Beḍawiē : a Cushitic/Semitic Language? [BdSL]

Contents

1. Introduction

1.1 The Beḍawiē Language

1.1.1 The language *tū-Beḍawiē* of the Beja people is spoken in Eastern Sudan, in the area between the Red Sea and the Nile and Atbara rivers, in the Red Sea hills of Upper Egypt north of the border with Sudan, and in N. Ertirea. In Sudan the Beja principally comprise the Haḍanḍiwa, Amar'ar and Bishari tribes (the last also prominent in Upper Egypt), along with the Beni Amer adjacent to the border with Ertitrea and in N. Eritrea itself.[1] Until very recently Beḍawiē has never been a written language. The first adequate grammar was that of Herman Almkvist in 1881, based on the Bishari dialect,[2] followed in 1893 by Leo Reinisch's grammar based on the Beni Amer dialect, but including material from other dialects.[3] Roper's introductory grammar of the Haḍanḍiwa dialect was published in 1928 and Richard Hudson's studies of the Arteiga dialect in 1964 and 1976 ; the Arteiga dialect is spoken in Suakin and Port Sudan

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[1] Some Beni Amer are Tigré speaking. The Ababde in Upper Egypt are also Beja but by the late 19th century seem mostly to have ceased to speak Beḍawiē. See the introduction to H. Almkvist, *Die Bischari-Sprache (Tū-Beḍawiē) in Nordost-Afrika [BSNOA]* (1881-5). The Arabic name for the language, and that commonly used by Westerners, is *Beja*. Although the Beja people are referred to in the records of the Axumite civilisation (S. Munro-Hay, *Aksum, An African Civilisation of Late Antiquity [ACLA]*), the name has been taken to be an Arabic corruption of *Beḍawiē*, itself of course an Arabic word. The likliest candidate for the original self-name of the Beja is Blemmye (Almkvist, *BSNOA,* esp. 9-15). The *ḍ* in Beḍawiē is retroflex and is not diachronically related to Arabic *ḍād*.

[2] For a survey of work on Beḍawiē prior to Almkvist see the introduction to his grammar.

[3] L. Reinisch, *Die Beḍauye-Sprache in Nordost-Afrika* [*BdG*] (1893-94). This work incorporates a good deal of comparative material, both with Cushitic and Semitic languages.

and has been much exposed to Arabic influence.[4] Current (2010) estimates of the total number of Beḍawiē speakers range between three and six hundred thousand but are not reliable, given the highly unstable political situation in the traditional Beja areas at the time of writing.

1.2 A Composite Cushitic and Semitic Language?

1.2.1 Although conventionally classed as a Cushitic language, Beḍawiē displays important grammatical and lexical characteristics that have caused it to be regarded as standing apart from the other Cushitic language groupings. Prominent among these are the relative paucity of lexical matches with other Cushitic languages[5] and certain characteristics of the verbal system. These differences have even led some investigators to suggest that Beḍawiē is not Cushitic.[6] However, notwithstanding its special characteristics Beḍawiē has much in common with the other Cushitic languages, both lexically and grammatically, particularly with the Lowland East Cushitic group, as even a cursory inspection of Reinisch's grammar will show.[7] But the differences hint at links with the Semitic languages that go beyond the very many obvious loans into Beḍawiē from Arabic and to a lesser extent from the N. Ethiosemitic and S. Arabian languages. This is especially true of the verbal system, the primary focus of this study, which is discussed in Sections 2 to 9 below, of the lexicon more generally, and to some extent of other grammatical features (Section 10).

1.2.2 Although there is a degree of 'scholarly' antipathy to the concept of a 'mixed' or 'composite' language, for whatever reason, it will be argued below that these various kinds of evidence support the hypothesis that Beḍawiē is a composite Cushitic and Semitic language. For whereas it is not disputed that, in general, when two peoples interact the language of the dominant culture will tend to marginalise the

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[4] E. M. Roper, *Tu Beḍawiē: Grammar, Texts, and Vocabulary* [*TB*] ; R.A. Hudson, *A Grammatical Study of Beja* (1964) and 'Beja', in M.L. Bender (ed), *The Non-Semitic Languages of Ethiopia* [*NSLE*] (1976), 97-132. Almkvist (*BSNOA*) and Reinisch, *Wörterbuch der Beḍauye-Sprache (BdW)* (1895), also published dictionaries, of which the latter is the more exhaustive and incorporates much of Almkvist's data. Roper's grammar includes an extensive vocabulary which contains a number of items not recorded by Reinisch or Almkvist.

[5] C. Ehret, 'Cushitic Prehistory', in *NSLE*, 87. For abbreviationzs see *Bibliographical Abbreviations*.

[6] F.R. Palmer, 'Cushitic', in A.T. Sebeok, (ed), *Current Trends in Linguistics VI* (1970), 571-85.

[7] See also the discussion in D.L. Appleyard, 'Beja as a Cushitic Language' ['BCL'], in C. Takács (ed), *Egyptian and Semito-Hamitic (Afro-asiatic) Studies in Memoriam W. Vychichl* (2004), 175-194.

language(s) of 'subordinate' peoples - Arabic after the rise of Islam being an obvious example - given approximate social and material parity between the constituent peoples, there can be no theoretical reason why two languages should not merge, however uncommon this may be in practice.

1.2.3 This of course begs the question of how a composite language might be defined. An adequate definition would admit evidence from a Swadesh-type core lexicon, but more importantly, the definition would ideally require at least some Beḍawiē grammatical systems to draw more or less equally from the source languages. In the event, these conditions can be met for the verbal system and core lexicon but not particularly for any other grammatical system. A further complication is that several important features of Beḍawiē grammar have evolved independently of both Cushitic and Semitic - the definite article being a case in point - and diachronically owe little to equivalent systems in the 'source' language families.

1.2.4 Evidence for the early history of the Beja people is fragmentary, but among opportunities for possible or more certain contact and mixing with Semitic-speaking peoples are the following:

1. **Evidence, albeit not unambiguous, for a Sabaean kingdom of *d'mt* in N. Ethiopia from about the 5th century BCE.[8]**
2. **The kingdom of Axum from the 1st century CE;**
3. **Ongoing contact with N. Ethiosemitic speakers subsequent to the decline and disappearance of the Axumite kingdom; from about the 7th century CE.**
4. **Early post-Islamic contact with Arabic speakers, especially in Upper Egypt and what is now north-east Sudan;**
4. **More recent interaction with Arabic and N. Ethiosemitic speakers (Tigré in particular among the latter).**

This list is not exhaustive, for it will become apparent in what follows that there were in all liklihood other, unrecorded, early migrations of Semitic-speaking peoples from Arabia into N.E. Africa, among whom were presumably speakers of what later became the South Ethiosemitic languages.

2. Overview of the Beḍawiē Prefixing (V_1) Verb

2.1 Introduction

2.1.1 Beḍawiē displays two principal types of verb, denoted V_1 and V_2 by Reinisch and Roper, which

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[8] **Munro-Hay, *ACLA* 'Introduction'.**

may be characterised as follows :[9]

1. **Type V_1 verbs have prefixed subject pronouns and suffixed morphemes of number and gender. Like the verb in the Semitic languages the V_1 set is based to a considerable extent, but by no means exclusively, on triradical roots;**
2. **Type V_2 verbs display suffixed morphemes of person, number and gender. Like the suffixing verbs in other Cushitic languages the V_2 set is essentially stem-based, albeit including a substantial number of Semitic loans, many originating in nouns.**

2.1.2 Among other Cushitic languages this dichotomy is common only in Saho and 'Afar, two closely related Lowland East Cushitic languages spoken respectively in Eritrea and Ethiopia, and linguistically separated from the Beḍawiē-speaking areas of Eritrea and the Sudan by the N. Ethiosemitic languages Tigré and Tigriña.[10] **Prefixing verb forms also occur sporadically in certain other Cushitic languages, for example Awngi, an Agaw language (five examples), and a similar number in Somali, also a Lowland East Cushitic language. Prefixing forms in other Cushitic languages are discussed in Section 6 below.**

2.1.3 In outline, several types of evidence support the hypothesis that prefixing verbs reflect a Semitic grammatical component in the Beḍawiē language.

1. **The strong morphological similarities between Beḍawiẹ̄ prefixing G-forms (G_P) on triconsonantal roots and their equivalents in the Semitic languages (§2.2 below);**
2. **A general lack of correlation between the lexical patterning of the Beḍawiē V_1 and V_2 verb sets, in part caused by the substantial percentage of lexical matches between Beḍawiē V_1 and Semitic roots (§10.1 below). This is a complex issue, not least because it requires a means of distinguishing relatively recent N. Ethiosemitic and Arabic loans from roots which may be original to Beḍawiē;**
3. **The fact that, in contrast to the associated G-forms, derived forms of V_1 verbs distinguish their so-called 'perfect' and 'imperfect' forms by apophony (§2.3 below), whereas V_2 verbs distinguish 'perfect'**

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[9] ***BdG*, §196 and *TB*, §119. These are respectively Almkvist's conjugations II and I (*BSNOA*, §171 ff and §168).**

[10] **For Saho see L. Reinisch, *Die Sprache der Irob-Saho in Abessinien* (1878) and W.E. Welmers, 'Notes on the Structure of Saho', *Word* 8 (1952), 145-162, 236-251. For 'Afar see L. Bliese 'Afar' in *NSLE*, 133-165. The latter study is in transformational-generative format and difficult to use. Dictionaries and texts of both languages by Reinisch.**

and 'imperfect' in their G- and derived forms by differing patterns of suffixes.[11]

2.2 G_P-Forms

2.2.1 Among the G-stems of the V_1 verb is a shorter form, which will be termed G_{PA} [G-prefixing-apocopate], and an 'extended' form (G_{PE}) incorporating a morpheme *n* in its singular forms and lengthening of the vowel of the first syllable in the plural forms.[12] Paradigms for the 'regular' Haḍanḍiwa biconsonantal and triconsonantal G_P-fom verb are set out in Table 2.1 ; note that there are no dual forms. The position of the stress is marked by the accent.[13] The syllable structure of equivalent forms in the other dialects is generally very similar, although the location of the accent tends to vary somewhat ; for details see Table 3.1 below.

