THE WORD FOR 'ONE'
IN PROTO-SEMITIC[1]

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Abstract

Traditionally, scholars have reconstructed *waḥad* or some variant thereof as the word for 'one' in Proto-Semitic. In this paper, I argue that *'ast-* is a better candidate because it is attested *as a number* in both East and West Semitic. *waḥad*, by contrast, was most likely an adjective meaning 'lone' as in Akkadian. Along the way, I will review some methodological criteria that may prove useful in the ongoing effort to reconstruct Proto-Semitic.

1. A Different Scenario

The treatment of the number one follows a set pattern in comparative grammars of the Semitic languages: a long section on *waḥad* and its relatives precedes a brief section on its less common rival *'ast-*. This organizational pattern, in turn, reflects a common assumption about the nature of Proto-Semitic. Most scholars reconstruct *waḥad* or some variant thereof as the first cardinal number.[2] But, in this paper, I argue that *'ast-* is original. Along the way, I will review some methodological criteria that may prove useful in the ongoing effort to reconstruct Proto-Semitic.

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[1] An earlier version of this paper was presented at the 40th meeting of the North American Conference on Afro-Asiatic Linguistics. I would like to thank the audience members for their insightful feedback. I would also like to thank John Huehnergard and Naʿama Pat-El for commenting on earlier iterations of this paper. Any remaining errors are mine alone.

[2] Kienast 2001: §165.3; Brockelmann 1908: §249a. Edward Lipiński is an exception. He reconstructs two Proto-Semitic words for the number one: *'ist-* and *ḥad*. Although it is unlikely that Proto-Semitic had two functionally identical words for the same number, Lipiński's work does raise questions about earlier reconstructions of the number system (Lipiński 2001: 289–92).

In the reconstruction of Proto-Semitic, Akkadian plays the role of kingmaker.[3] Whether as the closest direct descendant of Proto-Semitic or the premier representative of that descendant, Akkadian holds as much weight as the other Semitic languages combined.[4] The reason for this is simple. Without evidence from a higher node (i.e. Afro-Asiatic), a feature found in several West Semitic languages could be innovation after the split. Conversely, any feature that occurs in Akkadian and at least one West Semitic language is likely to go back to Proto-Semitic, barring areal influence or any of the other gremlins of reconstructive work. Robert Hetzron, for instance, was able to reconstruct the Proto-Semitic imperfective conjugation as *yaqattal on the basis of Akkadian, Ethiopic and Modern South Arabian alone.[5] Of course, he was still obligated to explain the shift of *yaqattal to *yaqtulu in Central Semitic and this brings me to my second point. A plausible reconstruction must explain changes and deviations from Proto-Semitic systematically. Otherwise the priority of one form over another remains unclear.

Seen in this light, for the number one *'ast- is more likely to be the original form. Unlike *waḥad, it is attested *as a number* in both East and West Semitic (the relevant forms can be found in Table 1 and Table 2 below). In Akkadian, ištēn is the standard form, while in Minaic, Qatabanic and Ugaritic reflexes of *'ast- survive vestigially alongside reflexes of *waḥad. Ugaritic and Hebrew also preserve a remnant of *'ast- in some forms of the number 11. *waḥad-, by contrast, is merely an adjective in Akkadian meaning 'lone'. It does not function as a numeral in both East and West Semitic, and so cannot be reconstructed with this meaning and function to Proto-Semitic according to the criterion outlined above.

The rise of *waḥad is not hard to explain. In early West Semitic, the adjective *waḥad- 'lone' experienced a slight semantic expansion—'lone' > 'one'—and then ousted *'ast- as the cardinal number. But languages on the periphery, like Ugaritic and Ṣayhadic, retained remnants of the original form. This suggests that the shift of *'ast- to

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[3] This paper uses Robert Hetzron's subdivision of Semitic as modified by Rainer Voigt, John Huehnergard and Victor Porkhomovsky. According to this model, Proto-Semitic splits into East and West Semitic; West Semitic, in turn, splits into three coordinated subgroups: Modern South Arabian, Ethio-Semitic and Central Semitic. Hetzron 1976: 103–5; Voigt 1987: 1–21; Huehnergard 1991: 282–93; Porkhomovsky 1997: 219–23.

