form of *bayt. We will also address arguments that Ugaritic is a Canaanite dialect, or that Canaanite and Ugaritic are more closely related. This proposal not only outlines a more coherent family tree for Northwest Semitic, but also accounts for numerous "Aramaic"-like features in some Canaanite dialects, primarily Biblical Hebrew, which have thus far been treated as the result of language contact in the early Iron Age.

1. INTRODUCTION

The internal subgrouping of the Central Semitic languages was first established by Hetzron (1976) and later refined by Huehnergard (2005a). One of the sub-branches of Central Semitic, Northwest Semitic, contains a number of languages, with no established hierarchical relation among them; that is, they remain in a polytomic formation (Huehnergard 1991, 2005a): Ugaritic, Aramaic, Canaanite, the Deir 'Allā dialect, and Samalian.¹ This formation is tantamount to admitting that there is no empirical evidence to justify further subgroupings (see Fig. 1).

Over the years scholars have attempted to establish a more accurate sub-branching for Northwest Semitic or to suggest a different genetic affiliation for some of its constituent languages, such as Ugaritic. The relationship between Ugaritic and Canaanite has been explored since the decipherment of Ugaritic in 1931² and is still somewhat of a standing issue. Goetze (1941) declared it a separate linguistic entity, though related to Canaanite. Many scholars, such as Segert, Tropper, and Kogan, have argued for subgrouping Ugaritic with Canaanite,

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- 1. The diagnostic features of some of these branches have already been identified: for Aramaic, see Huehnergard (1995); for Canaanite, see Huehnergard (1991) and Pat-El and Wilson-Wright (2016); for Deir Allā, see Hackett (1984), Huehnergard (1991), and Pat-El and Wilson-Wright (2015).
 - 2. For bibliography on this early debate see Goetze (1941: nn. 6-8).

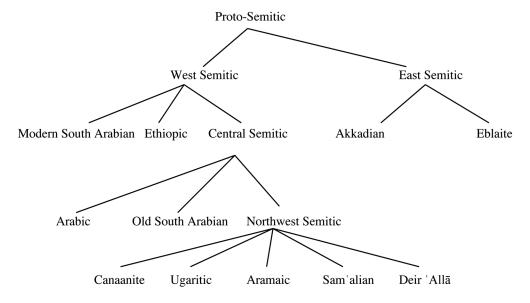


Fig. 1. The Semitic languages.

while others, such as Sivan and Huehnergard, have argued for treating Ugaritic as its own distinct sub-branch.³ Unfortunately, some of the arguments in this debate have not been purely linguistic.⁴

Other suggestions include subgrouping Canaanite with Arabic (Hetzron 1976; Voigt 1987) and (Proto-)Aramaic with Sabaic (Kottsieper and Stein 2014). In this paper, we will review the arguments regarding the micro-classification of the Northwest Semitic sub-branch. We will show that the arguments in favor of a Ugaritic-Canaanite sub-branch are linguistically weak. We then adduce a number of innovative morphosyntatic features which we suggest can establish an Aramaeo-Canaanite sub-branch: the doubly marked fs demonstrative *ða't, the direct marker *'ayāt, the use of dative subjects with certain predicates, the use of the construct state with prepositions, the prefix conjugation of geminate verbs, and the plural form of *bayt. We do not advocate eliminating any of the currently accepted sub-branches, but rather argue for a more nuanced grouping, reflecting a closer connection between some of the lower nodes of Northwest Semitic.

2. SHARED FEATURES WITH UGARITIC

Both Tropper (1994) and Kogan (2010) have argued in favor of a Ugaritic-Canaanite subgroup of Northwest Semitic. ⁶ But they emphasize different parts of the grammar in their

- 3. Pardee (2012: 25) suggests that Ugaritic is distinct, but resembles Canaanite.
- 4. See, for example, Rainey (1963), and comments to that effect by Pardee (2012: 14).
- 5. Huehnergard (2005a) dismissed the first proposal on linguistic grounds, by showing that there are no innovations connecting Canaanite and Arabic. The second proposal is based on four features (postposed definite article, use of the same set of verbal stems, retention of causative *h* in all inflections, comparable inventory of consonants). These features are either well-known areal features (definite article), examples of retention (causative *h* and consonantal inventory), or loss (verbal stems). None of them is a clear innovation which could prove a genetic affiliation between Sabaic and Aramaic.
- 6. Among earlier arguments in favor of classifying Ugaritic with Canaanite see Harris (1939), del Olmo Lete (1986), who primarily points to connections between Phoenician and Ugaritic, and Isaksson (1990–91), among others.

	East Sem.	West Semitic						
			Central Semitic					
					Northwest Sem.			
PS	Akkadian	Ethiopic	Arabic	ASA	Ugaritic	Hebrew	Old Arm	Off. Arm
*ð	z	z	₫	₫	d/\underline{d}	z	Z	d
*0	š	S	<u>t</u>	<u>t</u>	<u>t</u>	š	Š	t
*ś	š	S	S	S	š	<i>Ś</i> < <i>Š</i> >	Š	S
*0 <u>.</u>	Ş	Ş	Z.	z.	z/ģ	Ş	Ş	ţ

Table 1. Consonantal mergers in Semitic: a selection.

attempts to argue for genetic affiliation: Tropper focuses on phonology and morphology while Kogan discusses the lexicon. We will review their arguments below.⁷

2.1. Morphosyntactic Features

Tropper suggests several phonological and morphological features, which, according to him, indicate that Ugaritic and Canaanite should be grouped together. As we will show below, however, the vast majority of these features are not exclusive to Canaanite and Ugaritic, and so do not indicate an immediate genetic relationship between these two branches.

i. Loss or merger of laterals

Aramaic and Canaanite also share a large number of consonant mergers, ⁸ but losses or mergers are meaningless for subgrouping, and so this feature cannot be used to substantiate a Ugaritic-Canaanite subgroup. ⁹ Note additionally that this feature is attested in Akkadian (see Table 1) and that the consonantal inventory of Ugaritic is closer to that of Classical Arabic than Canaanite, although few scholars have used this similarity to argue for an Arabo-Ugaritic subgroup. ¹⁰

More generally, shared sound changes do not reliably indicate genetic relatedness. Typologically, there are only a small number of possible sound changes that can occur and thus distantly related or even unrelated languages may undergo the same change. Several languages, for example, have undergone a change of \bar{a} to \bar{o} , known to Semitists as the "Canaanite Shift," some of which are non-Canaanite Semitic, such as Modern Aramaic and several dialects of Arabic, and some that are non-Semitic, such as Germanic and ancient Egyptian. ¹¹

- 7. For another refutation of Tropper (1994) see Sivan (2000), although we disagree with him on a number of points, such as his suggestion that the Barth-Ginsberg Law is Proto-Semitic. For a fuller evaluation of some of the features discussed here, see Noorlander (2016).
- 8. This fact fostered the widespread hypothesis that the Old Aramaic inscriptions were written in a mixed dialect, blending Aramaic and Canaanite features (Cross and Friedman 1952: 22). Given the Akkadian evidence, Blau (1978: 22 n. 2) suggested parallel development (or drift) to account for the similarity between the consonantal inventories of the two branches.
- 9. Genealogical relation between languages is determined based on active changes, known as innovations. Loss of features may be random, but gaining features requires a process, which is far less likely to be accidental.
- 10. The only such proposal known to us is Mendenhall (2006: esp. 21–22), but this proposal has been convincingly refuted in Rendsburg, Rubin, and Huehnergard (2008).
- 11. For Neo-Aramaic and Arabic, see Fassberg (2013) and Shachmon (2013). For Germanic, see Salmons (2012: 57). For Egyptian see Allen (2013: 26).

ii. Collapse of the diphthongs *aw > \bar{o} and *ay > \bar{e}

This is also attested, though inconsistently, in GəSəz: *mawt > mot 'death'; *bayt- > $b\bar{e}t$ 'house'. ¹² Although some of the Canaanite languages, such as Phoenician, attest to the collapse of diphthongs, the evidence for this feature in other dialects is inconsistent. Ammonite retains the diphthong in ywmt 'days' and Edomite retains it in the divine name Qws (Garr 2004: 37). The spelling yn 'wine' in the Samaria Ostraca provides evidence of this collapse in Northern Hebrew (Noorlander 2016: 67–68); however, the spelling byt 'house', which does not reflect this collapse, is also attested in two northern Hebrew inscriptions (Bet Shean and Tell Qasile). In addition, the spelling $q\bar{s}$ for $qayi\bar{s}$ 'summer' is attested in the Gezer calendar. This inscription was found at a site southwest of Jerusalem, well to the south, which was a part of the later Southern Kingdom. Despite the inscription's find spot, a number of scholars have argued that the inscription actually records the northern dialect of Hebrew because of the diphthong collapse.