TABLE 2.1 G_P FORM PARADIGMS

Biconsonantal = *dif* 'go'			Triconsonantal = *kitim* 'arrive'	
'Perfect' (G_{PA})	'Imperfect' (G_{PE})	Person	'Perfect' (G_{PA})	'Imperfect' (G_{PE})
i-díf	i-n-dī́f	3ms	i-ktím	kantī́m
ti-díf	ti-n-dī́f	3fs	ti-ktím	kantī́m
tí-dif-a	tī́-n-dīf-a	2ms	tí-ktim-a	kántīm-a
tí-dif-i	tí-n-dīf-i	2fs	tí-ktim-i	kántīm-i
a-díf	a-n-dī́f	1s	a-ktím	a-kantī́m
í-dif-na	ḗ-dif-na	3p	í-ktim-na	ē-kátim-na
tí-dif-na	tḗ-dif-na	2p	tí-ktim-na	tē-kátim-na
ni-díf	nē-díf	1p	ni-ktím	nē-katím

2.2.2 It will be clear from Table 2.1 that, morphologically, Beḍawiē G_{PA} forms on triconsonantal roots quite strongly resemble, say, the Ge'ez subjunctive and equivalent forms in other Semitic languages (e.g. Arabic *majzūm*). On the other hand there is no obvious relationship between the Beḍawiē and

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[11] In the Modern South Arabian (MSA) languages apophony is also used to distinguish between certain 'subjunctive' and 'imperfect' forms of derived verbs. See for example the paradigms of Mehri causative forms in Johnstone, *Mehri Lexicon (MhL)* p xxxvii ff.

[12] These forms are termed 'perfect' and 'present' by Almkvist (*BSNOA*, §169/70) and Reinisch (*BdG*, §224), 'past' and 'present' by Roper (*TB*, §177/9), 'preterite' and 'present' by Hudson (*NSLE*, 115 [§8.2]). Apocopate and extended forms also occur in the Beḍawiē V_2 (suffixing) verbal system, which is discussed in Section 6. There are in fact two types of G_{PA} form, the 'declarative', represented in Table 2.1, and a form which in Haḍanḍiwa has 'conditional' function. The latter is discussed at §3.2 below.

[13] Data from *TB*, §179 and §201.

Semitic G_{PE} forms (e.g. Arabic *muḍāri'*; Biblical Hebrew imperfect) ; this question is further explored in Section 4. Another important difference between the Semitic and Beḍawiē V_1 verbal systems is the more common occurrence in the latter of biconsonantal stems. Reinisch correctly judges the majority of these to be worn-down Semitic triconsonantals, although a small number are Cushitic originals.[14] Pure biconsonantal roots are of course absent from the older verbal systems of the Semitic languages, except for weak verbs preserving only two radicals in certain environments, as for example Arabic II-weak 3ms form *yaqum*.

2.2.3 Morpheme *n* of the G_{PE} form is prefixed to its stem in biconsonantal singular forms and prefixed to the second consonant in triconsonantal singular forms. This morpheme is absent from plural forms, which are distinguished from the equivalent G_{PA} forms as follows:

1. **In biconsonantal G_{PE} forms the vowel in the first syllable is lengthened and its quality changed, eg. *nidíf* (1p G_{PA}) vs *nēdíf* (1p G_{PE});**
2. **In triconsonantal G_{PE} forms the vowel in the first syllable is lengthened and its quality changed, but also, except in the Arteiga dialect (Table 4.2), an additional syllable is created by inserting a vowel between the first and second radicals, eg *niktím* (1p G_{PA}) vs *nēkatím* (1p G_{PE}).**

2.2.4 In the Haḍanḍiwa dialect the *n* is prefixed to the first radical of triconsonantal forms when the second consonant of the stem is a weakened former laryngal/pharyngal, typically equivalent to Semitic *ḥ* or *ḵ*, so that such stems have in effect come to be regarded as biconsonantal. This formation seems not to occur in the Beni Amer and Bishari dialects. In addition, Haḍanḍiwa 2s and 3s forms of this type may retain the pronominal morpheme; compare for example *tinḍhī́na* (2ms) vs *ḍánhī́na*.[15]

2.3 Derived Forms

2.3.1 A range of derived stems occurs in association with both the V_1 and V_2 verb sets. For stems whose deriving morpheme incorporates a consonant, as for example the S-form, the principal difference between the two types is that:

1. **Type V_1 verbs prefix the *s* and any accompanying vowel to the first radical, much as in the Semitic languages (details in Section 8);**

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[14] ***BdG*, §197. Stem pattern CvC (with short vowel) tends to be more common in Roper's data and CVC (with long vowel) in Reinisch.**

[15] **Root = *ḍhn* 'be alive', see *TB*, §234.**

2. Type V_2 verbs suffix the *s* and any accompanying vowel to the final radical, as is typical of the Cushitic languages.

2.3.2 Cushitic languages without prefixing verb forms display the second pattern exclusively.[16] Of languages with both types, Saho and 'Afar generally follow the Beḍawiē pattern but, apparently with a single exception, the other Cushitic languages with prefixing G forms appear not to have prefixing derived forms among their very limited repertoires.

2.3.3 In the context of the present study, the obvious initial conjecture would be that type V_1 derived forms reflect the postulated Semitic component in Beḍawiē and type V_2 forms the Cushitic component. Beḍawiē 'perfect' and 'imperfect' forms on derived V_1 stems are always differentiated by apophony, in the Semitic manner, whereas 'imperfect' V_2 derived forms are marked by the same suffixed morphemes as the 'imperfect' V_2 G-forms (Section 6).

2.4 Subject Pronominal and Number Morphemes

2.4.1 Subject pronominal morphemes prefixed to the Beḍawiē G_{PA} verb forms fit comfortably into the Semitic pattern[17] albeit the correspondences among the suffixed morphemes are more elusive. As in the Ge'ez subjunctive, final *-i* in the Beḍawiē 2fs form may well be a worn down *-ī*, the characteristic 2fs marker in the Semitic languages, and the corresponding 2ms morpheme *–a* may be a Beḍawiē innovation by analogy with the 2fs morpheme. Although the morphemes suffixed to the Beḍawiē 3p/2p forms match those of the 3fp/2fp forms of Literary Arabic and Biblical Hebrew, the Beḍawiē pattern, with plural forms not differentiated for gender, is typically Cushitic (Table 4.2).

2.5 Stress Patterns

2.5.1 Initial comparison of the stress patterns of the Haḍanḍiwa triconsonantal G_{PA} forms with selected Semitic G_{PA} forms suggests a fairly straightforward relationship between Beḍawiē and the Semitic forms (Table 2.2 – which utilises a hypothetical root *npr* with stress marked by a dash). There is in fact a close match between the Haḍanḍiwa and Mehri 3s, 1s and 1p forms while, as will be seen from Table 3.1, the Beni Amer and Bishari plural stress patterns match those of the Mehri plurals, and indeed

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[16] Not all retain the *s* in their causative/factitive forms. See for example the Somali paradigms in L. Reinisch, *Die Somali-Sprache (SoG)* (1903), §298.

[17] For Semitic forms see E. Lipiński, *Semitic Languages: Outline of a Comparative Grammar (OCG)*, p388/9 (2001). Dual forms are entirely (?) absent from the Cushitic languages.

the Arteiga patterns match the Mehri patterns almost completely.[18] The principal difference between the Beḍawiē and the Arabic/Ge'ez forms is that main stress in the 3s, 1s and 1p forms in the latter pair falls on the first syllable.[19]

TABLE 2.2 HAḌANḌIWA AND SELECTED SEMITIC G_{PA} STRESS PATTERNS

Form	Beḍawiē	Mehri	Arabic	Ge'ez
3ms	inpí-r	yənpē-r	yá-npur	yə́-npər
3fs	tinpí-r	tənpē-r	tá-npur	tə́-npər
2ms	tí-npira	tənpē-r	tá-npur	tə́-npər
2fs	tí-npiri	tənpē-ri	tanpú-rī	tənpə́-ri
1s	anpí-r	lənpē-r	'á-npur	'ə́-nper
3mp	í-npirna	yənpē-rəm	yanpú-rū	yənpə́-ru
3fp		tənpē-rən	yanpú-rna	yənpə́-rā
2mp	tí-npirna	tənpē-rəm	tanpú-rū	tənpə́-ru
2fp		yənpē-rən	tanpú-rna	tənpə́-rā
1p	ninpí-r	nənpē-r	ná-npur	nə́-npər

3. G_{PA} Forms

3.1 Aspect

3.1.1 On the function of the Beḍawiē 'tenses' Reinisch states; 'As in Semitic, the perfect (i.e. G_{PA}/G_{SA} form) in Beḍawiē marks a completed action or a condition which has come about; the present-future ($G_{PE}G_{SE}$) on the other hand is employed for a developing, and therefore unfinished action or similar, exactly as the Semitic imperfect', and Roper observes that 'the primary strong (V_1) verb normally has the sense of a single act only'.[20] Reinisch's analysis, which applies both to V_1 and V_2 verbs, implies that the Beḍawiē verbal system, like those of the older Semitic languages, was originally aspect- rather than tense-based.

3.1.2 Study *Aspect in Common Semitic and Egyptian (ACSE)* proposes that the Semitic (and pre-Semitic) verbal system was originally four-term, comprising 'singulative' events (real or hypothetical) viewed as occurring only once, 'non-singulative' embracing all other events except those of a more strictly 'iterative' nature, and 'stative'. It is further argued that 'singulative' aspect in Semitic was originally expressed by an apocopate (G_{PA}) form, 'non-singulative' by an 'extended' (G_{PE}) form incorporating an *n*-based morpheme as its aspect marker, 'iterative' by a reduplicating (G_{PR}) form and 'stative' by a G_S

[18] **Mehri data from Johnstone, *MhL* p xxi.**

[19] **Ge'ez patterns in accordance with the rules of T.O. Lambdin, *Introduction to Classical Ethiopic (Ge'ez)* (1978), p5.**

[20] ***BdG*, §224 and *TB*, §171.**

form.[21]

3.1.3 Thus it may be that Beḍawiē V_1 forms describing 'a single act', being morphologically of type G_{PA}, also originally expressed the aspect element 'singulative' and so be diachronically related to the equivalent Semitic forms both functionally and morphologically. Similarly, if the proposed element 'non-singulative' were the ancestor of the term 'present' used by Reinisch and Roper then, at least among Beḍawiē regular verbs, there would be a verb form expressing 'non-singulative' aspect which in its singular forms also incorporates an aspect morpheme based on phoneme *n*. But of course unlike Semitic morpheme *n*, which (ignoring any final short vowel) generally occurs in final position where it has been preserved, Beḍawiē *n* precedes biconsonantal stems and is generally infixed into triconsonantal stems (Table 2.1).

3.2 Non-indicative Functions

3.2.1 The definition of the aspect term 'singulative' proposed in *ACSE* §1.3 implies that the Semitic G_{PA} form was originally employed not only for 'indicative' functions but also for such functions as 'conditional', 'jussive/cohortative' and 'negative imperative'. Literary Arabic, Biblical Hebrew and Akkadian provide ample evidence to support this hypothesis and something of the same is also true for Beḍawiē.