[4] As far as I know, Huehnergard was the first scholar to articulate this methodological point. See Huehnergard 2006: 2–3.

[5] Hetzron 1976: 103–5.

waḥad- was an areal phenomenon in early West Semitic that did not spread to the farthest reaches of the speech community. Within West Semitic more generally, *waḥad-* survived as an adjective and soon diverged from the new form, which underwent an ad hoc change of /w/ to /'/.

Table 1. Reflexes of Proto-Semitic *'ast- 'one'

Language	Masculine	Feminine
Proto-Semitic	*'ast-	*'astay-
Akkadian	ištēn	ištī(a)t
Minaic	's¹t	—
Qatabanic	's¹tnm	—
Ugaritic	'št 'šr(ḥ)	'šty[6]
Hebrew	—	'aštê 'āśār
Arabic	—	'iḥday

Table 2. Reflexes of Proto-Semitic *waḥad- 'lone'

Language	Form	Meaning
Proto-Semitic	*waḥad-	'lone'
Akkadian	(w)êdum	'lone'
Ge'ez	'aḥadu	'one'
Mehri	'əḥād	'someone'
Arabic	'aḥad / wāḥid	'one'
Aramaic	ḥad	'one'
Ugaritic	'aḥadu[7]	'one'
Hebrew	'eḥād	'one'

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[6] This form appears at the beginning of a counting sequence prescribing offerings to an unknown deity (CAT 1.161:27). F.A. and B.W.W. Dombrowski derive it from the Hurrian number *ašt*, but this is unlikely. As Josef Tropper has shown, Hurrian *ašt* would appear in Ugaritic as *'iṭt* and cannot explain all of the cognate forms. More likely, *ašt* is — alongside *šin(a)* 'two' and *šeže* 'six' — an early Semitic loan into Hurrian, which reflects the original a-vowel of the Semitic form. See Cecchini 1981: 106–9; Dombrowski and Dombrowski 1991: 357; Tropper 1997: 666–7; Wilhelm 2004: 115.

[7] For the vocalization of this form see Huehnergard 2008a: 522.

Yet the change of *ʿast- to *waḥad- was not a simple case of lexical replacement. Even after being repurposed as a number, *waḥad- stayed true to its adjectival origins.[8] Whereas *ʿast- and the other cardinal numbers precede the counted noun and are often in construct with it,[9] the numerical reflex of *waḥad- typically follows it in apposition, like an adjective.[10] In Biblical Hebrew, for example, one daughter is *bat ʾaḥat* (2 Sam. 14:27), but three daughters is *šālôš bānôt* (Job 1:2). Likewise Classical Arabic retains *qaryatun wāḥidatun* 'one village' alongside *talātu qaryātin* 'three villages'[11] and Ugaritic has *lmd aḥd* 'one apprentice' (CAT 4.138:4), but *tlt lmdm* 'three apprentices' (CAT 4.138:6). The number one usually follows the counted noun in Mehri as well, despite undergoing lexical replacement.[12] In other West Semitic languages, such as Geʿez and Tigrinya, one is the only number that regularly inflects for gender like adjectives, but unlike numerals.[13] In some languages, *waḥad- even has a plural form — Hebrew *dəbārîm ʾăḥādîm* 'indentical words' (Gen. 11:1) — or derivatives from adjectival vowel patterns — Arabic *wāḥdūna* 'alone' and *ʾāḥād* 'together'. Taken together, these adjectival features support the idea that *waḥad- is a latecomer to the system of cardinal numbers.