More recently, Pardee (2013) has argued that the Gezer Calendar is Phoenician, based on the final -w on certain nouns, which he interprets as a 3ms proleptic pronominal suffix, and the collapse of diphthongs. As Huehnergard and Pat-El (2012) have argued, however, the final -w in this inscription most likely represents a 3ms pronominal suffix serving as a definite article, a function that is attested in every branch of Semitic. Given the inconsistent distribution of the diphthong contraction in Canaanite and the site where the Gezer inscription was found, there is no compelling reason to assume the inscription is Phoenician and not Judahite Hebrew. It is therefore safer to conclude that this collapse was sporadic, and it would be a stretch to use it to determine subgrouping.

iii. The Barth-Ginsberg law 13

Tropper himself notes that this feature is attested in some Arabic dialects but dismisses the evidence because it is rare. However, since the Barth-Ginsberg law undoubtedly operated in Arabic (Bloch 1967; Schub 1974) and Aramaic (Syriac; Barth 1894: 6), it is immaterial whether it is rare or not. There is no reason to reject the evidence that the Barth-Ginsberg law was operative in Arabic; it is attested in Arabic and must be taken into account. Furthermore, Tropper's position is inconsistent: although he dismisses the Arabic evidence for the Barth-Ginsberg law because it is rare, he uses the two occurrences of 1s independent pronoun with a final y (nky) outside of Canaanite as a proof that the first person pronoun is not a diagnostic feature of Canaanite (Tropper 1994: 347). ¹⁴ In the end, the Barth-Ginsberg is inherited from Central Semitic and cannot be used to show genetic affiliation between Canaanite and Ugaritic.

iv. I-7 verbs with a prefix vowel -u-

Tropper claims that there are five roots which exhibit alternate forms with -u- alongside the expected -a- vowel: ¹⁵ yihd ~ yuhd, which he ties to Hebrew yōkel (see also Tropper 2012:

- 12. Huehnergard (2005b) argues that at least in *qatl nouns, *aw usually contracted to o (except after a guttural), while *ay usually did not contract to e (except before a dental). In some weak verbal roots, diphthongs and monophthongs alternate in the verbal paradigm, for example hayawka / hayoka 'you (ms) recovered' (\sqrt{hyw}).
- 13. This law refers to the relationship between the prefix and thematic vowels of the prefix conjugation in some Semitic languages. When the thematic vowel is closed, the prefix vowel is open (*yaqtul, *yaqtil), but when the thematic vowel is open, the prefix vowel is closed (*yiqtal). This phenomenon was originally observed in Hebrew by Jakob Barth (1894) and later in Ugaritic by H. L. Ginsberg (1939).
- 14. Samalian ²nky (KAI 215: 19) and Nabatean ²nwky (Cantineau 1936: 271 ll. 3, 4). The latter form is assumed to be a borrowing from Canaanite by Teixidor (*pronom phénicien*; 1973: 412), Gawlikowski (1974: 98), and, most recently, Noorlander (2012: 219–20).
 - 15. These roots are 'bd 'perish', 'hb 'love', 'hd (Heb. 'hz) 'hold', 'kl 'eat', 'sp 'collect' (Tropper 1994: 348).

612–13). Sivan (1996) and Bordreuil and Pardee (2009: 54) prefer a different explanation for the Ugaritic forms, where the first syllable splits into two syllables in vowel harmony with the thematic vowel of the form: $ya^{n}hudu > ya^{n}uhudu$. Huehnergard (2012: 66) suggests either an analogy to the imperative (uhd) or an assimilation of short a > u when a guttural is between them (e.g., * $tah\bar{u}ru > tuh\bar{u}ru$; Huehnergard 2012: 29, and a slightly different proposal in Huehnergard 2008: 279 n. 58).

The Hebrew forms, on the other hand, followed a different path of development, which involved sound changes attested only in the Canaanite branch: PNWS $*ya^kul > *y\bar{a}kul >$ PCan $*y\bar{o}kul$. These forms regularly resolve in dissimilation in Hebrew $*y\bar{o}kil > y\bar{o}k\bar{e}l$. ¹⁶ Note that the sound rules which determine the vowel of the prefix are Proto-Canaanite. Thus, despite the fact the Ugaritic and Hebrew forms show superficial similarity, they represent different processes of change. This feature is therefore not indicative of a closer genetic relationship between these two sub-branches.

Additionally, similar forms are attested in several Levantine Arabic dialects, such as those of the rural West Bank (Palestinian, Horani, and Salti). In these dialects the prefix of the imperfect of two I- 7 roots, ^{7}kl and ^{7}hd , has an ^{7}o / vowel, rather than the expected ^{7}a / (Cleveland 1963: 61). This suggests a conditioned change in these verbs, rather than the regular non-conditional $^{*}a^{7} > ^{*}\bar{a} > \bar{o}$ which we find in Hebrew.

v. The inflection of the verb \sqrt{hlk}

In both Hebrew and Ugaritic, the first radical of the root hlk is lost in the G prefix conjugation, the imperative, and the infinitive (Hebrew impf. $y\bar{e}l\bar{e}k$, imp. $l\bar{e}k$, inf. leket; Ugaritic impf. ylk, imp lk, inf. lkt). This feature is not a good indicator of immediate genetic relatedness for several reasons: first, it consists of a single lexical item, which exhibits an irregular change within the inflectional paradigm of these languages. Second, the same root in Aramaic is also irregular, appearing to derive from two suppletive roots: \sqrt{hlk} in the suffix conjugation \sqrt{hlk} and \sqrt{hwk} in the prefix conjugation. He is conjugation is not universal in Canaanite: Moabite shows a regular imperfect form ($\sqrt[n]{hlk}$, 1cs; KAI 181: 14), which suggests that the irregular conjugation of hlk is not a feature of PCan. He peculiarities of \sqrt{hlk} in Ugaritic apply to \sqrt{hlm} as well (impf. ylm), which Tropper (2012: 624–25) lists under $\sqrt{hlverbs}$. This is not the case for Canaanite; see, for example, Hebrew imp. $yehelm\bar{e}-n\hat{i}$ (Ps. 141:5) or $yah\bar{a}l\bar{o}m\bar{u}n$ (Ps. 74:6). The shared inflection of a single root, which is unusual for both languages, is not a strong feature to prove their genealogical relation.

vi. *miya 'who?'

This feature is indeed found in Canaanite and Ugaritic, but also in Eblaite, ²⁰ which means that it is not an innovation exclusive to these languages.

- 16. A similar dissimilation in an identical environment explains the shift of $*^{2}an\bar{a}ku > \text{Hebrew }^{2}an\bar{o}k\bar{\iota}$ (Huehnergard 1991: 285).
 - 17. bi-qyām-ay lā halēktūn (Targum Jonathan, Ezek. 11:12 for Hebrew b∂-ḥuqqay lō(?) halāktem).
- 18. wyhk Hdd qdm-y (Tell Dan, 5). Bembery (2015) suggests that the Aramaic conjugation is an analogy to the conjugation of the root slq, and not a specifically Aramaic root. This is also the conclusion of Kogan (2015: 389–90).
- 19. Hebrew has some regular forms, like *yahǎlok* (3ms; Jer. 9:3, Pss. 58:9, 73:9, 91:6, etc.) and *tihǎlak* (Exod. 9:23, Ps. 73:9), though these may be derived by analogy to sound roots.
- 20. DULAT, 607. See Krebernik (1988: 33, 6.2.3). Pagan (1998: 76) claims that $m\bar{i}$ in Eblaite is a West Semitic form, but Gelb (1977: 21; 1987: 61) treats it as a native Eblaite form. Gelb (1977: 11, 21) also argues that $m\bar{i}$ occurs in pre-Sargonic Mari names, but this is based on an interpretation of two names found at Mari: Mi-ga-Il 'who is like II?' and Mi-ma-hir-su 'who is his opponent?'

vii. Mimation on the plural and dual, but not on the singular

First, as Tropper notes, Moabite shows nunation.²¹ Second, historically, both mimation and nunation were used to mark unbound nominals, -*m* after short vowels and -*na* after long vowels. The preference for -*m* in Hebrew and Ugaritic is a result of generalization of one of these endings to the entire paradigm. Compare this to Arabic, where Classical Arabic generalized -*n* for plural, dual, and singular nominals, while Non-Classical variants of Arabic show this ending on plural and duals but not on singulars and broken plurals. This exact distribution is attested in Aramaic, and yet we do not think of it as a shared feature between Aramaic and Arabic.²²

viii. Directional -āh

Again, as Tropper notes, this feature is preserved in East Semitic (-iš) and therefore is a shared retention.

ix. 3mp prefix t- in the prefix conjugation

This is indeed a shared feature between Ugaritic and Amarna Canaanite, 23 but it is also attested in Mari Akkadian and Eblaite. 24 If we assume that the Biblical Hebrew paradigm, 3mp y- and 3fp t-, is original, 25 all other systems can be explained: Ugaritic, Mari Akkadian, and Amarna Canaanite levelled the feminine prefix t- for 3cp, while Akkadian, Arabic, Ethiopic, and Aramaic levelled the masculine prefix y- for 3cp (Hasselbach 2004: 25). 26 This feature, therefore, is not a shared innovation. 27

x. Cohortative and Jussive

The Jussive is a Proto-Semitic form and thus has no value for the subgrouping of Ugaritic with Canaanite (i.e., Hebrew and Amarna Canaanite; Moran 1960). This has been observed already by Bauer and Leander (1918–22: 273, §36d), followed by all the major Hebrew grammars. Even if both languages use the cohortative only for the 1st person singular (though Hebrew, at least, has examples of the 3rd person cohortative), this is simply a reduction of the paradigm, and not an innovative development.