3.2.2 Although the details are complex, the use of G_{PA} forms in Semitic conditional clauses appears originally to have been restricted to those cases where it is 'possible' for the condition to be fulfilled, e.g. 'if I see him (which I may) I will tell him', as opposed to 'impossible' conditions, e.g. 'had I seen him (which I did not) I would have told him'[22] In the Haḍanḍiwa dialect both the protasis and apodosis of 'possible' conditions involving a prefixing verb may be expressed through a second type of G_{PA} form in which, in regular verbs, the first vowel is lengthened, as for example *tīdíf* vs *tidíf* (3fs);[23] declarative G_{PA} verbs (as in Table 2.1) will be denoted G_{PAD} and those with lengthened first vowel G_{PAC}.[24] Although the

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[21] ***ACSE* Section 4.**

[22] **See in particular §2.1/2/5 in *ACSE*.**

[23] **For paradigms see *TB*, §189 and §206. Compare *BdG*, §231 and Hudson, 'Beja', 120 [§9.1C]. Reinisch cites a few verbs with identical G_{PAD} and G_{PAC} forms. Conditional forms on suffixing verbs and their syntax are analogous to those on prefixing verbs. See *TB*, §148ff, Appleyard, 'BCL', §2.5, and §7.1 below.**

[24] **The G_{PAC} form of 'intransitive' verbs (Table 5.1) is generated in various ways. In Roper's Haḍanḍiwa examples**

constructions differ in details (for instance the verb in a Beḍawiē protasis is accompanied by suffix *–ek* or *–ēk*) it is not difficult to relate this particular Haḍanḍiwa conditional construction to Arabic and Biblical Hebrew constructions similarly utilising G_{PA} forms in both protasis and apodosis.[25]

3.2.3 But unless the Haḍanḍiwa construction is the more original, this association with the Semitic languages is weakened by the fact that 'possible' conditions in Beni Amer utilise the G_{PAD} form in the protasis, accompanied by *–ek* or *–ēk*, and the G_{PE} form in the apodosis, as for example *barūk bēn ō-tak te-dir-ék aní andírhok* [you–that–man–if you kill–I–will kill you] 'if you kill that man I'll kill you'.[26] Moreover 'possible' conditionals in Saho tend to follow the Beni Amer pattern as; *atú tō heyótō ti-gdifə́-n-kō anú kū ágdifä,* identical in meaning to the Beni Amer example, where the first verb is G_{PA}, the second G_{PB} (Tables 6.1 and 6.2) and Saho suffix *–kō* is equivalent to Beḍawiē *–ēk*. This similarity obviously invites the conjecture that the constructions in the two languages share a common origin, and so conflict with the conclusion drawn from the Haḍanḍiwa data.

3.2.4 But Beni Amer 'impossible' conditions utilise the G_{PAC} form in both protasis and apodosis as; *aní mehalagáb íbery-ék,* še*'áb ídleb* [I-money-I possessed-a cow-I bought] 'had I had money I would have bought a cow'.[27] But on the other hand the Beni Amer (and Arteiga) G_{PAC} form functions primarily as a pluperfect[28] and it may be that its use in 'impossible' conditionals is secondary.[29] But the range of

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(*TB*, §240) the final vowel is lengthened and apophony is applied, as for example *adirór* (1s, G_{PAD}) vs *ídirūr* (G_{PAC}). In the examples recorded by Reinisch itransitive G_{PAC} forms can typically be derived formally from the G_{PE} form through apophony, as for example (*BdW*, p136) *ákbari* (G_{PE}) vs *ékbera* (G_{PAC}), both 1s.

[25] For Arabic see W. Wright, *A Grammar of the Arabic Language*[3] (1962), Vol. II §17c. For Hebrew see W. Gesenius and E. Kautsch *Hebrew Grammar*[2] (1966), §109h.

[26] *BdG*, §266.

[27] *BdG*, §232, note.

[28] *BdG*, §231-3; 'Beja', p115 [§8.2 (iii)]. Roper does not discuss the Haḍanḍiwa pluperfect. Almkvist records a different construction for Bishari (*BSNOA*, §181) but suspects, on the basis of (Beni Amer) paradigms cited by Munzinger, that the G_{PAC} form may exist in Bishari but that he was unable to elicit it from his informants (§182).

[29] The protasis of 'impossible' constructions in Haḍanḍiwa utilises the G_{PAC} form of *ak* 'be' (plus *–ek*) with a gerund, and a G_{PAD} form is employed in the apodosis. 'Impossible' conditions in the Atreiga dialect appear to be expressed by what Hudson ('Beja', p115) terms the 'volitional' form, which is in effect the G_{PAC} form plus suffix *–ay*. Almkvist appears not to discuss Bishari 'impossible' conditions.

conditional clauses in the various Semitic languages suggests that such constructions were or became an area of considerable instability, and it may be that the Beḍawiē and Saho constructions in their own way reflect this same instability.[30]

3.2.5 Positive optative forms on V_1 verbs in Haḍanḍiwa and Arteiga are formed by prefixing *bā* to the G_{PAC} form and negative optatives by prefixing *bā* to a modified G_{PE} form.[31] The Beni Amer positive optative again uses a different construction, based on the G_{PAD} form, although the negative optative resembles the Haḍanḍiwa construction rather more closely.[32] Beḍawiē negative imperative forms utilise the base form of the stem, for example *dífa* 'go', *bā́-dífa* 'don't go'.[33]

3.2.6 Thus whatever the precise origin of the G_{PAC} form it is suggestive that the use of G_{PA} forms in Beḍawiē conditional and optative constructions to some extent parallels the equivalent constructions in (say) Arabic and Biblical Hebrew. Of course, unlike Beḍawiē, no Semitic language has distinct G_{PAD} and G_{PAC} forms, but as Semitic forms expressing jussive and associated senses tend to exhibit stress patterns different from those of declarative forms[34] so the Beḍawiē forms, which typically differ only in the length of their initial vowel, may themselves reflect originally differing stress patterns.[35]

3.3 Origin of G_{PA} Form Stress Patterns

3.3.1 The varying stress patterns of G_{PAD} verb forms in the Beḍawiē dialects are shown in Table 3.1,

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[30] See for example the range of conditional constructions in Mehri (J.C.E. Watson, *The Structure of Mehri (TSM)* 9.2.8). Some 'possible' constructions use the (G_{PA}) subjunctive form (p397) and some 'impossible' conditions use the (Mehreyyet) conditional form (p399).

[31] *TB*, §190/1, §207/8; 'Beja', p115. Beḍawiē *bā-* is similarly used with V_2 verbs (*TB*, §157).

[32] *BdG*, §263/4. Almkvist does not discuss Bishari optatives.

[33] *TB*, §176, §198; *BdG*, §255/6.

[34] Lipiński, *OCG*, §25.8.

[35] The Saho triconsonantal G_{PA} (perfect) and G_{PB} (imperfect) forms, for example 1s *ífdinä* (G_{PA}) vs *áfdinä* (G_{PB}), are functionally equivalent to the Beḍawiē G_{PA} and G_{PE} forms (Tables 6.1 and 6.2). The Saho forms are accompanied by a third G_P form, termed 'subjunctive' by Reinisch, whose 1s form is *afdánō* and 3p form *yafdánōn*. With the *–ō* of these forms compare the subjunctives of Somali G_P verbs (Reinisch *SoG* §266/9/70). Again like the Somali subjunctives, the initial vowel of the Saho paradigm suggests that the subjunctive is based on the G_{PB} form rather than the G_{PA}, and is thus unlikely to be related to the Beḍawiē G_{PAC} form.

along with the equivalent Mehri (subjunctive) forms.[36] As there are only two or three possible syllables on which the main stress can fall, that the Mehri biconsonantal singular and 1p forms parallel certain of those of the Beḍawiē dialects is of interest - but could merely be due to chance. But the situation is somewhat different with the triconsonantal forms in that the Arteiga paradigm almost completely matches that of Mehri - excluding the 1s form, although recall that Arteiga is the dialect most exposed to Arabic influence.

TABLE 3.1 G_{PAD} FORM STRESS PATTERNS

	Biconsonantal			Triconsonantal			
	Haḍenḍiwa B. Amer Bishari	Arteiga	Mehri	Haḍenḍiwa	B. Amer Bishari	Arteiga	Mehri
3ms	idí-f	í-dif	yəmē-t	iktí-m	í-ktim	iktí-m	yərkē-z
3fs	tidí-f	tí-dif	təmē-t	tiktí-m	tí-ktim	tiktí-m	tərk-ēz
2ms	tí-difa	tidí-fa	təmē-t	tí-ktima	tí-ktima	tiktí-ma	tərkē-z
2fs	tí-difi	tidí-fi	təmē-ti	tí-ktimi	tí-ktimi	tiktí-mi	tərkē-zi
1s	adí-f	á-dif	ləmē-t	aktí-m	á-ktim	á-ktim	l-ərkē-z
3mp 3fp	í-difna	idí-fna	yəmē-təm təmē-tən	í-ktimna	ektí-mna	iktí-mna	yərkē-zəm tərkē-zən
2mp 2fp	tí-difna	tidí-fna	təmē-təm təmē-tən	tí-ktimna	tektí-mna	tiktí-mna	tərkē-zəm tərkē-zən
1p	nidí-f	ní-dif	nəmē-t	niktí-m	ní-ktim	niktí-m	nərkē-z

3.3.2 W**hich triconsonantal pattern is the more original? Note first the identical Beni Amer and Bishari patterns, despite these dialects being spoken respectively towards the southern and northern ends of the Beḍawiē-language area and therefore perhaps less likely to have been in recent close contact ; but it may simply be that their patterns have been more strongly influenced by Arabic and N. Ethiosemitic, a conjecture supported by the fact that their biconsonantal patterns agree with those of Haḍanḍiwa. On the other hand, for all there is a close match between the Arteiga and Mehri triconsonantal forms, the Arteiga patterns, both biconsonantal and triconsonantal, appear to be a largely independent development.[37] Thus for the purposes of what follows the Haḍanḍiwa triconsonantal pattern is taken to**

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[36] **Mehri data from Johnstone, *MhL* p xxi and xxix (the Mehri 'biconsonantal' root is *myt*). The Beḍawiē accent is marked by a diacritic and a dash, e.g. *í-e***

[37] **The Haḍanḍiwa and Arteiga stress patterns for non-indicative (G_{PAC}) forms (biconsonantal and triconsonantal) are identical to those on the associated G_{PAD} forms, whereas Beni Amer G_{PAC} forms appear always to stress the first syllable.**

be the more original, albeit the evidence in support of such a conclusion is not compelling.[38]

3.3.3 Hudson suggests that surface stress in Beḍawiē originates in an underlying tone system ; for example he derives accent on the Arteiga 2s and 3/2p forms from an underlying falling tone on the final syllable, which yields main stress on the penultimate syllable.[39] Leaving aside any particular reservations regarding Hudson's hypothesis, if Beḍawiē is indeed a composite Cushitic and Semitic language one could readily envisage stress-based Semitic prefixing verb forms (perhaps originally rather like those of Mehri) being influenced by some kind of Cushitic tone system, with consequent changes to the original Semitic stress patterns,[40] although if the Haḍanḍiwa patterns are indeed the more original they would conflict with Hudson's analysis of the Arteiga forms. An alternative explanation may be that, as many V_1 biconsonantals originate in triconsonantals, the shift of stress in 2-syllable forms may have begun in the biconsonantal set and was then extended by analogy to the triconsonantals, although this would not of course account for the 3-syllable patterns.