The scenario outlined above is not unprecedented, either in Semitic or more generally. A parallel development took place in Neo-Babylonian approximately three thousand years after the West Semitic change.[14] Here, the adjective *êdu* (< *waḥad) 'lone, single' began to

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[8] Lipiński 2001: 293; Kienast 2001: §165.1; Brockelmann 1908: §189a. For the individiual languages see: Dillmann 2003: §158; Fischer 2006: §129 n. 1; Gesenius 1987: §97a; and Simeone-Senelle 1997: 395.

[9] Compare Akkadian *ištēn taklam* 'one trustworthy man' and Minaic *ʿs¹t ḥr* 'one freeman' (M 367). von Soden 1965–81: §69c.

[10] In Geʿez, Ṣayḥadic and some dialects of Aramaic the more common word order was levelled. Given the enormous structural pressure to do so, it is not surprising that this change occurred independently in several languages. The alternative is unlikely. It would be strange indeed for several languages to independently innovate a special word order for the number one alone. Dillmann 2003: §158; Beeston 1984: 36; Macuch 1965: §267.

[11] Examples taken from Fischer (2006: §129a).

[12] Rubin 2010: 209–10. If Maximilian Bittner and John Huehnergard are correct in deriving the bizarre Proto-MSA numbers *tad and *tat from a clipped form of *ʾaḥad* and a preceding noun, then *ʾaḥad* followed the counted noun in MSA as well. The new MSA forms would have inherited the syntax of *ʾaḥad*. Bittner 1913: 82–4. J. Huehnergard, p.c.

[13] Kogan 1997: 435; Dillmann 2003: §158.

[14] The change of *ʿast- to *waḥad occurred shortly after East and West Semitic parted ways in the fourth millennium BCE. The Neo-Babylonian change, by contrast, is first attested in texts dated to the eighth century BCE. For the date of the

function like a numeral semantically and syntactically in some contexts. Unlike its West-Semitic counterpart, it mirrors the syntax of *ištēn*, often preceding the noun that it modifies. A boundary stone attributed to Marduk-apal-iddina declares: *êdu amēla lā īzib* 'I did not abandon a single man' (VAS 1 37 iii 26). Another Neo-Babylonian text reads: *ina muḫḫi êdu ina ḫaṣāri maḫir* 'He received [the dates] in the date storehouse in one [delivery]' (VAS 3 64:19). The most notable difference between the two cases, of course, is that *êdu* did not replace *ištēn* altogether.

Other languages were less scrupulous when it came to retaining inherited forms of the number one. Among the Indo-European languages, both Greek and Tocharian replaced Proto-Indo-European *oi-no* with the adjective *sam* meaning 'together, the same'.[15] Similarly, some of the Berber languages have swapped Proto-Berber *yīwan* for *iǧ* of unknown origin.[16] And in Tigrē, Cushitic *woro* or *worot* takes the place of *'aḥadu* in the masculine.[17] In this regard it is also interesting to note that many branches of Afro-Asiatic exhibit a different word for one (See Table 3 below). This suggests that the number one was replaced at least three times in the history of Afro-Asiatic and, more generally, that the number one is often the target of replacement.

Table 3. Some Afro-Asiatic Words for 'One'

Family	Form
Semitic	*'ast-
Berber	*yīwan[18]
Egyptian	w'yw[19]
Chadic	*t-k-(n)[20]

The change of *'ast- to *waḥad- also prompted a change in the ordinal form. Within Proto-Semitic, *'ast- probably formed the ordinal

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East-West split see J. Huehnergard, 'Trees and Waves: On the Classification of the Semitic Languages' (paper presented at the North American Conference on Afro-Asiatic Linguistics 37, Albuquerque, New Mexico, March 13–15, 2009).

[15] Buck 1988: 937. The same adjective with a different vowel grade is also the source of Greek *monos* 'alone' (cf. Table 5).

[16] Destaing 1920: 275.

[17] Lipiński 2001: 292.

[18] Prasse 1974: 403.