The so-called "long imperative," found in Hebrew, Amarna Canaanite, and Ugaritic, utilizes the same morpheme as the cohortative, and could very well be a shared feature:

Hebrew $mikr\bar{a}$ 'sell (\sqrt{mkr} , 2ms)' (Gen. 25:31) Amarna²⁸ ku-na 'be ready (\sqrt{kwn} , 2ms)' (EA 147: 356)

- 21. Tropper (1994: 349) dismisses this counter-evidence as Aramaic influence, but offers no evidence that Moabite was under such influence.
- 22. Tropper's argument is comparable to the reliance on the generalization of -k- or -t- in the 2nd person of the suffix conjugation for subgrouping. When only two options exist, generalization can go either way (Huehnergard 2005a: 161–62, contra Hetzron 1976).
- 23. Ugaritic *ti-tar-h*[*u*] (Gt; Huehnergard 2008: 320); Amarna *ta-aš-pu-ru-na* (EA 138: 122) / *ti-iš-pu-ru-na* (EA 138: 137). The prefix vowel in Ugaritic follows the Barth-Ginsberg law; the vowel in Amarna Canaanite and Akkadian for the most part, though it is reasonable to assume that in the language of its writers, it also followed Barth-Ginsberg.
- 24. Mari *ti-ku-lu* /ti²kulū/ 'they ate' (Durand 1982: 81, 1. 22); Eblaite *dib-da-ru*₁₂ /tipṭarū/ 'they delivered' (Catagnoti 2012: 130).
 - 25. Mishnaic Hebrew, on the other hand, leveled *y* for all 3rd person plural forms.
- 26. This feature was also mentioned in Kogan (2010: n. 89) as an indication of the genealogical affinity between Ugaritic and Amarna Canaanite. He explains the lack of this feature in other Canaanite languages as the result of "de-Canaanizing."
- 27. Moran (1951: 35) argues that the leveling of *t* is the result of using 3fs *taqtulu* with a plural subject (see also Rainey 1996: II 43).
- 28. Rainey (1996: II 266) claimed that these forms carry the Akkadian ventive suffix; see, however, Huehnergard (1998: 71) for a discussion and counterarguments. The example quoted above, *ku-na*, is accepted even by Rainey as a Canaanite form.

Ugaritic ša "carry (2ms)" (\sqrt{n} š 7 , 1.5: V: 13)

Note, however, that Arabic has an imperative form with a suffix which appears to be the short energic suffix, a form based on the subjunctive: *'iftaḥ-a-n'* 'open'. If this formation is similar to the subjunctive ending in Canaanite and Ugaritic, then the "long imperative" is likely a Central Semitic feature that has been lost in Aramaic.

xi. Infinitive absolute as a narrative device

The use of infinitives as main verbs in a sentence is known from Amarna Canaanite (Moran 1950; 1952), Phoenician (Friedrich, Röllig, and Amadasi Guzzo 1999: 192–93; Piquer Otero 2013), Hebrew (Callaham 2010), and Ugaritic (Tropper 2012: 491–92). This use, however, is not restricted to these Northwest Semitic languages, but is also found in Ancient South Arabian, where the infinitive functions as the main verb in narrative (Nebes 1988; Stein 2013: 120):

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w-y²ttmw / w-tqdmn / w-rtdlin / b-²m / hmt / ²hbs²n and-arrive.impf and-confront.inf and-fight.inf in-with dem.mp NP "They came, confronted, and engaged in battle with the Abyssinians" (ASA, J 575/5)
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As we have tried to show in this section, the phonological and morphological features discussed by Tropper are either attested in other branches of Semitic and are therefore not specific to Canaanite and Ugaritic (due to inheritance or levelling), or are not relevant diagnostic features. None of these features can be used as proof for a genealogical relation between Canaanite and Ugaritic.

2.2. Lexical Features

The significant overlap between the lexicon of Canaanite and Ugaritic has been repeatedly noted in the literature (e.g., del Olmo Lete 1986: 45–46), but only in recent years have attempts at a thorough statistical comparison been conducted. Even so, there is no agreement on how to interpret the evidence. Recently, two major studies of the Ugaritic lexicon have appeared. Halayqa (2008) specifically investigates the lexical connection between Ugaritic and Canaanite to the exclusion of all other languages. 57.8% of the lexemes he examined in Ugaritic are shared with Canaanite. Halqaya (2008: 468), however, stresses that this finding does not indicate that Ugaritic and Canaanite form a discrete subgroup, but rather points to a number of other explanations that he considers preferable:

- Genetic affiliation: Both branches descended from the same ancestor and share an inherited lexicon.
- Chronological and physical proximity: Both branches overlapped for approximately 200 years, so some cultural and regional references were accessible to both.
- Contact: Both branches shared political relations, trade routes, and religious affiliation, which can help account for the transfer of lexical material.

Halayqa concludes that Ugaritic cannot be classified as a Canaanite language on the basis of its lexical inventory, and notes the much larger number of unshared lexemes found in the two branches.

Kogan examines the relationship between Ugaritic and several other Semitic branches, in addition to Canaanite, and reaches the opposite conclusion. Kogan (2010; 2015: 343–49) concentrates on "exclusive isoglosses" between Ugaritic and a variety of other related languages. Such "exclusive isoglosses" are lexical items which occur only in Ugaritic and one additional

Semitic branch, but not in others. Kogan finds that the number of shared exclusive vocabulary items between Ugaritic and some Canaanite languages (78) is much larger than the number of unique lexical items Ugaritic shares with other languages (2010: 308). ²⁹ On the basis of this finding, Kogan concludes that Ugaritic should be subgrouped with Canaanite.

There are several problems with Kogan's approach. First, he is reluctant to consider contact between Canaanite and Ugaritic as an explanation for the high number of exclusive isoglosses shared by these families. In fact, he treats contact as a mere excuse used by those who object to using lexical evidence to subgroup (2010: 310). When he discusses the case of the Akkadian-Ugaritic shared lexicon, however, he emphasizes language contact as the primary factor accounting for isoglosses between Akkadian and Ugaritic. Kogan even hypothesizes that speakers of Ugaritic borrowed from a pre-Old Babylonian variety of Akkadian (2010: 317). There was, of course, substantial contact between Ugaritic and Akkadian speakers during the Late Bronze Age, but speakers of Ugaritic were in much longer and more sustained contact with Canaanite speakers.

There is no obvious methodological reason for the different treatment of Akkadian and Canaanite. If Kogan's hypothesis is taken to its logical extreme, then we must assume that Ugaritic and Akkadian are more closely related to each other, with twenty-six shared lexemes, than Ugaritic and Aramaic, with only five lexemes. Kogan's lexical comparison is inconsistent with what the morphologies of these languages reflect, namely that Ugaritic and Aramaic are genealogically closer than Ugaritic and Akkadian. While lexical evidence should not be excluded from discussions of subgrouping, it cannot carry significant weight in evaluating genetic relationships, given the relative ease with which lexemes are borrowed.

Second, Kogan (2010) and other scholars, like del Olmo Lete (1986), Healey (1988), and Tropper (1994: 253), note that the lexical inventory of Ugaritic is shared primarily with Phoenician, not with Hebrew, even though the attested vocabulary of Hebrew is much larger than that of Phoenician (Kogan 2015: 348). Kogan suggests treating Canaanite as having two branches (or "bundles of specific lexical features"; 2010: 310; 2015: 347): a northern one and a southern one. ³⁰ The southern branch, i.e., Hebrew, went through "de-Canaanization" probably under the influence of Aramaic (this is only implied by Kogan 2010: 311), while the northern branch, i.e., Phoenician and Ugaritic, preserved Proto-Canaanite lexical material. ³¹ This scenario leads Kogan to declare Ugaritic "Canaanite *par excellence*" (2015: 348).

There is no reason to assume that such a process took place except to substantiate the Canaanite affiliation of Ugaritic. In every other respect, Hebrew and Phoenician are extremely similar. Kogan's insistence on differentiating between them seems to be related to his rejection of a contact scenario. Phoenician speakers were geographically much closer to Ugarit than speakers of Hebrew and were in close contact with mercantile centers, such as Ugarit. They were therefore more likely to be in contact with speakers of Ugaritic than were speakers of Hebrew. ³² More generally, the spread of lexical items as a result of economic interests is

^{29.} For example, exclusive lexical items between Ugaritic and Aramaic are extremely scarce, totaling only five (Kogan 2010: 308).