4. G_{PE} Forms

4.1 Paradigms

4.1.1 Paradigms for the regular transitive G_{PE} verb, along with stress patterns and equivalent transitive forms from Mehri, are shown in Tables 4.1 and 4.2, where accent is marked by a diacritic and/or a dash.[41]

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[38] According to Reinisch, Saho G_{PA} declarative and G_{PB} prefixing verb forms, biconsonantal and triconsonantal, tend to stress the first syllable, although subjunctive forms always stress the second syllable (*Irob-Saho*, p14-16 and *SaW*). For what it is worth, this strengthens the argument in favour of the Beni Amer/Bishari pattern, although Saho and 'Afar display more transparent loans from the N. Ethiosemitic languages than does Beḍawiē. Refer to Tables 6.1 and 6.2.

[39] 'Beja', p101/2, 120.

[40] Hudson's hypothesis in fact requires that tone was already applied to the G_{PA} forms, rather than being the mechanism by which the actual stress patterns came into being.

[41] Data from *TB*, §179/201; *BdG*, §235/6; *BSNOA*, §172/5 and 'Beja', p120 [§9.1A]. The Mehri data is from Johnstone, *MhL* p xxi and xxix.

TABLE 4.1 BICONSONANTAL G_{PE} PARADIGMS COMPARED

Person	Haḍanḍiwa	Beni Amer	Bishari	Arteiga	Mehri
3ms	ində́-f	ində́-f	é-ndīf	’ində́-f	yəmū-t
3fs	tində́-f	tində́-f	té-ndīf	tində́-f	təmū-t
2ms	tí-ndīfa	tí-ndīfa	té-ndīfa	tində́-fa	təmū-t
2fs	tí-ndīfi	tí-ndīfi	té-ndīfi	tində́-fi	təmá-yti
1s	andə́-f	andə́-f	á-ndīf	andə́-f	əmū-t
3mp 3fp	ə́-difna	ēdí-fna	ēdí-fna	’ēdí-fna	yəmá-wt təmū-tən
2mp 2fp	tə́-difna	tēdí-fna	tēdí-fna	tēdí-fna	yəmá-wt təmū-ən
1p	nēdí-f	nə́-dif	nə́-dif	nēdí-f	nəmū-t

4.1.2 In the triconsonantal paradigms a vowel appears between the first and second root consonants, with the exception of the Arteiga plural forms. This contrasts with the situation in Arabic or any N.W. Semitic G-form but is partly in agreement with the imperfective forms of Ethiosemitic (North and South) and also the Modern South Arabian (MSA) languages for, as can be seen from Table 4.2 the Mehri singular and 1p forms on active strong verbs have a long vowel between the 1st and 2nd radical.[42] Thus the typical Beḍawiē G_{PE} paradigm, with vowel between first and second stem consonants but without gemination, is to some extent reminiscent of those of MSA and S. Ethiosemitic.[43]

TABLE 4.2 TRICONSONANTAL G_{PE} PARADIGMS COMPARED

Person	Haḍanḍiwa	Beni Amer	Bishari	Arteiga	Mehri
3ms 3fs	kantə́-m	kantə́-m	kantə́-m	kantə́-m	yərū-kəz tərū-kəz
2ms	ká-ntīma	ká-ntīma	ká-ntīma	kantə́-ma	tərū-kəz
2fs	ká-ntīmi	ká-ntīmi	ká-ntīmi	kantə́-mi	tərē-kəz
1s	akantə́-m	akantə́-m	á-kantīm	’akantə́-m	ərū-kəz
3mp 3fp	ēká-timna	ekatí-mna	ekatí-mna	’ēktí-mna	yərə́-kzəm tərə́-kzən
2mp 2fp	tēká-timna	tekatí-mna	tekatí-mna	tēktí-mna	tərə́-kzəm tərə́-kzən
1p	nēkatí-m	nekatí-m	nékatim	nēktí-m	nərū-kəz

4.1.3 But in contrast to S. Ethiosemitic, where the G_{PB} (i.e. imperfective) paradigms resemble those of

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[42] For forms in other MSA dialects see D. Cohen, *La phrase nominale et l’évolution du système verbal en sémitique; études de syntaxe historique (ESVS)* (1984), p69. Those of Soqotri differ somewhat but still display separation of the first and second stem consonants. Cohen (*ESVS*, p73) derives the MSA transitive forms from an original **yiktubu* which, if correct, would be almost identical to the equivalent Arabic form. For South Ethiosemitic forms see Lipiński, *OCG*, §38.7.

[43] Recall that in Saho and ‘Afar the first and second stem consonants of triconsonantal G_{PB} forms usually form a

the MSA languages, the equivalent 'imperfect' forms in Geʿez and the other N. Ethiosemitic languages display gemination of the second radical (type G_{PG}), for example Geʿez *yənaggər* (3ms), although compare, say, Tigriňa *tənagri* (2fs) and Tigré *təqetla* (2fp). Cohen offers two conjectures for the Geʿez G_{PG} form, one where it has evolved by analogy with the equivalent D-form, and another which assumes that the original form was **yənagr*.[44]

4.1.4 In explanation of the Beḍawiē G_{PE} forms Reinisch proposes as the source of morpheme *n* an auxiliary V_1-type verb *an* 'say/be', preposed to a stem which has been nominalised in some way.[45] But although his proposal is fully worked out for V_2 verb forms (see Section 7) for V_1 forms it is little more than an assertion. Cohen attempts to flesh out Reinisch's proposal, but there are several problems with his analysis.[46] Firstly, if Roper and Reinisch's paradigms for verb *an* are taken as a model, the Beḍawiē forms cited by Cohen are not in all cases correct. For instance, he cites the V_2 3ms form as *tam-in-i* (type G_{SE}) in parallel with V_1 *in-dīf* (G_{PE}) where Roper and Reinisch have as *tam-īn-i,* with long second vowel. Similarly Cohen has *tam-ān-e* for the 1s form where Roper has *tam-an-e* and Reinisch *tam-an-i*, although the latter two forms in fact provide a better fit with Cohen's hypothesis. A further problem is that in the 3ms G_{PE} form cited by Cohen (*in-dīf*) initial *i* is clearly the 3ms subject pronoun (compare the equivalent G_{PA} form *i-dif*) and his 'original' 3ms prefix would therefore have to have been **i-in-* rather than *in-*.[47] These objections could be dismissed as matters of detail, but an insuperable problem for Cohen's and Reinisch's hypothesis is that *n*-based morphemes are entirely absent from the prefixing derived verb forms (Section 8) and from the intransitive G_P forms (Section 5).

4.1.5 Diakonov proposes an evolution of the G_{PE} verb form analogous to a supposed evolution of the 'imperfect' form in Akkadian.[48] His conjecture of a pattern of evolution (3ms) **ifaddig* → **ifandig* →

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cluster and are differentiated from the G_{PA} forms by apophony (Tables 6.1 and 6.2).

[44] *ESVS*, p68. It is unclear (to this author) to what extent the modern pronunciation of Geʿez has been influenced by the modern Ethiopian languages, especially Amharic. See for example Lipiński, *OCG*, §8.11.

[45] *BdG*, §234, §307.

[46] *ESVS*, p93ff. In passing, he incorrectly states that in V_1 set (his group A) biconsonantal stems are more common than triconsonantal. In fact some 52 per cent of the V_1 set are fully triconsonantal (i.e. not based on weak roots) but only 19 per cent are fully biconsonantal.

[47] See the paradigm in *BdG*, §307.

[48] Cited in *ESVS*, p95.This conjecture has also been explored by Voigt (reference in Appleyard, 'BCL', p175). See

***fandig* is interesting but has at least the following weaknesses:**

1. **There is no evidence in Beḍawiē (or Saho-'Afar) for an original G_P-form of type **ifaddig*;[49]**
2. **The lexical pattening of Beḍawiē V_1 stems and roots generally points to an Arabian (i.e. non-Ethiosemitic) origin (§9.1.1 below), where, once again, there is little or no evidence for G_P forms of type **ifaddig*;**
3. **Although the introduction of a supplementary phoneme *n* into lexical items is not uncommon in Lowland East Cushitic and N. Ethiosemitic, there are very few examples of this phenomenon in Beḍawiē and certainly not such as to trigger an important modification to the V_1 verbal system;[50]**
4. **Diakonov's conjecture, like those of Reinisch and Cohen, cannot account for intransitive verbs.**

4.1.6 But notwithstanding point 2 above, one school of thought asserts that common Semitic originally expressed 'imperfective' aspect through a form along the lines of (3ms) **iqattal* and that G_{PE} forms of type *yaqtulu* are secondary.[51] Evidence in support of this hypothesis is drawn largely from Akkadian and Geʿez, with support from Berber.[52] But aside from the former two languages – albeit that Akkadian is one of the most important languages for the history of the Semitic verbal system - there is little evidence for an original G_P form **iqattal* elsewhere in Semitic, particularly not in Epigraphic South Arabian (ESA), MSA or S. Ethiosemitic, and it thus seems more likely that geminating forms in the N. Ethiosemitic languages are secondary, originating in earlier forms lacking gemination (see the discussion in *ACSE* Section 3).[53] This said, it must be conceded that if *yənaggər* is a secondary formation in Geʿez,

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also Lipiński, *OCG*, §38.5.

[49] Saho displays a good number of G-form verbs with doubled second radical but these are almost all N. Ethiosemitic loans conjugated using the regular Saho prefixes and suffixes.

[50] Many Ge'ez roots incorporate phoneme *n* in position C_2 (equivalent to *r* in Arabic quadri-consonantal roots), but this *n* is preserved in the 'imperfect' conjugation, and is not assimilated to the phoneme in position C_3.

[51] See for example Lipiński, *OCG*, §38-5ff.

[52] See the review of the literature and discussion in H. Fleisch, *Traité de philologie arabe* (1961-79), Vol II, §126p ff. Also M.L. Bender et al, *Language in Ethiopia* (1976), p24.

[53] Lipiński (*OCG*, §38.7) cites sporadic S. Ethiosemitic forms displaying gemination, but these could be secondary rather than primary. Lipiński (§38.5) also suggests that the Mehri form *yərōkəz* derives from **yarakkaz*, but Cohen points out that stressed vowels in Mehri (closed or open syllables) are always long (*ESVS*, p75). The G_{PAC} form (§3.2 above) suggests that in Beḍawiē a stressed vowel may also become long in certain environments. Could gemination in

Tigriña and Tigré, then *_ifaddig_ as an interim formation in Beḍawiē is not impossible, even though there is no evidence for it.