[19] Gardiner 1957: 192.

[20] Mukarovsky 1987: 26.

via *nisbe* ending. The rare Standard Babylonian form *ištīyu* reflects this derivation — as does the common Akkadian form *ištēnû*.[21] *waḥad*, however, could not take a *nisbe* ending because it started life as an adjective and retained many of its adjectival features. Thus, each West Semitic language was forced to improvise a new cardinal number. Some languages, such as Geʿez and Aramaic, used different forms of the root QDM 'to precede'; others, like Hebrew, derived a new cardinal number from the word for 'head' (see Table 4 below). Whatever strategy each individual language employed, the absence of a common word for 'first' in West Semitic reflects upheaval in the system of cardinal numbers.

Table 4. A Change in the Cardinal Form Prompts a Change in the Ordinal Form

Language	'First'
Proto-Semitic	*ʿast-āy
Akkadian	ištēnû, ištīyu[22]
Geʿez	qadāmī
Soqotri	neśher
Arabic	ʾawwalu
Old South Arabian	<QDM>
Aramaic	qadmāy
Hebrew	riʾšôn

The primacy of *ʿast- over *waḥad- also receives minor support from the wider Afro-Asiatic family. *waḥad- lacks a clear Afro-Asiatic cognate,[23] but *ʿast has been linked to several Afro-Asiatic forms with limited success: Egyptian *fty*, Berber *iǧ* (feminine *išt*), and Omotic *ista*.[24] The most promising cognate for *ʿast- is Old and Middle Egyptian *fty* meaning 'each, everyone'.[25] This equation is not perfect, however, since it relies on a conditioned correspondence of Semitic /s/

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[21] Unfortunately, the ordinal form of *ʿast- has not left any traces in West Semitic, so we must rely on the testimony of Akkadian alone.

[22] Alongside *maḫrûm* and *pānûm*.

[23] Wolfgang Schenkel's attempt to relate Semitic *wḥd* and Egyptian *wʾyw* via the Egyptian noun *wʿw* 'loneliness' is speculative and relies on the problematic assumption that Egyptian /ʾ/ developed from Afro-Asiatic /d/ (Schenkel 1990: 55). For a thorough critique of this proposed sound correspondence see Steiner 2011: 63–76.

[24] Lipiński 2001: 289; Militarev and Stolbova 1990: 65; Blažek 2001: 15–16.

[25] Diakanoff 1988: 45 followed by Militarev and Stolbova 1990: 65.

with Egyptian /f/ found also in the third masculine singular possessive suffix (Proto-Semitic *–sū, Egyptian –f) and assumes a semantic shift in either Egyptian or Semitic.[26] It also assumes that the feminine form was generalized in Egyptian. If, however, *'ast- and 'fty are indeed cognate, then *'ast- predates Proto-Semitic and thus has an even better chance of being the original form of the cardinal number.

The proposed Berber and Omotic cognates for *'ast- are less promising. iğ does not go back to Proto-Berber since it only occurs in certain dialects of Central Atlas Tamazight and Zenati and not in any of the other, more archaic branches like Touareg or Kabyle.[27] Furthermore, iğ does not share any consonants with *'ast- for certain: /'/ does not occur in Proto-Berber, so it is impossible to tell whether it really belongs in this word; the /š/ of the feminine is a pre-stop allophone of /ğ/; and the /t/ is not a root consonant, but rather the common feminine morpheme. The possible Omotic cognate ista suffers from some of the same problems as iğ. The form ista cannot be reconstructed to proto-Omotic since it only occurs in the Ometo subgroup of South Omotic and not North Omotic.[28] The voiced pharyngeal fricative cannot be reconstructed to Proto-Omotic either. Additionally, both the genetic affiliation and internal structure of the Omotic family are disputed, so the existence of similar forms in Semitic and Omotic may be irrelevant.