^{30.} Earlier classifications of Ugaritic as North Canaanite and Hebrew as South Canaanite were already proposed by Albright (1938) and Cross and Freedman (1948: 201).

^{31.} Kogan attempts to support such a process by pointing to the 3mp. impf. in *t*-, found in both Amarna Canaanite and Ugaritic, but not in later Canaanite dialects; however, as mentioned above, the same feature is also found in Mari Akkadian (Izre'el 1987) and Eblaite. Curiously, Kogan does not discuss the several morphosyntactic features distinguishing Phoenician and Hebrew from Ugaritic.

^{32.} For an overview of the commercial contact between Ugarit and the Phoenician heartland in the Late Bronze Age see Singer (1999: 668–73).

one of the factors which lead to the development of regional linguistic forms, such as pidgins (Holm 2010). This phenomenon is known from other areas of the world, where special linguistic forms have developed as a result of mercantile contact.³³

A contact scenario can explain the much higher number of lexical items shared by Ugaritic and Phoenician compared to Aramaic, which is also closely related to Ugaritic, but was far less important politically and economically in the Late Bronze Age. Thus, without dismissing the lexical similarity between Ugaritic and some Canaanite languages, we doubt that Ugaritic can be considered Canaanite solely on the basis of seventy-eight lexical items.³⁴

Given our conclusion that none of the morphosyntactic features suggested so far indicates an immediate genetic relationship between Ugaritic and Canaanite, how might the internal subgrouping of Northwest Semitic be conceptualized? In the remainder of this paper we will present a large set of possible shared morphosyntactic features pointing to an immediate genealogical connection between Canaanite and Aramaic, which we argue are more significant than any of the features connecting Canaanite and Ugaritic. We suggest on the basis of some of these features that Aramaic and Canaanite shared an immediate ancestor, Aramaeo-Canaanite.

3. POSSIBLE FEATURES OF ARAMAEO-CANAANITE

In the following section, we will review and evaluate a number of shared Canaanite-Aramaic features, several of which suggest that the internal subgrouping of Northwest Semitic should be re-conceptualized.

3.1. cnst m Plural < cnst m Dual

Nominal state was originally a distinct category in Semitic. The construct state was marked by the absence of nasalization on the head noun, e.g., Arabic $ras\bar{u}l$ -u-n 'messenger' vs. $ras\bar{u}l$ -u- $(ll\bar{u}h$ -i) 'messenger (of god)'. In the construct, sound plural masculine nouns, specifically, terminated in a long vowel whose quality depended on the case of the noun: \bar{u} for the nominative case and \bar{i} for the oblique (accusative-genitive) case. For example:

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Akkadian a-ki-lu /³ākilū/ 'consumers' (Hasselbach 2005: 184)<sup>35</sup> Arabic muslimū 'muslims'
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The Northwest Semitic languages lost nasalization in most environments, but retained nasalization on the masculine plural to mark the unbound state:

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Ugaritic kadd-ū-ma 'jars (unbound plural nominative)' (Huehnergard 2008: 296) vs.

maryann-ū 'charioteers (bound plural nominative)' (Huehnergard 2008: 297)

maryann-ī 'charioteers (bound plural oblique)' (Huehnergard 2008: 297)
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- 33. For more examples, see Jahr (1997) for contact between Middle Low German and Mainland Scandinavian, and Ansaldo (2009) for economic motivations for linguistic contact in Asia.
- 34. One problem in identifying borrowed lexemes is, of course, the similarity between the phonological and morphological systems of Canaanite and Ugaritic, which makes it difficult to distinguish borrowing from inheritance; this is indeed a problem in all cases of contact between genetically related languages (Epps et al. 2013).
- 35. The absolute and construct plurals in East Semitic are identical and both lack nasalization. This is probably an East Semitic innovation, whereas the West Semitic paradigm, which shows nasalization on the absolute plural but not on the sound construct plural, should be considered original (Huehnergard 2006: 10).

Both Canaanite and Aramaic, however, replaced the expected long vowel of the construct masculine plural with a diphthong *-ay, whose origin is probably the oblique masculine construct dual (Arabic -ay-, Babylonian $-\bar{\iota}$, Assyrian $-\bar{e}$). ³⁶

Hebrew $^{\gamma}\check{e}l\bar{o}h\bar{i}m \sim ^{\gamma}\check{e}l\bar{o}h\hat{e} \; (< *^{\gamma}il\bar{a}h$ -ay)

Aramaic $mlkn (*malak-\bar{i}n) \sim mlky (< *malak-ay)$

Although this could be a significant innovation, oblique masculine forms also end with \bar{e} in Old Akkadian, Neo-Assyrian, and certain Babylonian dialects (von Soden 1995: §64h; Hasselbach 2005: 107–8; Huehnergard 2013: 454)—e.g., sa-ri-si-in /sarrésin/ 'their kings' (cf. Hebrew $s\bar{a}r\hat{e}hem$ [Isa. 3:4])—and Old Akkadian and Assyrian \bar{e} and Babylonain $\bar{\iota}$ come from original *-ay (Hasselbach 2005: 179 n. 100). While the forms in Canaanite and Aramaic are restricted to construct forms, the Akkadian forms are used for any oblique plural form. Nevertheless, these suffixes are likely to have a single origin (Hasselbach 2007b: 125) and therefore cannot be used as a diagnostic feature.

3.2. fs Demonstrative *ða²t

The feminine singular proximal demonstrative is reconstructed to PWS as *ðā (Hasselbach 2007a: 22–23). 37 Reflexes of * $\delta \bar{a}$ are attested in both Canaanite and Aramaic: Phoenician z (KAI 26 A II 9); Aramaic z (Tell Ḥalaf; Lipiński 1994: 15). But both branches also exhibit an innovative form z^2 -t: Moabite h-bmy z^2 t "this altar" (KAI 181: 3), Hebrew $h\bar{a}$ - \bar{a} reş haz- $z\bar{o}(\bar{c})t$ "this land" (Gen. 12:7). While Aramaic generally uses $za^{\gamma}(>d\bar{a})$, in the Tel Fekheriye inscription δ^2 -t appears: $dmwt^2$ δ^2 t "this statue" (l. 16). Further examples of this demonstrative are attested in several late fourth century BCE Sabaic inscriptions from the Eastern Arabian peninsula: $hmt blq^{\gamma} \delta^{\gamma}t$ "this stone hmt" (CIH 921 + Ry 547: 11; RES 4763: 13). Robin and Prioletta (2013: 154-55) attribute the appearance of this form in Sabaic to Aramaic influence, noting that these inscriptions deviate from typical Sabaic usage in using both N Dem word order and the Aramaic definite article $-^{?}$. The demonstrative $\delta^{?}t$ also appears in a recently discovered Hasaitic inscription from the same area: $slfht^{-\rho} \tilde{\partial}^{\rho}t$ "this metal plaque" (Stein 2017: 114). Stein does not comment on the origin of this demonstrative, but given that the inscription employs the Aramaic form of the definite article and was found alongside an Aramaic-Hasaitic bilingual (Overlaet, McDonald, and Stein 2016), Aramaic influence seems likely. Taken together, these Arabian inscriptions provide indirect evidence for the continued use of the demonstrative $\delta^{\gamma}t$ in Aramaic.

While many other Semitic languages attest to a final -t on the fs demonstrative, none outside Canaanite, Tel Fekheriye, and the Arabian peninsula have a demonstrative with both a glottal stop and a final -t. The Old Aramaic form is unique, since the fs demonstrative at this time was typically z^2 (e.g., Sefire 1 A 35). It is unlikely that the final t^2 was a marker of vocalic

^{36.} This is the traditional view (e.g., Bauer and Leander 1918–22: 521, §64f); however, Rin (1961) and in more detail Cross (2002) have argued that the dual is unlikely to be the source of the masculine plural oblique marker, and suggest instead that these forms are relics of two ancient plural suffixes *-aw and *-ay. See also Hasselbach (2007b) for a similar opinion. Most recently Wilson-Wright (2016a) has argued that the plural suffix *-aw is a later reanalysis of broken plurals of III-weak nouns, like *'abaw 'fathers' (< *'abw). Wilson-Wright suggests that this reanalysis took place only in West Semitic and that the plural suffix *-aw cannot be considered a PS morpheme.

^{37.} Hasselbach (2007a) reconstructs * $\delta \bar{a}tu$ as the fs demonstrative to Proto-Semitic, but this reconstruction is dependent on the East Semitic relative pronoun, since Akkadian does not exhibit any demonstratives beginning with a dental. Recently, Huehnergard and Pat-El (2018) have argued that the West Semitic demonstratives derive historically from the Proto-Semitic relative pronoun, and that only the relative had a dental base in Semitic originally. If they are correct, then * $\delta \bar{a}tu$ can only be reconstructed as a demonstrative to Proto-West Semitic.

value, a mere *mater lectionis*, on both z^2 and z^2t at this period (Cross and Friedman 1952: 28, 33; Degen 1969: 25 n. 4; Muraoka 1984: 93–94). The *aleph* in the Canaanite forms is similarly unlikely to be a mater, since internal matres are not attested in Canaanite inscriptions until the seventh century and then only sporadically (Aḥituv 2008: 3–4). The form should therefore be vocalized for both branches as /ða 2t /.