4.2 Evolution of the Regular G_{PE} Form

4.2.1 Although Cohen's proposal for the evolution of the regular Beḍawiē G_{PE} forms (§4.1.4. above and *ESVS* p93ff) is more carefully worked out than that of Reinisch, both have an air of contrivance, and Diakonov's proposal is in effect a conjecture founded on a conjecture. But there are two other possible explanations which are potentially rather more satisfactory. The first and more complex of these is founded on the proposal in *ACSE* §4.2 that the morpheme marking 'non-singulative' aspect in Semitic (and pre-Semitic) was *_un,_ positioned at the end of the verb string (see also §3.1 above). As noted in *ACSE*, versions of this morpheme occur in various Semitic languages (ESA in particular, where forms incorporating final *n* are common).[54] In sum, the functional similarity between the Beḍawiē G_{PE} forms and morphologically equivalent forms in the Semitic languages, together with a possible early date for initial contact between Semitic speakers and Cushitic speakers in the Beḍawiē language area, when older Semitic forms may still have been in use,[55] invites the conjecture that morpheme *n* of the Beḍawiē G_{PE} singular forms may also originate in the same 'non-singulative' aspect morpheme *_un_.

4.2.2 In §3.3 above it is suggested that the stress patterns on Haḍanḍiwa triconsonantal G_P verbs may be the more original. Should this be so the 1s and 3s G_{PE} forms (Table 4.2) could originate in modification of an earlier Semitic stress pattern such that the main accent came to fall between the second and third root consonants. This process could have begun either as a simple shift in regular triconsonantal stems, perhaps in conjunction with a shift of main stress to the final syllable in two-syllable biconsonantal forms originating in triconsonantals,[56] or to have taken place under the influence of a Cushitic tone system - or some

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the N. Ethiosemitic 'imperfective' verb forms be an alternative consequence of stress falling on an adjacent vowel?

[54] See *ACSE* §2.7. ESA forms in *–nn* are also common and are less readily explained by the hypothesis proposed in *ACSE*. See for example M. Höfner, *Altsüdarabische Grammatik* (1943), §59; N. Nebes and P. Stein, 'Ancient South Arabian' [ASA], in R. D. Woodward (ed.), *The Ancient Languages of Syria-Palestine and Arabia* (2008), p155.

[55] This claim is based partly on the fact that the northern Beja (the Bishari in particular) are famed camel breeders. Domesticated at some time around 1000 BCE, the camel is first recorded in Egypt ar around 550 BCE, inviting the conjecture that it may have been introduced into Egypt through contact with the Beja.

[56] It may equally be the case that the loss of a 'weak' stem consonant (in Beḍawiē terms) may have been the result of

combination of both (§3.3.3 above).

4.2.3 If the original marker of 'non-singulative' aspect in Semitic was indeed **un*, its loss from many of the Semitic languages, except in particular environments, suggests that this final syllable would not have been strongly accented (see §8.5 in *MPSVS*). Thus if the 'non-singulative' marker in Beḍawiē G_{PE} forms was originally identical with that proposed for the Semitic G_{PE} forms it is likely that the original final syllable of Beḍawie G_{PE} verbs on triradical roots would likewise have diminished, with or without any other stimulus. Then, at least for Beḍawiē singular triconsonantal forms, the proposed rightward shift of main stress could have resulted in certain forms tending towards a final consonant cluster, which might have been a precondition for repositioning aspect morpheme *n* in front of the second stem consonant.

4.2.4 If Beḍawiē and Mehri intransitive verbs originate in a common form, as is argued in Section 5, it may be instructive to compare the regular Beḍawiē G_{PE} form with the equivalent Mehri regular imperfective form. Paradigms are given in Table 4.3, from which it will be seen that the primary marker of imperfective aspect in Mehri singular and 1p forms is a long or accented vowel between the first and second radicals, just as the primary marker in regular Beḍawiē singular forms is phoneme *n* between the same two radicals. Are these phenomena related? If so there are two primary possibilities ; either Beḍawiē *n* originates in a long vowel similar to that of Mehri, or the reverse, namely that the Mehri long vowel reflects an original *n*.

TABLE 4.3 TRICONSONANTAL BEḌAWIĒ AND MEHRI G_{PE} PARADIGMS

Person	Haḍanḍiwa	Mehri	Person	Haḍanḍiwa	Mehri
3ms	kantī́-m	yərū-kəz	3mp	ēká-timna	yərə́-kzəm
3fs		tərū-kəz	3fp		tərə́-kzən
2ms	ká-ntīma	tərū-kəz	2mp	tēká-timna	tərə́-kzəm
2fs	ká-ntīmi	tərē-kəz	2fp		tərə́-kzən
1s	akantī́-m	ərū-kəz	1p	nēkatí-m	nərū-kəz

4.2.5 Although there is no direct evidence for an original *n* in the Mehri paradigm, there are two pieces of evidence to suggest that this may not always have been the case, although the details are rather complex :

1. **As noted above it is clear that the ESA languages (Sabaic in particular) in varying degrees exhibit an *n*-based morpheme in their G_{PE} forms (*ACSE* §2.7). If it can then be assumed that the MSA languages are more closely related to ESA than to the other Semitic language groups, if not actually direct descendents,**

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the change in stress pattern, rather then the cause.

then the former at some stage may also have incorporated an *n*-based morpheme in their G_{PE} forms.[57]

2. The previous existence of an *n*-based aspect morpheme may also be supported by the Mehri 'conditional' paradigm, whose 3ms form is *yərkēzən*, i.e. the 'subjunctive' form *yərkēz* plus final *-ən*. Whether this form is a Mehri innovation (it does not occur in all Mehri dialects – see *TSM* §2.5.1.3.2.3) or does indeed in some way reflect an original marker of 'non-singulative' aspect seems impossible to say on present evidence, but note that G_{PE} forms in final *n* also appear to be common in ESA conditional constructions.[58]

4.2.6 Suppose then that Beḍawiē and Mehri triconsonantal 3ms G_{PE} forms originate in Common Semitic **yíqburùn* (*ACSE* §4.2), where *í* marks the main accent and *ù* the secondary. If the main accent in South Arabian G_{PE} forms later came to fall between the second and third radicals (§4.2.2) the syllable structure could have become **yìqbúrun* (cf. Mehri conditional form *yərkēzən*). In Beḍawiē the resulting weakening of the final syllable could then have yielded form **yìqbúrn* with final consonant cluster. In Semitic terms such a form would have been unstable and could have resulted in the *n* either being lost or being shifted to precede the second radical, perhaps giving a form **(y)iqànbúr*.[59] Following further detail modifications this could then have become the attested form *qànbī́r*.[60] In Mehri the *n* could have been transposed and then assimilated, yielding a long vowel, as in *yərūkəz*, accompanied by simultaneous or subsequent modifications of the other vowel quantities and stress pattern.[61]

4.2.7 The other major possibility is of course that the MSA imperfect forms evolved much as proposed by Cohen (*ESVS* 73) and independently of any final morpheme **-un*, in which case the Beḍawiē

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[57] Nebes and Stein assert firmly that 'the modern South Arabian languages in no way represent the linguistic continuation of Ancient South Arabian' See N. Nebes and P. Stein, *Ancient South Arabian* (*ASA)* p177.

[58] *ASA* p169 and A.F.L. Beeston, *A Descriptive Grammar of Epigraphic South Arabian (DGESA)* §21.9. In Mehri derived forms the imperfect and conditional forms are identical, both displaying final *-ən*. See for example the 'conative' paradigms in *MhL* p xxxiii and xxxiv.

[59] But if Mehri conditional form *yərkēzən* is original rather than a secondary innovation it would remain to be explained why the final *n*-based morpheme here did not also shift. Compare Cohen (*ESVS* 73) who proposes for Śḥəri an intermediate form **yikutb* which he takes to result in the attested form *ikóteb.*

[60] In Appendix A this proposal is worked through in detail for the whole Beḍawiē G_{PE} paradigm. On the default stem vowel *i* in Beḍawiē G_P forms see §6.1.1 below.

[61] On Mehri vowel *u* see *ESVS* 71ff.

imperfect could similarly have evolved along the lines : **ikátim* => **ikātim* => **ikántim* => *kantī́m*, which is somewhat reminiscent of Diakonov's proposal (see §4.1.5). This conjecture is supported in that there is no other evdence that verb forms with string-final aspect marker **-un* ever existed in Beḍawiē, and also by the fact that Almkvist (*BSNOA* §171) regards the *n* of the imperfect forms as merely reflecting nasalisation of the following consonant rather than being an independent phoneme.

5. `Intransitive Verbs

5.1 The paradigms in Table 2.1 apply to about 85 per cent of G forms in the V_1 set, ignoring genuinely irregular verbs. The majority of the remaining 15 per cent are generally intransitive in sense and, as Table 5.1 shows, are relatively regular in their triconsonantal G_{PA} forms, although the stem vowel tends to be *a* rather than the *i* of the 'regular' G_{PA} forms. In contrast, triconsonanal G_{PE} verbs of this type are marked by a final or near-final vowel *–i* and, again in contrast to regular verbs, retain their subject-pronominal morphemes throughout.[62]

TABLE 5.1 G_P INTRANSITIVE VERBS

	G_{PA}	G_{PE}		G_{PA}	G_{PE}
3ms	é-ngad	é-ngad-i	1s	á-ngad	á-ngad-i
3fs	té-ngad	té-ngad-i	3p	é-ngad-na	é-ngad-ī́-n(a)
2ms	té-ngad-a	te-ngád-ia	2p	té-ngad-na	té-ngad-ī́-n(a)
2fs	té-ngad-i	té-ngad-i	1p	né-ngad	né-ngad-i

In the G_{PE} paradigm of biconsonantal intransitives the vowel of the subject pronoun is generally *ē*, as for example G_{PA} *ḗ'ami* (1s) and *tē'ámya* (2ms) from *'ām* 'swell'. There are relatively few of these and a number appear to be Cushitic.