2. Method and Morphology

*'ast- and *waḥad exhibit morphological peculiarities, within both the historically attested Semitic languages and the various proto-languages. The gender marking of *'ast- does not match the most common system reconstructed for Proto-Semitic, and the Akkadian reflex exhibits a change of initial /e/ to /i/. *waḥad, on the other hand, has an alternative vocalization in wāḥid and undergoes an ad hoc change of initial /w/ to /ʔ/ in most of West Semitic. For the most part, these problems can actually be resolved by treating *'ast- as primary. In fact, many of them offer insight into the structure and development of Proto-Semitic and early West Semitic.

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[26] Sadly, the direction of this semantic shift cannot be determined. But compare Hebrew yaḥad 'together' > 'all' from the adjectival reflex of *waḥad-.

[27] For a list of these dialects, see Destaing 1920: 275 and Militarev and Stolbova 1990: 65.

[28] Zaborski 1983: 386–7 cf. 384.

One of the most interesting features of *ʿast- is the feminine, which was marked by the rare feminine morpheme –ay.[29] By the time the Semitic languages are first attested, this morpheme was no longer productive except in Arabic. In Akkadian, a second feminine marker was added in order to supplement the weakening gender associations of –ay. Then, the resulting triphthong contracted yielding ištīat:

*ʿastayat > *ʿaštīat > *ʿeštīat >*ʾeštīat > ištīat

In Hebrew, the feminine froze as the default form. It appears in both masculine and feminine forms of eleven — ʿaštê-ʿeśrê yərîʿōt 'eleven curtains' (Exod. 26:7) pārîm ʿaštê-ʿāśār 'eleven bulls' (Num. 29:20) — where the final diphthong contracts with the retraction of the stress.[30] Finally, Arabic, Sabaic and Dedanitic (an Ancient North Arabian dialect) preserve the seemingly related feminine forms ʾiḥday, <ʾḤDY>[31], and <ḤDY>[32] either regularly — as in Arabic — or as hapax legomena.[33] Although caution is necessary when drawing conclusions from a single form, the ending –ay may have been transferred by analogy to *ʿastay while ʿast and ʾaḥad were still in competition:

ʿast : ʿastay :: ʾaḥad : X = ʾaḥaday

Speculation aside, the appearance of this morpheme on a common word is striking. Outside of Arabic, –ay is poorly attested in the Semitic family, where it occurs mostly on personal names and words for animals. Perhaps *ʿastay hearkens back to an earlier stratum where –ay was more a common marker of gender.[34]

The masculine form is also said to contain a morphological relic. I.J. Gelb indentifies the /n/ of the Akkadian numeral with an Afro-Asiatic masculine morpheme that may appear on some Semitic forms of the demonstrative.[35] Given the limited distribution of this

[29] This morpheme appears in the Hebrew personal name śāray and in a few nouns in Geʿez, Syriac and Classical Arabic. See Gesenius 1987: §801; Dillmann 2003: §120; Nöldeke 1904: §83; Fischer 2006: §75b; and Brockelman 1908: §255 B 1.

[30] Compare śāráy with accent on the ultima. Hetzron attributes the use of the construct in the teens to substratum influence and further suggests that ʿaštê itself is a borrowing from 'a now unknown, and possibly substandard dialect'. It is easier to treat these forms as an innovation in Hebrew rather than posit a new language on the basis of a single feature (Hetzron 1977: 178).

[31] See BRYanbug 47/9.

[32] This form appears in CLL 26/4 cited in Macdonald 2004: 522.

[33] Macdonald 2004: 502–3.

[34] A less likely possibility is phonological conditioning. The –ay morpheme may have been preferred after the dental stop /t/.

[35] Gelb 1969: 37.

morpheme, however, a connection with the 'substantivizing' *–ān* suffix is preferable.[36] In the context of early Semitic, this suffix may have functioned as a masculine morpheme when paired with feminine *–ay*. Such a combination is attested elsewhere. In Arabic, masculine adjectives ending in *–ān* pair with feminines in *–ay*.[37] Unfortunately, it is unclear whether the addition of this ending goes back to Proto-Semitic. The addition of *–ān* could be a parallel development in Akkadian and Qatabanic that did not affect Minaic.