Muraoka (1984) suggests that this form is original in Semitic and that the other forms, both za^{7} and $z\bar{a}$, descended from it. We find this unlikely given that $*\delta a^{7}t$ is only attested in Canaanite and Aramaic. It is therefore more likely to be an innovation. Both Aramaic and Canaanite exhibit two innovative fs demonstrative forms: $*\delta a^{7}$ and $*\delta a^{7}t$. These demonstrative forms are exclusively found in these two branches and in no other Semitic language.

A superficially similar form is also attested as the feminine relative pronoun in Safaitic, Hismaic, and Hagarite, three Ancient North Arabian dialects (Robin and Prioletta 2013: 155; Al-Jallad 2015: 85). Al-Jallad (2015: 115) reconstructs this relative as $/d\bar{a}^2$ at/ or $/d\bar{t}^2$ at/ (115). Resems unlikely, however, that this form is related to the Aramaic and Canaanite form for two reasons. First, the vocalization of the Safaitic form is based on the Aramaic/Canaanite form, since there is no internal evidence to substantiate it from Safaitic (or Ancient North Arabian in general). Second, this form is a relative pronoun, not a demonstrative. The fs demonstrative is d, d0 which is likely the expected reflex of P-WS *da. While many scholars assume that the relative and demonstrative pronouns come from the same paradigm, they behave differently in the attested branches (Huehnergard and Pat-El 2018: 193–95). Thus, even if they originally developed from the same base, there can still be localized innovations in one paradigm that are unrelated to the another. We suggest, therefore, that the doubly marked fs demonstrative *d0 a shared feature of Canaanite and Aramaic.

3.3. Direct Object Marker *?ayāt

While verbal arguments were originally marked with case in Semitic, other markers are also attested; the preposition *li-, for example, is used to mark verbal arguments in a number of languages, though it gained wide distribution only in Late Aramaic. The Canaanite languages, on the other hand, use a separate particle to mark direct objects, which is written with initial aleph and a final taw in consonantal orthography: Hebrew $^{\prime}t$ (Gen. 1:1), Moabite $^{\prime}t$ (KAI 181: 5), Edomite $^{\prime}t$ (Ḥorvat $^{\circ}$ Uzza, 1. 3), Phoenician $^{\prime}yt$ (KAI 10: 8–9). Wilson-Wright (2016b) reconstructs the Proto-Canaanite form of this marker as * $^{\prime}ay\bar{a}t$, which became * $^{\prime}ay\bar{o}t$ with the operation of the Canaanite shift and contracted to * $^{\prime}\hat{o}t$ in many of the Canaanite languages. The latter form matches the vocalization of the Hebrew object marker found before personal suffixes. When the Hebrew form is used independently, however, it employs the base $^{\prime}\bar{e}t$, which appears to be a reflex of the preposition * $^{\prime}itt$ - 'with' that infiltrated the object marker paradigm. 40

A direct object marker in ${}^{2}yt$ or yt is also found in many Aramaic dialects: Old Aramaic (${}^{2}yt$; Sefire II C 5), Targumic ($y\bar{a}t$; Gen. 1:1), Qumran (${}^{2}yt$ -h; 4QEnastr d 1 iii: 4), 4 1 Samaritan (yth; Deut. 31:17), Christian Palestinian (yth; 1 Sam. 6:15), and Peshittā Syriac ($y\bar{a}t$; Gen. 1:1). Most late dialects restricted the usage of the direct object marker; some use it only with suffixes, others only with definite nouns (Rubin 2005: 102). Based on evidence from

^{38.} The difference between the Safaitic ending and the Canaanite and Aramaic forms is a result of the levelling of the feminine allomorph -at to the exclusion of -t in Safaitic.

^{39.} Another form is the unrelated *t* (Al-Jallad 2015: 81).

^{40.} See Wilson-Wright (2016b), where a full discussion of the different Canaanite forms and their development can be found.

^{41.} See Wilson-Wright (2016b: 8 n. 6) for the reading with an initial aleph here.

Peshittā Syriac and Targumic Aramaic, the vowel of the short form yt seems to be \bar{a} -. This is similar to the second syllable of the reconstructed Canaanite form. The quality of the initial syllable, attested in Old Aramaic, can be inferred from comparative Aramaic and Semitic evidence. In most cases of *aleph* apharesis in Aramaic, the *aleph* preceded an a vowel, for example Proto-Aramaic *'aḥad > Aramaic ḥad (Wilson-Wright 2016b). Additionally, since the nominal pattern * $qat\bar{a}l$ is far more common among the Semitic languages than the patterns * $qit\bar{a}l$ and * $qut\bar{a}l$ (Fox 2003: 223, 229), Wilson-Wright suggests a reconstruction * $qat\bar{a}l$ for both branches.

Several superficially similar object markers are attested in other languages, of which Classical Arabic $^{2}iyy\bar{a}$ - and wt in Samalian and the Katumuwa Inscription are the most conspicuous. A number of scholars have suggested that the Northwest Semitic forms of the object marker derive from $^{*2}iyy\bar{a}$ with the addition of a final feminine $^{-t}$ (e.g., Brockelmann 1908–1913: §106b-c). As Wilson-Wright argues, however, Classical Arabic $^{2}iyy\bar{a}$ cannot be cognate to Hebrew ^{2}ot and Aramaic ^{2}yt / $y\bar{a}t$ for several reasons: $^{2}iyy\bar{a}-t$ would not contract to ^{2}ot in Hebrew, nor would it undergo aphaeresis in Aramaic, since the loss of the *aleph* and its vowel would leave a word-initial consonant cluster; additionally, $^{2}iyy\bar{a}-t$ is a *qittal* noun from the root ^{1}ot yy (Testen 1997–98: 217–18), whereas $^{*2}ay\bar{a}t$ is probably a *qatāl* noun from the root ^{1}ot yt. The Arabic form is therefore unrelated to either the Canaanite or the Aramaic object marker.

The form WT in Samalian and the Katumuwa Inscription has been connected to the Canaanite and Aramaic form, but *aleph* is always retained word initially in Samalian and so *wt* cannot be a syncopated form of ${}^{3}\!yt$. Wilson-Wright (2016b) suggests that this form is derived from the preposition ${}^{*}liw\bar{a}t$ 'towards', which is attested in various Aramaic dialects (Pat-El: forthcoming). The Canaanite and Aramaic direct object markers also resemble the 1cs Akkadian oblique pronoun $y\bar{a}ti$, ⁴² but they are unlikely to be related to it for two reasons: first, the 1cs oblique pronoun is only attested in Akkadian and is likely to be an East Semitic innovation (Huehnergard 2006: 13). Second, the Akkadian form lacks an initial *aleph*, an absence that cannot be explained through regular sound change.

It seems, therefore, that despite some superficial similarities to forms in other branches, only the Aramaic and Canaanite direct object markers are etymologically related to each other, sharing the same root, nominal pattern, and function. Gzella (2011: 5–8; 2015: 20) attributes the similarity of the direct object markers in Aramaic and Canaanite to language contact, but does not provide detailed argumentation to support this position. (We will return to this question below.) These forms, thus, constitute a strong feature linking Aramaic and Canaanite.

3.4. The Use of Dative Subjects with Adjectival Predicates

Both Canaanite and Aramaic attest to a syntactic pattern where the predicate takes the form of an adjective or a stative descriptive verb and the subject is introduced via the preposition *l*-. Aramaic primarily uses active and passive participles for this function, while Hebrew primarily uses non-verbal adjectives or stative ("adjectival") verbs (Mor and Pat-El 2016).

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Hebrew sar l-\hat{\imath} m\partial^{2}\bar{o}d
narrow to-me very
"I am greatly distressed" (1 Sam. 28:15)
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42. The connection was suggested by an anonymous reviewer.

Amarna: *ṣaduq ana ia-ši*just to me-dat.
"I have a just case" (FA

"I have a just case" (EA 287: 32)

Off. Aramaic: [°]*arwat malkā lā* [°]*arīk la-nā lə-meḥězē* dishonor.fs king neg fitted.ms to-us to-see "We shouldn't see the king dishonored" (Ezek. 4:14)

Mid. Aramaic: *l-āk həwā ḥāzē lə-missab təlātā hullāqîn* to-you was see.ms to-see three parts "You deserve to receive three portions" (Onkelos, Gen. 49:3)

This pattern is not attested elsewhere in Semitic. Arabic has a highly formulaic pattern with exhortations, e.g., waylu la-nā "woe to us," which is also found in other Central Semitic languages and many other unrelated languages (Barðdal et al. 2012). Mor and Pat-El (2016) suggest that this pattern developed on the basis of nominal sentences where the subject was either a clause or an infinitive, with a non-obligatory additional benefactive preposition *l*- (the "ethical dative"); for example, rab lākem šebet bā-hār hāz-ze (Deut. 1:6) "You have stayed long enough at this mountain." Increasingly the infinitive became restricted in its syntax for two reasons: a) its morphological pattern became specialized for verbal complements only, so it was less likely to be understood by speakers as a subject; b) in both languages infinitives came to be introduced by a preposition more frequently, and thus became less likely to be analyzed as subjects. The infinitive was then interpreted as a dependent, rather than the subject, and the benefactive, which is typically co-referential with the logical subject, was reanalyzed as the grammatical subject (see discussion in Pat-El 2018: 175–77). Given that this pattern occurs only in Canaanite and Aramaic, it is likely an innovation of these sub-branches.