5.2 Reinisch, Roper and Almkvist together record thirty three triconsonantal verbs of this type, almost all of which are intransitive. From the paradigms in Table 5.1 it will be seen that morpheme *i* precedes the regular 2/3p suffixed morpheme *–na* and 2ms morpheme *–a* (compare the regular G_{PE} paradigms in Table 4.2). Verbs of this type occur in the Beni Amer, Haḍanḍiwa and Bishari dialects and

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[62] Table5.1 consists of Bishari forms on stem *negad* (Almkvist's Conjugation IV, *BSNOA*, §169, 178) ; the Beni Amer forms are very similar, although the G_{PE} 2fs suffix is (the expected) *ī* rather then the *i* of the Bishari paradigm (Reinisch, *BdG,* §220 and §244). The Haḍanḍiwa stems (Roper, *TB*, §240/2) display a range of vowel patterns and the G_{PE} forms may take a very short vowel between the first and second stem consonants, although this is often omitted. The accent appears to fall on the syllable bearing the stem vowel in the majority of Haḍanḍiwa forms.

so must be regarded as common Beḍawiē, and fairly ancient as a type. Lexical analysis suggests that rather more of these verbs have Arabic correlates than Ethiosemitic.[63]

5.3 **Although apparently inexplicable in the context of the regular verb, intransitives are an important pointer to possible cognates of the Semitic component in Beḍawiē, for the morphological difference between Beḍawiē 'transitive' and 'intransitive' verbs is paralleled in the MSA languages. For example, in contrast to regular 'active' verbs the Mehri regular 'intransitive' verb conjugates its imperfect and subjunctive forms almost identically, the only differences being between the 1s and 2fp forms (*MhL* p xxi/xxii). Table 5.2 compares the Bishari intransitive G_{PA} paradigm with the Mehri imperfect intransitive, which is slightly closer to the Beḍawiē paradigm than the equivalent subjunctive. As usual the Beḍawiē forms display the apparently Cushitic 2/3p ending, although note the partial match between this and the Mehri feminine plural suffixes. In contrast to the Beḍawiē forms the accent in the Mehri forms always falls on the stem vowel, although recall that the accent also tends to fall on the stem vowel in the Haḍanḍiwa intranstives (*TB* §240).[64]**

5.4 The formal and functional similarities between these two paradigms thus suggest that they may be diachronically related. If so, there are two possible hypotheses that might explain the Beḍawiē intransitives. Firstly, the Beḍawiē intransitive G_{PA} and G_{PE} forms could originally have been more or less identical, rather like the Mehri forms, and then have come to be differentiated by the addition of final or near final *i* to the G_{PE} forms, i.e. a Beḍawiē innovation. Alternatively, Cohen (*ESVS* p69-75) derives the imperfect paradigm of such MSA (Śḥəri) verbs from an original G_{PE} **yirkabu*, although his hypothesis is not without its difficulties. The typical stem vowel of Beḍawiē intransitives being *–a-*, as in Cohen's reconstruction, could the final *–i* of the Beḍawiē forms originate in the Semitic aspect marker *-u*?

TABLE 5.2 BEḌAWIĒ (G_{PA}) AND MEHRI INTRANSITIVE PARADIGMS

Person	Beḍawiē	Mehri
3ms	é-ngad	yə-t̲bōr
3fs	té-ngad	tə-t̲bōr
2ms	té-ngad-a	tə-t̲bōr
2fs	té-ngad-i	tə-t̲báyr-i

[63] **Compare for example the Arabic 1s apocopate intranstiive *'aġraq* 'drown' with Beḍawiē *agrā́k* (Reinisch) and Arabic *'abšaq* 'be quick' with *abšák*^{w} 'be alert' (Roper).**

[64] **Recall also that the Haḍanḍiwa 1s G_{PAC} (conditional) form is *ídirūr*, with long stem vowel as in Mehri, albeit with the accent on the initial syllable.**

Person	Beḍawiē	Mehri
1s	á-ngad	ə-ṯbōr
3mp	é-ngad-na	yə-ṯbīr
3fp		tə-ṯbōr-ən
2mp	té-ngad-na	tə-ṯbīr
2fp		tə-ṯbōr-ən
1p	né-ngad	nə-ṯbōr

5.5 Of these two possibilities the addition of a final vowel is probably to be preferred, partly because in Beḍawiē G_{PE} forms with suffixes of number and gender (2ms, 3/2p) morpheme *–i* precedes the suffix, which would be unexpected although not impossible in forms originating in a 'classical' Semitic paradigm. Moreover, in contrast to regular V_1 verbs, intransitive verbs retain the 'non-singulative' marker in their derived verb forms, suggesting a subsequent innovation by analogy with that of the associated G-forms.[65] But whatever the correct explanation, in having intransitive verbs that are morphologically and functionally similar to the intransitives of Mehri and other MSA languages, and which likewise differ morphologically from their transitive equivalents, Beḍawiē shares a feature with the latter which seems otherwise nexplicable and may point to the source of the Semitic component in Beḍawiē.[66]

6. Prefixing Verb Forms in other Cushitic Languages

6.1 Morphology

6.1.1 As noted above, prefixing G-forms occur in Cushitic languages other than Beḍawiē, particularly in Saho and 'Afar. The Beḍawiē and Saho paradigms are compared in Tables 6.1 and 6.2, where the roots are equivalent, i.e. Beḍawiē *fidin* 'go away' vs Saho *fadan* 'be distant'; Beḍawiē *bir* 'snatch' vs Saho *baḷ* 'tear away'.[67] The identical stem vowel *i* of Beḍawiē *fidin* and Saho *fadan* will be

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[65] ***BdG*, §245.**

[66] **Compare also the Ge'ez subjunctive, where transitive verbs typically have the 3ms form *yəfləs* and intransitives *yəgbar*.**

[67] **The stem *bir* : *baḷ* is Cushitic and *fidin* : *fadan* is Semitic (cf. Ge'ez *btn* 'scatter'). Saho data from Reinisch, *Irob-Saho*, 14, his *Wörterbuch der Saho-Sprache (SaW)* (1890), and Welmers, 'Notes', p236/247 ; the 'Afar paradigms are almost identical. Welmers takes the initial and final vowels to be part of the stem, which is sychronically legitimate as there is frequently harmony between the initial and main stem vowels in the G_{PA} forms. The quality and quantity of the final vowels are those of *SaW*. The notation 'G_{PB}' in Table 6.2 indicates that the Saho and 'Afar paradigms are not 'extended' in the sense of §2.2,1 but are distinguished from their G_{PA} forms by apophony. In the Saho G_{PB} form**

noted. This vowel is assigned to about 60 per cent of Saho triconsonantal V_1 verbs and is on the way to becoming almost the default ; a similar evolution might account for the universality of *i* as the stem vowel in Beḍawiē V_1 transitive verbs. Note the similarity between Saho and the Mehri 3p and 2p forms (for Mehri refer to Table 2.2).

TABLE 6.1 BEḌAWIĒ AND SAHO 'PERFECT' (G_{PA}) PARADIGMS

	Biconsonantal		Triconsonantal	
Form	Beḍawiē	Saho	Beḍawiē	Saho
3ms	ibír	yíbiḷə	ifdín	yífdinə
3fs	tibír	tíbiḷə	tifdín	tífdinə
2ms	tíbira	tíbiḷə	tífdina	tífdinə
2fs	tíbiri		tífdini	
1s	abír	íbiḷə	afdín	ífdinə
3p	íbirna	yíbiḷin	ífdinna	yífdinin
2p	tíbirna	tíbiḷin	tífdinna	tífdinin
1p	nibír	níbiḷə	nifdín	nífdinə

TABLE 6.2 BEḌAWIĒ (G_{PE}) AND SAHO (G_{PB}) 'IMPERFECT' PARADIGMS

	Biconsonantal		Triconsonantal	
Form	Beḍawiē	Saho	Beḍawiē	Saho
3ms	imbír	yábiḷə	fandī́n	yáfdinə
3fs	timbír	tábiḷə	fandī́n	táfdinə
2ms	tímbīra	tábiḷə	fándīna	táfdinə
2fs	tímbīri		fándīni	
1s	ambír	ábiḷə	afandī́n	áfdinə
3p	ḗbirna	yábiḷin	efádinna	yáfdinin
2p	tḗbirna	tábiḷin	tefádinna	táfdinin
1p	nēbír	nábiḷə	nēfadī́n	náfdinə

6.1.2 The Beḍawiē and Saho G_{PA} paradigms can without difficulty be derived from a common original. The obvious difference between the Beḍawiē G_{PE} and Saho G_{PB} paradigms is that the former follows those Semitic languages that have genuine G_{PA} and G_{PE} forms, even though, as discussed above, infixed morpheme *-n-* of the Beḍawiē singular forms is unique.[68] A further significant difference is the presence in Beḍawiē of distinct 2ms and 2fs forms, a Semitic feature that also appears in the Beḍawiē G_S paradigms but not in any other Cushitic language so far examined.

6.1.3 Paradigms for selected prefixing verb forms in other Cushitic languages are given in Tables 6.3 and 6.4. The relevant verbs are:[69]

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the initial vowel is always *a*.

[68] In the Beḍawiē biconsonantal paradigm the usual *n* becomes *m* in the environment of a labial radical.

[69] Somali data from Reinisch, *SoG*, §271. The Awngi G_{PA} forms are Hetzron's 'perfect indefinite' and the G_{PB} forms his 'imperfect indefinite'; the symbols *â, á* and *à* represent respectively falling, high and low tone and *q̈* represents

Somali	***qān* 'know';**	**Rendille**	***mīt* 'come'**
Dasenach	***mez* 'come'**	**Awngi**	***q̓əŋ* 'be'**

TABLE 6.3 G_{PA} 'PERFECT' FORMS IN OTHER CUSHITIC LANGUAGES

Form	Somali	Dasenach	Rendille	Awngi
3ms	yiqīn	yimi	yimiy	yaq̓â
3fs	tiqīn	cimi	timiy	taq̓â
2ms 2fs	tiqīn	cimi	timiy	taq̓â
1s	iqīn	yimi	imiy	aqâ
3p	yiqīnēn	-	yimātēn	yaq̓éka
2p	tiqīnēn	cimi	timātēn	taq̓éka
1p	niqīn	yimi	nimiy	aq̓nâ

TABLE 6.4 G_{PB} 'IMPERFECT' FORMS IN OTHER CUSHITIC LANGUAGES

Form	Somali	Dasenach	Rendille	Awngi
3ms	yaqān	yimeze	yamīt	yáq̓é
3fs	taqān	cimeze	tamīt	táq̓é
2ms 2fs	taqān	cimeze	tamīt	táq̓é
1s	aqān	yimeze	amīt	áqé
3p	yaqānnīn	-	yamītīn	yáq̓ánà
2p	taqānnīn	cimeze	yamītīn	táq̓ánà
1p	naqān	yimeze	namīt	áq̓né

6.1.4 Somali and Awngi each have five prefixing verbs and Dasenach three. With twelve examples, Rendille has more than any other Cushitic language except Beḍawiē and Saho-'Afar. The stems of prefixing verbs in these languages are almost all biconsonantal and all have rather 'basic' senses. The majority of the stems are Cushitic, the few apparently Semitic items being largely if not entirely confined to Rendille. What is less apparent from the tables is that the same verbs tend to recur; for example four of the five Somali verbs also occur in Rendille, as do all three Dasenach verbs. Similarly, Somali and Awngi share three of their five verbs.[70]

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voiced *q* (R. Hetzron, *The Verbal System of Southern Agaw (VSSA)* (1969), p8, 44, 118). Dasenach data from H-J. Sasse, 'Dasenach', in *NSLE*, p210-12 and Rendille data from S. Pillinger and L. Galboran, *A Rendille Dictionary* (1999).

[70] A total of fifteen verbs has so far been identified in the various languages. The only derived form associated with these stems appears to be Rendille *yayyadēh* 'keep saying', analysed as a reduplicated form of *dēh* 'say', although certain Beḍawiē V_1 verbs of Cushitic origin, e.g. *kan* 'know', related to Somali *qān*, occur only as (reflexive) T forms (see §8.5 below).