The initial /i/ vowel of the Akkadian form defies a neat phonological explanation. Normally, the pharyngeal fricative /ʿ/ triggers a shift of /a/ to /e/ in Akkadian before disappearing, with subsequent vowel harmony in the Babylonian dialect.[38] The expected form is *ʿastān > *ʿeštēn > *ʾeštēn > **eštēn. The only other form where /i/ replaces an expected /e/ is Ištar, which also contains the consonantal sequence /št/. This hints at the possibility of a sound rule e > i /_št,[39] but unfortunately two forms cannot confirm the existence of a phonological process. It is also possible that *ištēn* and Ištar owe their current forms to analogy. In the counting sequence, *ištēn* comes before *šina*, while Ištar was closely associated with the Sumerian goddess Inanna, both in lexical lists and literary texts.[40] For now, the motivation for this change remains unclear, but this does not substantially affect my main argument. The genetic relationship between *ištēn* and West Semitic *ʿast is secure regardless of subsequent developments in Akkadian.

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[36] For the uses of this suffix see Streck 2005: 233–43.

[37] Fischer 2006: §119.

[38] In Assyrian, the vowel harmony rule did not always affect /ā/, especially when it was some distance from the pharyngeal consonant (e.g., *ʿaᵈzābum 'to leave' > *ʿeᵈzābum > *ezābum*). Thus, Assyrian *ištēn* is probably the result of inter-dialectal borrowing.

[39] John Huehnergard p.c.

[40] Analogical change occurs frequently in the counting sequence. In Latin, Proto-Indo-European **penkʷe-* 'five' became *quinque* under the influence of *quattuor* (< **kʷetwer-*) 'four'. And in Akkadian itself, *tīšet* 'nine', feminine *tiši* was changed to *tešēt*, feminine *teše* on the basis of *erbēt* 'four', feminine *erbe*. For further examples see Campbell 2004: 112. Divine names are less susceptible to analogical change since they do not typically appear in a fixed, frequently repeated sequence, but this does not rule out the possibility entirely. As Piotr Steinkeller has argued, Semitic *ʾil-ʾil > *ʾilil* was changed to Enlil under the influence of the common Sumerian word *en* 'lord'. Ištar could also be the result of taboo deformation (Aramaic *Šimšā* vs. OSA *Śms*) or folk etymology (cf. the sumerographic writing of EN.ZU for Semitic *Suʾen / Sīn*). Steinkeller 1999: 114, n. 36.

The vocalization of *waḥad* presents less of a problem. Although Akkadian *wêdum* is ambiguous — it could come from *waḥad* or *wāḥid* — most of the remaining languages reflect *waḥad* alone (See Table 2 above). Only Arabic attests *wāḥid*, which is vocalized like a participle. Here the principle of parsimony comes into play. It would be easier for Arabic to develop a bi-form by analogy with the participle than for the majority of the West Semitic languages to independently innovate a new, unmotivated form. The connection between *waḥad* and the verbal system also supports this reconstruction. Most likely, *waḥad* is the verbal adjective of *waḥada* 'to be alone' attested in Geʿez, Mehri, Arabic and Safaitic (Ancient North Arabian) and, as Huehnergard points out, verbal adjectives from stative roots have the form *qatal* or *qatil*.[41]

The consonants of *waḥad* are more troublesome than its vowels. Most languages show evidence of an ad hoc sound change of initial /w/ to a glottal stop, although Arabic, and possibly Ugaritic and Sabaic, preserve /w/ in some cases.[42] While there is little doubt that *waḥad* and *'aḥad* are genetically related, the reasons for this change have not been examined in detail. I argue that the change occurred because *waḥad* was repurposed as a number in early West Semitic. Presumably, the numerical reflex of *waḥad* was used more frequently than its adjectival counterpart and, as is well known, ad hoc sound changes are more likely to occur in common words. Significantly, the less common, adjectival reflex of *waḥad* retains the initial /w/ as shown in Table 5 below. Later developments support this theory. In Aramaic, Tigrē and some modern Arabic dialects the numerical reflex of *waḥad* undergoes a second ad hoc sound change. The initial syllable is lost to aphaeresis.