3.5. Construct with Prepositions

While all the Semitic branches allow construct with dependent substantives and sentences (Goldenberg 2013: ch. 14), none of them, except Aramaic and Canaanite, allow direct construct with dependent prepositional phrases. In other languages, these constructions are typically marked with the relative pronoun or its equivalents.

Dependent prepositional phrase

Akkadian kaspu u-šīpāti gabbi ša ittī-ya

silver and-wool all rel with-me "All the silver and wool I have" (Aro 1963)

Arabic ...l-ka² su llatī fī yadi-ka

the-cup rel.fs in hand-your

"The cup in your hand" (Al-Jāḥiz, apud Pat-El and Treiger 2008)

Mehri: ħə-wōdi ðə sər-īn

the-wadi rel behind-us

"The Wadi behind us" (apud Goldenberg 2013: 245)

Amharic: yä-bä-lay fərd bet

rel-in-up judgment house

"Supreme court" (apud Goldenberg 2013: 249)

Aramaic ${}^{\varsigma}dy$ - ${}^{\gamma}$ zy b-spr- ${}^{\gamma}$ znh

Treaty-def rel in-inscription-def dem.ms "The treaty in this inscription" (Sefire 1B 28)

Hebrew ham-mayim ${}^{\rho}$ ăšer mit-taḥat l- \bar{a} - $r\bar{a}q\hat{\imath}^{\rho}a$

def-water rel from-under to-def-heaven

"The water under the heavens" (Gen. 1:7)

Compare these constructions with the following:

Syriac: šappirat bə-ḥezwā

Pretty.cnst in-appearance

"Beautiful"

Hebrew nəgînat lə-Dāwîd

poem.cnst of-David

"A poem by David" (Ps. 61:1)

It is possible that this pattern developed by analogy with other types of attribution: *millah zv ?ilāh : *millat ?ilāh :: *millah zv la-malk : ? = *millat la-malk. Such a development could have occurred independently in Canaanite and Aramaic and would not necessitate a common ancestor. The necessary requirement for the analogy, namely the loss of final nasalization on singular nouns, is attested in other West Semitic languages (e.g., Safaitic), ⁴³ which do not show this pattern. This, of course, is not a strong argument against a possible parallel development. Therefore, despite being a unique pattern in Aramaic and Canaanite, the construct with prepositions seems to be a plausible, but weak feature for internal subgrouping.

3.6. The Prefix Conjugation of Geminate Verbs

Geminate roots conjugate regularly in Akkadian (e.g., *išdud* 'pull') and Ethiopic (e.g., *yəgsəs* 'touch'), but show metathesis in Central Semitic, **yasbub-u* > **yasubb-u*, where R2 and R3 cluster, rather than R1 and R2 (e.g., Arabic *yaruddu* 'reply'). Hebrew and Aramaic differ in this respect from most other languages; while they do use the Central Semitic pattern, they also have forms where they cluster R1 and R2 like Akkadian and Ethiopic, but geminate R1, as if the root were R1R1R2. This phenomenon is attested in the prefix conjugation of the G and C stems.⁴⁴

Hebrew: √sbb: G yissōb ~ yissəbû; C yassēb ~ yassəbû/yassēbbû. Aramaic: √bzz: G nebboz (Syriac); √dqq: C tiddaq (Biblical Aramaic).

While this phenomenon is widespread in Aramaic, it is not fully generalized in Hebrew, although it is very common there too. In any case, these forms appear very early in both branches. The common opinion is that these forms in Hebrew are a result of Aramaic influence (e.g., Joüon-Muraoka 2000: 229; Blau 2010: §4.3.8.8.1(b)n). ⁴⁵ For this possibility see our counterarguments below in section 4.

The reason for this development is hard to determine. One possibility is an analogy between the masculine singular imperative of I-n verbs and geminate verbs, as both of them

^{43.} Al-Jallad 2015: 66-67.

^{44.} Hebrew also shows the same phenomenon in the Cp stem: *yussab*. The situation in other Canaanite languages is hard to ascertain, due to the absence of gemination markers in the orthography; however, the consonantal skeleton indicates that these forms are comparable to Hebrew, e.g., Phoenician C *ysb*.

^{45.} Few have expressed any doubt that such an influence is responsible for the forms in Hebrew. An exception is Kautzsch (1906), who claims that there are internal semantic and phonological reasons for the development of the forms in Hebrew and that they cannot be attributed to Aramaic influence, a term he argues is misleading (*irreführend*; p. 780). We thank David L. Sobey for bringing this reference to our attention.

show the pattern CVC: $\sqrt{\text{ngs}}$ gas - $\sqrt{\text{gll}}$ gal. This is a problematic hypothesis, however, since the masculine singular is the only form of the paradigm where such an analogy is possible. Another possibility is a sound change. Given that the final short vowel was lost in both branches, making a form like **yasibb (C) impossible, the only two avenues possible were either simplification (*yasib) or R1 gemination (*yasib). Indeed, the attested distribution of R1 gemination in Biblical Hebrew seems to corroborate this scenario: wherever gemination of R2 is possible there is no R1 gemination. This applies to plural forms and forms with pronominal suffixes. We suggest that this distribution reflects the original state of affairs, namely that R1 gemination was restricted to forms ending in R2. Since the paradigm was inconsistent and showed two different patterns of gemination, one of the patterns was later generalized: Aramaic chose the path of R1 gemination, while Canaanite, at least as reflected in Hebrew, chose R2 gemination (and therefore simplification in the singular).

A similar phenomenon is attested in geminate roots in the G stem in Jibbali, a Modern South Arabian language (Rubin 2014: 106). Sound roots show gemination of R1 in the subjunctive singular: 3ms yɔddəl, 3fs tɔddəl. There are several major differences, however, between the Canaanite-Aramaic geminate conjugation and the Jibbali one: the subjunctive plural is not affected at all (e.g., 3mp yədləl, 3fp tədlɛlən), and several roots, particularly with gutturals, exhibit typical conjugation (e.g., yəġbɛb, yəcśɛś). Moreover, the Jibbali imperfect is typically unaffected because it has a vowel between R1 and R2; but, with geminated verbs there is no vowel between R1 and R2. Despite the identical pattern, the imperfect of geminate roots exhibits a regular conjugation: 3ms impf yədlel, 3fs tədləl. The reason the subjunctive singular is different is most likely a result of its stress pattern: the subjunctive singular is stressed on the initial syllable, while the imperfect, subjunctive plurals, and most roots that do not show R1 gemination are stressed on the second syllable.

Finally, this feature is an internal Jibbali innovation; Mehrī shows a regular conjugation of geminate roots in the G (3ms impf. *yərdūd*, subj. *yərdēd*; Rubin 2010: 160–61). Both Jibbali and Mehrī show R1 gemination in the subjunctive and dual of the C stem for some roots (Rubin 2010: 160; 2014: 211–12) and for Jibbali, at least, this phenomenon too seems to be a result of stress patterns. Thus, despite some similarities, the Modern South Arabian case of R1 gemination seems to reflect a different set of conditions than the Aramaic-Canaanite one.

This what** is a complicated development which is unique to Canaanite and Aramaic, and is therefore likely a shared feature.

3.7. The Plural of *bayt

The common Semitic noun *bayt- 'house' is a regular *qatl noun and shows typical plural formation in most Semitic languages: Akk. $b\bar{t}t\bar{a}tu$ (Neo-Assyrian $b\bar{e}t\bar{a}nu$); Eth. ${}^{2}aby\bar{a}t$; ASA ${}^{2}byt$; Arab. $buy\bar{u}t$. Ugaritic displays a unique form bht-m. Canaanite and Aramaic, on the other hand, have a plural form with a geminated t and an unexpected loss of the medial y: Hebrew $b\bar{a}tt\hat{u}m$ (Exod. 1:21); Old Aram. bty (pl. cnst; KAI 202B 9; 223C 2f); Off. Aram. bty^{2} (Cowley 34: 6); Bib. Aram. $b\bar{u}tt\hat{e}k\hat{o}n$ (Dan. 2:5); Syriac $b\bar{u}tte$. The distribution of this form in Canaanite is less widespread than in Aramaic since the plural form is not attested in most Canaanite dialects. The Hebrew form is noted above, and in Phoenician the diphthong *ay collapsed, so both singular and plural forms have bt- as a base (e.g., btm KAI 4: 2), which makes it impossible to tell whether the plural truly lost the medial y.