6.2 Origins

6.2.1 The question must therefore be asked : do these phenomena result from chance preservation of the same verbs as a residue of an originally much larger repertoire (perhaps in consequence of their 'basic' senses), or from a situation whereby prefixing subject pronouns were applied only to a small subset of common verbs, under Semitic influence. That the latter may well be the case is supported by the fact that prefixing forms are entirely absent from the Highland East Cushitic languages and from Agaw languages other than Awngi.

6.2.2 A proposal by Zaborski for the evolution of the Cushitic verbal system argues for something like the following sequence:[71]

1. **In the earliest phase there was a 'prefix conjugation with apophony, an Afroasiatic heritage' and a 'suffix conjugation, a Cushitic innovation'. Although he does not elaborate, it seems reasonably clear (e.g. 'proto-Beja rather close to proto-Cushitic') that for the prefixing conjugation Zaborski envisages subject pronominal morphemes along the lines of those of Beḍawiē, Saho and 'Afar.**
2. **With the exception of Beḍawiē and Saho-'Afar, prefixing forms were then almost entirely (e.g. Somali and Awngi), or entirely (e.g. Highland East Cushitic and Agaw except for Awngi), replaced by suffixing forms, more or less as attested in many contemporary Cushitic languages.**
3. **Suffixing forms in some languages were then replaced by forms incorporating 'selectors', as seen for example in Iraq^{w}.**

6.2.3 Although a position apparently quite widely held by Cushitists, any claim that Cushitic prefixing verb forms are a common Afroasiatic heritage is little more than conjecture,[72] for aside from the Cushitic languages under discussion, evidence in support of the proposal is confined to prefixing verb forms in the Semitic languages and Berber.[73] Zaborski's conjecture further entails that the Egyptian

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[71] **A. Zaborski, 'Remarks on the Genetic Classification and Relative Chronology of the Cushitic Languages', in *Current Issues in Linguistics*, (1984), p132 ff.**

[72] **For the purposes of this study the conjecture that the Cushitic languages originate in a common Afroasiatic language is accepted witout comment. But compare *The Afroasiatic Fllacy (TAF)*, which argues against the conjecture on climatic, genetic and linguistic grounds.**

[73] **The relationship of Berber to the Semitic languages is explored in preliminary fashion in *Berber : a Semitic Languag?e* which argues that Berber originated in a Semitic language spoken by people who moved into N. Africa at**

verbal system originally exhibited Semitic-type or similar prefixing subject pronouns, which subsequently fell out of use. But there is not the least evidence that Egyptian, the oldest recorded 'Afroasiatic' language, ever possessed prefixing forms - a serious, if not fatal, obstacle to Zaborski's proposal.[74] Although in the limit it cannot be shown comclusively that Zaborski's conjecture (or any other) is wrong, it seems ultimately to rest not only on the assumption that common Afroasiatic exhibited verb paradigms with prefixing subject pronouns, but that these paradigms resembled those of the Semitic languages, a position reminiscent of the old belief that the Arabic verb should be regarded some kind of prototype for the verbal systems of the Semitic languages generally.

6.2.4 If the hypothesis proposed in the present study is valid, namely that prefixing subject pronoun morphemes in the Cushitic languages were an innovation under Semitic influence, it implies that when early Semitic speakers entered N.E. Africa (at some time before the Axumite civilisation), they were or became the dominant culture. If so ;

1. **For Beḍawīē, Saho and 'Afar, languages with numerous prefixing verbs, the hypothesis requires either that large numbers of Semitic (V_1-type) verbs were introduced into the languages as loans, complete with Semitic inflections, or rather that these verbs comprise a Semitic stratum sitting alongside another group consisting (originally) of Cushitic verbs with Cushitic suffixing subject morphemes (type V_2).**
2. **Certain other Cushitic languages were also influenced by the language of these Semitic migrants to the extent that Semitic prefixing subject morphemes were introduced into a small number of Cushitic verbs of rather basic sense, in replacement of their original Cushitic suffixing morphemes.[75] This process**

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some early (probably bronze age) date and which incorporated elements of one or more 'aboriginal' N. African languages. Claims have also been made for a prefixing conjugation in the Chadic languages, particularly Hausa. While synchronically correct, the Hausa prefixing subject pronouns are clearly adaptations of the possessive/object pronouns and are therefore diachronically secondary. See the paradigms in F.W.H. Migoed, *A Grammar of the Hausa Language* (1914) p125f and the discussion in R.J. Hayward, 'Afroasiatic', in *African Languages an Introduction*' (2008), p93.

[74] **In §4.1 of *Towards a Modphology of the pre-Semitic Verbal System* it is argued that prefixing subject pronoun morphemes were a Semitic innovation and that the Semitic languages (along with Berber) and Egyptian descend from a common original whose verb paradigms did not incorporate subject pronouns,**

[75] **It is of course likely that these languages originally had rather more than their current numbers of prefixing**

subsequently ceased, such that the languages concerned thereafter preserved their original Cushitic verbal systems while retaining at least some of those verbs which had become 'semitized'. [76]

7. G Forms of the Suffixing (V_2) Verb

7.1 G_{SA} and G_{SE} Forms

7.1.1 Along with the prefixing G_{PA} and G_{PE} verb forms discussed in Sections 3 to 5, Beḍawiē also has apocopate (G_{SA}) and extended (G_{SE}) suffixing forms, termed type V_2 by Reinisch and Roper and Conjugation I by Almkvist. Paradigms for these forms are given in Table 7.1, based on stem *sak* 'go'.[77] As with the G_{PA} forms there are two G_{SA} paradigms, of which G_{SAD} (declarative) signals past time, and is therefore functionally equivalent to the G_{PAD} form (§3.1). Like the equivalent G_{PAC} form (§3.2), the G_{SAC} form in Haḍanḍiwa is typically utilised in conditional clauses, whereas in Beni Amer and Arteiga it is essentially pluperfect.[78] Morphologically and functionally the G_{SE} paradigm parallels that of the G_{PE} form discussed in Section 4 (Tables 4.1 and 4.2) in having singular forms incorporating an *n*-based morpheme although, as will be seen below, whatever the details of the evolution of the G_{PE} form the G_{SE} form undoubtedly has a different history.

TABLE 7.1 G_{SA} AND G_{SE} FORMS

	G_{SAD}	G_{SAC}	G_{SE}
3ms	sák-ia	sák-i	sak-íni
3fs	sák-ta	sák-ti	sak-téne
2ms	sák-tã	sák-tia	sak-ténea
2fs	sák-tai	sák-tiyi	sak-ténī
1s	sak-án	sák-i	sak-áne
3p	sak-íān	sák-īna	sák-ēn
2p	sák-tāna	sák-tīna	sák-tēna
1p	sák-na	sák-ni	sák-nēi

7.1.2 *Sak* is here taken to be the stem, conjugated by adding the relevant endings for person, number and tense/aspect. Reinisch however offers a different analysis, taking the G_{SAD} and G_{SE} paradigms to

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verbs.

[76] Beḍawiē and Saho-'Afar also have a small number of Cushitic stems in their V_1 sets (7% and 8% respectively) ; for details see §10.1 below.

[77] Data based on *TB*, §128, §131, §148. Compare the G_{SAD} and G_{SE} paradigms in *BSNOA*, §168 and *BdG*, §326, and the G_{SAC} paradigm in *BdG*, §330. The G_{SAC} form appears not to be used in Bishari.

[78] For Arteiga see Hudson, 'Beja', p120 [§9.1C].

comprise a stem combined respectively with the G_{PA} and G_{PE} forms of V_1 'substantive verb' *an* 'be, say'.[79] Reinisch's paradigms for this verb are set out in Table 7.2, and as can be seen, in having final vowel *–i* in its G_{PE} form, *an* is formally intransitive (Section 5).[80] Although Reinisch's 'imperfect' paradigm for *an* appears to be confined to the Beni Amer dialect it will be seen from Table 7.2 that Roper's 'perfect' paradigm, (incorporating proposed derivations for certain of the attested forms), quite closely matches Reinisch's 'imperfect', suggesting that in Haḍanḍiwa at least, the original 'perfect' of *an* has fallen out of use and has been replaced by what was originally the imperfect.[81]

TABLE 7.2 MORPHOLOGICAL ANALYSIS OF *AN* 'BE, SAY'

	Roper (*TB* §251)	Reinisch (*BdG* §306)	
	Perfect	Perfect	Imperfect
3ms	é-[n]-e	y-[an]	yí-[n]-i
3fs	té-[n]-e	t-[an]	tí-[n]-i
2ms	té-[n]-ea	t-[án]-a	te-[n]-íya
2fs	*té-[n]-ei > ténī	t-[án]-i	te-[n]-íyi
1s	á-[n]-e	'a-[án]	'á-[an]-i
3p	*i-[n]-en(a) > ḗn(a)	y-[án]-na	yé-[n]-na
2p	*ti-[n]-ena > tḗna	t-[án]-na	té-[n]-na
1p	*nē-[n]-e > nēn	n-[an]	né-[n]-i

7.1.3 The suffixes of the G_{SE} paradigm in Table 7.1 indeed show a reasonable albeit not complete correspondence with Reinisch's imperfect paradigm for *an*. But there are problems with his analysis:

1. The similarity between the Beḍawiē G_{SE} plural forms and G_{SB} (imperfect) plural forms in other Cushitic languages (Table 7.3) suggest that, synchronically at least, the *n*-based morpheme in the Beḍawiē G_{SE} paradigm is confined to singular forms in exactly the same way as in the G_{PE} forms, and thus that the plural G_{SE} forms owe nothing to verb *an*;
2. Reinisch attempts to extend his hypothesis to the G_{SA} forms but his paradigm for the declarative perfect (G_{SAD}) of the V_2 verb (*BdG* §308) requires the liberal addition of a postulated but unattested

[79] *BdG*, §308.

[80] The square brackets attempt to delimit the stem that underlies the paradigms. In the 'imperfect' paradigm it is a matter of judgement whether the initial vowel (excluding the 1s form) should be considered part of the subject pronoun (as here) or part of the stem. A monosyllabic stem such as *an* would of course be prone to loss or metathesis of its stem vowel in certain environments.

[81] Only the sense 'say' is recorded by Roper and Almkvist for *an*. Compare Saho *na* 'be' (Reinisch, *SaW*, 278) and the forms cited in the 'Note' to *BdG*, §290.

phoneme *n* to achieve the parallel with verb *an*. This 'phoneme' is entirely absent from the G_{SAD} paradigm (Table 7.1), with the partial exception of 2ms *sak-tã* where, although the final *ã* here could imply an original nasal phoneme it is more likely to originate in *sak-ta-a*, by analogy with 2fs *sak-ta-i*;

3. Auxiliary verbs are utilised elsewhere in Beḍawiē verb paradigms such constructions are transparent, in contrast to those proposed for the G_{SE} (and G_{PE}) forms, albeit it is obviously possible that the formation incorporating *an* is more ancient and has therefore become more worn down.