Table 5. Adjectival Reflexes of Proto-Semitic *waḥad-*

Language	Form	Meaning
Akkadian	(w)êdum	'sole, alone'
Geʿez	wāḥəd	'unique, only, one'

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[41] Huehnergard 2011: 26–7. It is also possible that *waḥada* is a de-adjectival verb.

[42] CAT 4.750 refers to some of the prince's estates as *bt yḥd* 'a single house' (lines 5–7) and some as *bt 'ḥd* 'one house' (lines 8–11) alongside references to multiple houses (lines 2, 12–13). Without vowels, it is impossible to tell whether *yḥd* is an adjective or a numeral. Sabaic preserves *kwḥd* alongside *k'ḥd* (cf. Hebrew *kə'eḥād* and Targumic Aramaic *kaḥdā*), both meaning 'together, as one', but the latter could be an adjectival reflex of *waḥad* or a loan from Arabic.

Arabic	*waḥdāni*	'lone person'
Syriac	*yaḥīda'* > *'iḥiḏā*	'only'
Ugaritic	*yḥd*	'solitary, alone'
Amorite	*yaḥadu*	'lone person'
Hebrew	*yāḥîd*	'solitary, only'

The exact mechanism of the change /w/ to /ʔ/ was probably numeral syntax. As a cardinal number, *waḥad* could be yoked to higher numerals using the conjunction *wa-*. Indeed, the pattern tens *wa-*ones is a common West Semitic strategy for forming compound numbers and is found in Ethiopic, Mehri, Aramaic and Phoenician.[43] In such an environment, the triphthong /awa/ in *wa-waḥad* may have dissimilated into *wa-'aḥad*. Similar changes are attested across the Semitic family. In Targumic Aramaic, a glottal stop intervenes in III-w, y verbs before vocalic endings (*banayā* 'they (f) built' > *bəna'ā*) and in masculine singular G participles of II-w, y verbs (*qāwem* 'standing (ms)' > *qā'em*). This latter change also occurs in Classical Arabic, but may be due to the adoption of Aramaic orthography.[44] Thus, the change of /w/ to /ʔ/ in *wa-waḥad* is not unprecedented.

3. Summary and Conclusion

I have argued that *'ast-*, not *waḥad-*, is the Proto-Semitic word for 'one' since it occurs as a number in both Akkadian and West Semitic. In early West Semitic, this form gave way to *waḥad-*, but left remnants in several peripheral languages. Once repurposed as a number, *waḥad-* underwent an ad hoc sound change of /w/ to /ʔ/. The shift of *waḥad-* from adjective to cardinal number also triggered a morphological pull chain: each West Semitic language innovated a different ordinal number to fill the gap left by *'astāy-*. This reconstruction is powerful because it gives proper weight to the Akkadian evidence, explains change from Proto-Semitic systematically, and can even explain a number of morphological conundrums in West Semitic.

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[43] Compare Geʿez *'aśartu wa-'aḥadū* 'eleven (m)', Mehri *'āśərēt wə-ṭāṭ* 'eleven (m)', Imperial Aramaic *'śrh w-tryn* 'twelve (m)', Mandaic *asra uhda* 'eleven (m)' and Phoenician *'śr w-'ḥd* 'eleven (m)'. Dillmann 2003: §158; Rubin 2010: 211; Muraoka and Porten 1998: §21a, c; Macuch 1965: §178, §242; Friederich and Röllig 1999: §242.

[44] Fischer §247a.

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