Garnier and Jacques (2012) argue that the gemination is a result of the supposedly Proto-Semitic process of y assimilation, a phenomenon which they connect to the w assimilation

^{46.} The analogy would therefore be the following: gaš: gal:: yiggaš: X = yiggal. See Huehnergard 2002: 606.

^{47.} For example, the root *sbb* has no plural forms with R1 gemination while the vast majority of its singular forms show this geminating pattern. This is based on a comprehensive survey in an unpublished paper by David L. Sobey.

noted in Huehnergard (2005c): *baytīma > bāttîm. The problem with their argument is that Aramaic has a long vowel before the gemination, which most likely comes from a collapsed triphthong: *aya > \bar{a} . This triphthong would have been a result of a-insertion in the plural, namely **bayat- > **bāt- (so Beyer 1984: I 83). Thus, the gemination cannot come from y assimilation because the y and t were not in contact in the plural.

Kogan (1995), on the other hand, argues that the t of the Hebrew form is not actually geminated. He reconstructs the Pre-Canaanite plural of *bayt as *bayatīma, which contracted to $b\hat{a}t\hat{t}m$ with a "super-long vowel" \hat{a} that differed in several ways from the inherited \bar{a} . This new vowel did not undergo the Canaanite shift of * \bar{a} > \bar{o} and, due to its drawn-out articulation, did not trigger post-vocalic spirantization in Hebrew. Kogan therefore concludes that the dagesh in the Hebrew form is a dagesh lene marking the taw as unspirantized after a historically "super-long vowel." Unfortunately, however, Kogan's argument relies on several ad hoc proposals regarding the existence, survival, and phonetic qualities of super-long vowels in Hebrew. As it stands, there is no evidence for reconstructing super-long vowels for Proto-Canaanite or any other node of Semitic.

Khan (2018) takes a different tack. He suggests that several common II-weak *qVtl nouns (*bayt, *fiyr and *yawm) went through contraction in the plural in PNWS: e.g., PNWS *bayatūma > Hebrew *bātīm, Aramaic *bātīn. He attributes the gemination in the plural of *bayt to a shared ancestor of Hebrew and Aramaic, which employed gemination to distinguish the plural of *bayt from the homophonous 3mp G active participle of the verb *bwtl byt 'to spend the night', bātīm/bātīn (Khan 2018: 340). To support this claim, Khan provides a few additional examples where homophones were distinguished by adding gemination to the non-verbal form. Most of these examples, however, result from internal Hebrew developments, while *bāttīm/bāttīn must go back to a common ancestor of Canaanite and Aramaic.

In contrast to previous studies, we suggest that *bayt formed the plural by pattern replacement in both Aramaic and Canaanite. The singular base bayt- alternated with the plural base bayatt- much like singular gamal- 'camel' alternating with plural gamall- in Biblical Hebrew. 48 A similar explanation can account for Biblical Hebrew \$\sigma r \tilde{n} m\$, the unexpected plural of \$\sigma r\$ city'. In Aramaic, the triphthong -aya- contracted to \$\bar{a}\$, yielding the attested forms: *bayatt\bar{u}ma > b\bar{a}tt\bar{u}n\$. Aramaic allowed for long vowels in closed syllables in some forms, a tendency which becomes common in Late Aramaic: e.g., the plural participle of geminate roots (\$\sigma l\bar{u}l\bar{u}l\bar{n}\$, Dan. 4:4)\$^49 and various forms of the G inflection of hollow roots (\$q\bar{a}m\$, yaq\bar{u}m\$, maq\bar{a}m\$; Beyer 1948: 486; Folmer 2011: 155). It is possible, therefore, that Aramaic preserved the long vowel in this position. Certainly, all the attested forms show a long vowel in this form (Targ. Onkelos b\bar{a}ttekon [Gen. 42:19]; BA b\bar{a}tt\har{e}k\har{o}n [Dan. 2:5]; Syriac b\bar{a}tte; 50 Jewish NA b\bar{a}te [Sabar 2002: 110]).

In Canaanite, by contrast, the triphthong -aya- regularly contracted to a in a closed syllable: *bayattūma > battīm and *'iyarrūma > 'arrīm. These are the forms that are found in the Samaritan vocalization tradition (Ben Hayyim 2002: 204–5, 419). ⁵¹ In the Tiberian and Babylonian vocalization traditions 'arrīm > 'ārrīm, and, while the two forms were still in flux,

^{48.} See Huehnergard (2015: 56) for a discussion of CvCvCC- pattern nouns in Biblical Hebrew.

^{49.} We cannot be sure when such forms became widespread; there is a single plural form in the Zakkur inscription (*'ddn*; KAI 202A 12), but there are no examples of plural G participles of geminate roots in Official Aramaic (Folmer 2011: 153, 157). See Beyer (1984: 484–86) for more examples.

^{50.} JBL bātte; Mandaic presumably lost this form and replaced it with the expected plural, baytawātā.

^{51.} ${}^{\varsigma}\bar{a}r\hat{e}$, the plural construct of ${}^{\varsigma}\bar{r}r$ in the Tiberian tradition, also reflects the base ${}^{\varsigma}arr$ - $< *{}^{\varsigma}iyarr$ -. If the initial syllable had been open, the pretonic vowel would have reduced to \check{e} .

the \bar{a} of ${}^{c}\bar{a}r\hat{n}m$ was transferred to $batt\bar{u}m.^{52}$ Given that this plural form is not found in any of the other Semitic languages, the use of the plural base *bayatt- for *bayt seems to be a strong feature linking the Canaanite and Aramaic subgroups.

4. ANALYSIS

We consider the following features to indicate a genealogical relation between Canaanite and Aramaic: 1) the marked fs demonstrative $*\delta a^{2}t$, 2) the direct object marker $*^{2}ay\bar{a}t$, 3) the development of dative subjects with adjectival predicates, 4) the G imperfect inflection of geminate verbs, 5) the plural form of *bayt, with 6) the use of the construct state with prepositions as another possible, albeit weak, feature. These six features are morphosyntactic and as such present a strong case for grouping Canaanite and Aramaic together as a sub-branch of Northwest Semitic. The alternative scenario, that Ugaritic and Canaanite are more closely related, is much weaker, and the polytomic formation is unlikely, since it entails a simultaneous four-way split of Proto-Northwest Semitic; we suggest therefore that Canaanite and Aramaic share an immediate common ancestor.

Another explanation for this similarity may be contact. Certainly, several scholars have argued that these features in Hebrew are the result of contact (e.g., Garr 2004; Gzella 2015: 20, 93ff.). Such scholars point to contacts between Arameans and speakers of other languages in the first millennium BCE, as a result of an assumed regional state of multilingualism. Some argue for Canaanite influence on Aramaic (Degen 1969), but most see either convergence or Aramaic influence on Canaanite (Gzella 2015).

We think, however, that early linguistic transference between Aramaic and Canaanite is unlikely for both historical and linguistic reasons. The Arameans first appear in ancient records during the reign of Tiglat-Pileser I (1114–1076 BCE), who describes fighting them along the Euphrates all the way to Carchemish. While this description implies that the Arameans were non-sedentary raiding parties, several scholars today believe the Arameans were, at least in part, an indigenous pastoral group in Syria (Bunnens 2013; Berlejung 2014). This is based on the repopulation following the twelfth-century collapse of most kingdoms in the southern Levant and Anatolia, including Emar and Ugarit. This process, which was fairly rapid, reflects continuity, rather than an abrupt change, and has led scholars to hypothesize that the repopulation was conducted by the local population (Mazzoni 2000; Bunnens 2013).

Before the establishment of the Iron Age polities, the Arameans were organized in kinrelated groups and loose tribal confederations (Kühn 2014: 38–40; Berlejung 2014: 340), while the area that they inhabited was under the control of Egypt for much of the Late Bronze Age. Iron Age I sites, with the exception of the Phoenician coastal cities, are all small rural settlements, with no public buildings (Sader 2014a: 610, 615). There is no solid evidence that the Arameans had contact with, not to mention influence on, the rising political entities of Israel and Judah in the Southern Levant before Iron II (Maeir 2017: 54). ⁵³

The Aramean polities along with their urban centers were established during the late Iron Age I period (Sader 2014b; Bryce 2014: 105–6; Berlejung 2014: 341; Younger 2016),⁵⁴ i.e.,

^{52.} This explanation removes the need to posit a suppletive paradigm for ${}^{\circ}$ r on the basis of Sabaic ${}^{\circ}$ r pl. ${}^{\circ}$ rr 'citadel, hill-town' as Kogan (1995: 13) and Huehnergard (2015: 32 n. 22) have tentatively done. If our derivation of ${}^{\circ}$ ar \hat{r} m is correct, then the plurals ${}^{\circ}$ ay \bar{a} r \hat{r} m found in Judges 10:4 and ${}^{\circ}$ ey \bar{a} r \hat{o} t found in the Mishna would be later analogical developments.

^{53.} Almost everything we know about some of the Aramean Syrian polities is based on the biblical text; otherwise, there is very little evidence for them (Younger 2016: 192).

^{54.} Iron Age IC according to Mazzoni's periodization; see Mazzoni 2000: 37.

fairly late compared to the established Canaanite city states along the Mediterranean. Their rise was made possible by the collapse of the Late Bronze Age centers. The Aramaean center closest to the Hebrew-speaking area is Damascus, which is first mentioned in Assyrian sources in the mid ninth century. ⁵⁵ Most of our historical information about the Arameans around Canaan comes from the Hebrew Bible, and a large part of it is not contemporary. From the available information, it is highly plausible that Arameans settled in southern Syria in the tenth–ninth centuries in the Beqa⁶ valley and the eastern shores of the Sea of Galilee and the Golan heights. ⁵⁶ Their new political organization in the ninth century as a tribal confederation happened at the same time as a similar process started in Israel (Berlejung 2014: 343). The time of Aramean dominance in southern Syria was fairly short-lived and ended in 732 with the fall of Damascus, a decade before the fall of Samaria.

Our knowledge of the Arameans and their whereabouts in the period during which contact with speakers of Canaanite could have occurred is limited; but it is clear that they were not a significant political power in the fertile crescent before the twelfth century, nor were they economically important prior to the tenth century (Van De Mieroop 2007: 211). Even after urbanization, which took place later than the earliest written Canaanite sources (Bunnens 2013), they never formed a political unity among their various kingdoms. The only secure information about the economy of the Aramaic kingdoms comes from inscriptions, all dated later than the presumed time of contact. Only once the Neo-Assyrian empire adopted Aramaic did this language start gaining status, and even then, its use did not extend beyond educated elites and trained scribes (Mizrahi 2014: 112). The biblical evidence mentions the Arameans as a regional power only during the Omride period, which is also supported by extra-biblical evidence, such as the Tel Dan Inscription. Most historians, however, see the Omride kingdom as the stronger political power, primarily based on Assyrian records (Miller and Hayes 2006: 297; Sergi 2017).

In order for Aramaic to have influenced Canaanite as a whole—not simply individual Canaanite languages like Hebrew, Aramaic would have had to be an important regional language at a very early time period; specifically, its speakers would have needed to be the regional political or cultural elite at the time the features in question developed. ⁵⁷ What we know about the political situation in the fertile crescent points to the opposite situation. Clearly, contact of differing degrees between Aramaic and Hebrew is attested in all phases of Hebrew. Despite very meager evidence, ⁵⁸ bilingualism during the monarchic period is assumed by most scholars. ⁵⁹ But Hebrew was already a Canaanite language by the time its speakers directly engaged with Aramaic speakers, and contact between Hebrew and Aramaic could not have affected the linguistic make-up of the *entire* Canaanite branch. A contact scenario simply does not explain why some features are reconstructible for Proto-Canaanite and also extant in Aramaic; given this state of affairs, a shared ancestral structure is a much more plausible explanation. A form of Canaanite, with its relevant diagnostic features, is attested

^{55.} Even according to Hebrew sources, it was not a serious political power. See, for example, Younger (2016: 204), who concludes that "at the time of David (ca. 980 BCE), Damascus was still rather insignificant politically."

^{56.} Münger (2013) rejects the possibility of Aramean settlement in the Galilee in the early Bronze Age. Such settlements are necessary for any claim of extensive contact between speakers before the earliest written evidence of Aramaic.

^{57.} For the decisive role of social factors in determining direction and type of contact, see Thomason (2008).

^{58.} The evidence for such early contact is slim. Ugaritic, which was at least as close to Aramaic speakers during the Late Bronze Age, shows very little Aramaic influence (e.g., Kogan 2010).

^{59.} Some Aramans are mentioned in early texts, though it is unclear whether these individuals spoke Aramaic (Gzella 2015: 56; Berlejung 2014: 341). The only clear indication of active knowledge of Aramaic is in exilic and post-exilic Hebrew. In fact, Isa. 36–39, which refers to events taking place in 701 BCE, indicates that Aramaic was not widely spoken in Judah, where the majority of biblical texts were composed (see also Mizrahi 2014 for discussion).

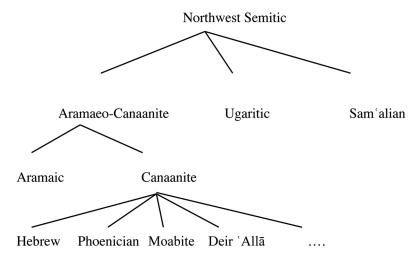


Fig. 2. Proposed reconstruction of Northwest Semitic.

almost 500 years prior to the first Aramaic inscriptions, with their own diagnostic features. We must assume, therefore, that the split between Canaanite and Aramaic is older than the language attested in the Amarna tablets, i.e., possibly earlier than the second millennium.

5. SUMMARY AND CONCLUSION

The evidence for a Ugaritic-Canaanite sub-branch rests on only seventy-eight lexical items, stemming primarily from Phoenician. Since both Phoenician and Ugaritic were spoken in the same geographical area and both were languages of commerce, this is not particularly surprising and need not be a result of inheritance. On the other hand, all morphosyntactic features shared by Ugaritic and Canaanite have been shown to be weak or irrelevant. Linguistically, the connection between Canaanite and Ugaritic does not support a shared immediate ancestor and is more likely a reflection of contact between two regional powers.

The evidence for an Aramaeo-Canaanite sub-branch, by contrast, rests on strong morphosyntactic features, which are less likely to transfer as a result of contact. Given the well-established strength of morphosyntax for demonstrating genealogical relationships, the evidence in favor of grouping Aramaic and Canaanite together as a separate sub-group is much stronger than the case previously made in favor of other combinations.

We further contest the assumption that Aramaic influence on Proto-Canaanite was intense enough and early enough to alter the structure of this sub-branch. As we have argued above, the sociolinguistic situation in the Levant and Syria was not conducive to this type of borrowing: Aramaic dialects were unlikely to be the prestige language in the area given the relative political disadvantage of the Aramaean polities compared with the much more established Israelite and Phoenician kingdoms in the early first millennium. We also noted that the features discussed are attested across all Canaanite dialects, sometimes even in Amarna Canaanite, a fact that cannot be explained by assuming localized contact along the northeastern border of Israel, for example.

We suggest therefore the above re-drawing of the Northwest Semitic branch (see Fig. 2), which takes into account our earlier identification of the Deir ^cAllā dialect as Canaanite (Pat-El and Wilson Wright 2015, 2016).

APPENDIX: DIAGNOSTIC FEATURES OF WEST SEMITIC AND ITS SUB-BRANCHES

West Semitic: perfect *qatVla⁶⁰

indicative negation $^{7}al^{61}$

Central Semitic: TAM system⁶²

form of "tens"⁶³ Barth-Ginsberg law⁶⁴

*mah 'what' 65

NW Semitic: double plural marking of **qVtl nouns 66

D and C verbal templates (*qattila, *haqtila)⁶⁷

1p pf suffix $-n\bar{u}$, obj/poss $-n\bar{a}^{68}$ imperative negation $^{9}al^{69}$

Aramaeo-Canaanite: fs demonstrative * $\delta a^{\gamma}t$

direct object marker * ayāt

dative subjects with adjectival predicates

G imperfect of geminate verbs

plural of *bayt

construct with prepositions (?)

- 60. Hetzron 1974.
- 61. Pat-El 2012.
- 62. Hetzron 1976.
- 63. Huehnergard 2005a.
- 64. Barth 1894; Ginsberg 1939; Bloch 1967; Schub 1974; Rainey 1996; Huehnergard 2005a.
- 65. Huehnergard 2005a.
- 66. Ginsberg 1970; Huehnergard 1991.
- 67. Huehnergard 1991, 1992.
- 68. Huehnergard 1991.
- 69. Pat-El 2012.

ABBREVIATIONS OF REFERENCES

- CIH = Corpus inscriptionum semiticarum, pt. IV: Inscriptiones ḥimyariticas et sabæas continens. 3 vols. 1889-1932. Paris: e Republican Typographeo.
- DULAT = Gregorio del Olmo Lete and Joaquín Sanmartín. 2003. A Dictionary of the Ugaritic Language in the Alphabetic Tradition. Leiden: Brill.
- EA = Anson F. Rainey. 2014. The El-Amarna Correspondence: A New Edition of the Cuneiform Letters from the Site of El-Amarna Based on Collations of All Extant Tabelts. Leiden: Brill.
- KAI = Herbert Donner and Wolfgang Röllig. 1966–1969. *Kanaanäische und aramäische Inschriften*. Wiesbaden: Harrassowitz.
- RES = Repertoire d'Épigraphie Sémitique. 8 vols. 1900–1968. Paris: Imprimerie nationale.

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