7.2 The 'Push Chain' Hypothesis

7.2.1 Zaborski's 'push chain' hypothesis argues that the G_{SE} form ('new present') is a relatively recent innovation, which has displaced the 'old present' (G_{SAD}) so that the latter now has 'past-tense function'. The 'old past' (G_{SAC}) in consequence is now 'a tense or modal with a variety of functions'.[82] The 'new present' (G_{SE}) is assumed to have been formed much as proposed by Reinisch. Two arguments are adduced in support of Zaborski's hypothesis:

1. The V_2 'present tense negative' is formed by prefixing negative particle *ka* to the ('perfect') G_{SAD} form, e.g. *ka-tám-ia* 'he does not eat';

2. The G_{SAD} subject pronouns have *a* as the dominant vowel, which is taken to reflect the inflections of the proto-LEC 'present/imperfective'.[83]

There is no convincing alternative explanation for the 'present tense negative' construction, which is paralleled in the V_1 verb set, where the 'present tense negative' is formed by prefixing *ka* to the G_{PAD} form. However it could be asked why the 'past tense negative' of V_2 verbs is not based on the 'old past', rather than being of form *tamāb kī́ke* 'he did not eat', where *tamāb* is a gerund in the accusative and *kī́ke* is the negative G_{PA} form of *kāy* 'be'.[84]

7.2.2 As can be seen from Table 7.3, the suffixing verb imperfective (G_{SE}) paradigms in 'Afar and Somali (both Lowland East Cushitic)[85] fit comfortably with the proposal that *a* is the dominant vowel of the subject pronouns in the imperfective forms of these languages, and it will be seen that the Beḍawiē

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[82] Appleyard, 'BCL', p185/6. Reinisch (*BdG*, §330 Note) considers G_{SAC} forms to be in effect worn-down G_{SAD} forms.

[83] 'BCL', p187.

[84] *BdG*, §142 and §233; *BSNOA*, §206; *TB*, §129.

[85] 'Afar data from Bliese, 'Afar', *NSLE* p147/9 [T36 and T40]. Somali data from Reinisch, *SoG*, §296.

G_{SAD} paradigm generally sits quite well with these.[86] The match between the Beḍawiē G_{SAC} ('old past') and the G_{SA} paradigms of the other languages also tends to support Zaborski's hypothesis, in that 'Afar *e* ≡ Beḍawiē *i* ≡ Somali *ä*. In sum, it is likely that the push-chain hypothesis at least partly accounts for the history of the Beḍawiē G_S forms and therefore, as regards the G_{SE} singular forms at least, Reinisch's explanation may well be broadly correct.

TABLE 7.3 SELECTED CUSHITIC G_S PARADIGMS

Somali	'Afar	Beḍawiē		Somali	'Afar	Beḍawiē
G_{SA} ('Perfect')		G_{SAC}		G_{SB} ('Imperfect')		G_{SAD}
jáb-äy	sug-é	sák-i	3ms	jáb-a	sug-á	sák-ia
jáb-täy		sák-ti	3fs	jáb-ta		sák-ta
jáb-täy	sug-té	sák-tia	2ms	jáb-ta	sug-tá	sák-ta
		sák-tiyi	2fs			sák-tai
jáb-äy	sug-é	sák-i	1s	jáb-a	sug-á	sák-án
jab-en	sug-ḗni	sák-īna	3p	jáb-ān	sug-ā́ni	sak-íān
jab-tēn	sug-tḗni	sák-tīna	2p	jáb-tān	sug-tā́ni	sák-tāna
jáb-näy	sug-né	sák-ni	1p	jáb-na	sug-ná	sák-na

7.2.3 Thus if morpheme *n* of the Beḍawiē G_{PE} paradigm is of Semitic origin, as proposed in Section 4, the G_{SE} paradigm could well have evolved by analogy with that of the G_{PE} form. This is the reverse of Appleyard's proposal that morpheme *n* was introduced into the G_{PE} forms to parallel those of the G_{SE} forms, a proposal that removes the motivation for a three-term system in the G_S verb.[87] The foregoing being said, if the G_P forms were indeed originally Semitic and therefore ancient, the G_{SE} paradigm is unlikely to have been a recent innovation, in which case it is perhaps surprising that its singular forms still appear to reflect so closely the paradigm of *an*, although later analogy could have re-interpreted an *n*-based morpheme introduced independently into the G_{SE} form as part of the paradigm of *an*.

7.2.4 The most convincing hypothesis for the evolution of the Beḍawiē suffixing G-form verbs would therefore appear to be the following:

1. **When the Semitic and Cushitic strata in Beḍawiē first came into contact, the 'Semitic' (G_P) verbs displayed an *n*-based morpheme in their G_{PE} ('non-singulative') forms and the 'Cushitic' (G_S) verbs were**

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[86] There is an old consensus that the pronominal suffixes of Cushitic V_2 verbs originate in a prefixing auxiliary verb suffixed to the verb stem. It cannot be shown that this is not so, but the pronouns are sufficiently similar to those of Semitic suffixing verbs to beg the question; if this is so, what 'auxiliary' verb might have been applied to the latter?.

[87] 'BCL', note 14.

typical Lowland East Cushitic;

2. An *n*-based morpheme was introduced into the 'Cushitic' imperfective ('old present') singular forms (G_{SB}) to create a G_{SE} form ('new present') by analogy with the 'Semitic' G_{PE} form. This morpheme was either derived from auxiliary verb *an* or came to be associated with it by analogy;

3. The push-chain effect then resulted in the functions of the three 'new' G_S paradigms; 'old past' (G_{SAC}), 'old present' (G_{SAD}), and 'new present' (G_{SE}), coming to mirror the functions of the G_{PAC}, G_{PAD} and G_{PE} forms.

7.3 Semitic G_S Forms

7.3.1 If Beḍawiē does indeed incorporate a Semitic component, the ubiquity of triradical suffixing verbs of type *qatala* in the Semitic languages (G_S) would lead one to expect evidence for a similar form in Beḍawiē. The absence of evidence perhaps indicates that if such a form did originally exist in Beḍawiē its similarity to the Cushitic G_S paradigms caused it to fall out of use, particularly if, as the functions of the Beḍawiē G_{PA} form would suggest, the G_S form in the Semitic ancestor of Beḍawiē did not have the range of functions of, say, Arabic or Geʿez *qatala*.

8. Prefixing Verb Derived Stems

8.1 Introduction

8.1.1 As noted at §2.3 above, Beḍawiē type V_1 derived forms morphologically resemble their Semitic equivalents. But any attempt to associate the Beḍawiē and Semitic forms is confronted by a major obstacle, namely that participial prefix *mu-* characteristic of Akkadian and Arabic derived forms and assumed to lie behind equivalent forms in the other languages, is absent from the Beḍawiē paradigms. If such participles did originally exist in Beḍawiē but subsequently fell out of use it might be expected that some trace would remain, as in Ge'ez,[88] but although Beḍawiē does indeed have a substantial number of nominal forms with initial *m-* none appear to originate in a derived-form participle. Thus if its V_1 derived verbs are indeed of Semitic origin, Beḍawiē would appear to have taken to its conclusion, influenced

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[88] **See A. Dillmann, *Ethiopic Grammar*[2] *[EtG]* (1907), §113. Although Ge'ez displays many nominal forms originating in *mu*-prefixing participles these rarely retain participial function, having generally been replaced by forms based on the G-form active participle, as for example the S-form participle *'aqbārī*. See also S. Moscati et al, *An Introduction to the Comparative Grammar of the Semitic Languages* (1964), §16.101.**

perhaps by its Cushitic stratum, a process which was still in progress in Ge'ez,[89]

8.1.2 A second important feature of Beḍawiē V_1 derived forms is that their 'perfect' and 'imperfect' forms are almost always differentiated by apophony, so that the *n*-based aspect morpheme characterisitc of the G_{PE} form is absent from the 'imperfect' paradigms. As will be seen below, it is possible in a number of cases to propose a hypothesis which could explain the loss of an original *n*-based morpheme but this in turn draws attention to the general absence of *n*-based aspect morphemes from the 'imperfects' of Semitic derived forms. This is evident for example in Arabic, where 'energic' versions of derived verbs appear to be uncommon - although compare Mehri derived verbs with imperfect forms in final *-ən* (e.g. *MhL* pxxxiii).

8.1.3 As also noted at §2.3, an important difference between Beḍawiē V_1 and V_2 derived forms is that the latter are conjugated in exactly the same way as the G_S forms and thus do not utilise apophony. Therefore if the G_{SE} form did indeed evolve by analogy with the G_{PE} form, as argued in §7.2, the 'imperfect' paradigms of V_2 derived verbs must also be a form of 'new present' created by analogy with the G_{SE} forms.[90]

7.1.4 The morphology of V_1 derived forms is outlined in the following paragraphs. For simplicity Roper's 'conditional' (Reinisch's 'pluperfect') paradigms are in general omitted.[91]

8.2 Frequentative and Reduplicative (G_{PF}) Forms

8.2.1 As in Mehri, a major omission from the repertoire of Beḍawiē V_1 derived verbs is any form morphologically equivalent to the Semitic D (or Dt) form. Cohen suggests that the Ethiosemitic languages have tended to rationalize their D- and G_V-forms (Arabic *yuqabbir* and *yuqābir*), usually in favour of the former.[92] Thus as Beḍawiē utilises the G_V-form (§8.3 below) it may be one of those languages, along with

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[89] Although Beḍawiē displays a fairly comprehensive range of gerunds or perfect participles (*BdG*, §282), active participles are confined to the G_P and 'intensive' forms (the latter equivalent to the Arabic IIIrd and Ge'ez I, 3 forms, see §8.3 below), being otherwise replaced by the *nomen agentis* (*BdG*, §283 Note 2). The different ways of expressing the sense of the active participle in Cushitic could be taken to suggest that there was no original common form in these languages.

[90] Saho and 'Afar derived verb forms, V_1 and V_2, are inflected exactly as the corresponding G-forms.

[91] A summary of derived verb form morphology is given in the table in *BdG*, §223.

[92] *ESVS*, p65.

Mehri, that evolved in the latter direction. The closest functional parallel to the Semitic D-form in Beḍawiē is what Roper and Reinisch term the 'frequentative or reduplicative' (G_{PF}) form, although these in fact comprise a relatively insignificant proportion of Beḍawiē derived verbs.[93]

8.2.2 For V_1 biconsonantal verbs the G_{PF} form is created either by repeating the first or second consonant, for example: *dir* 'strike' vs *dedir* vs *derir* 'strike one after another'; in triconsonantal verbs the first consonant is usually repeated, as: *bedil* 'change' vs *bibdel* 'change one after another'.[94] Although there are detail variations, in general the 'imperfect' forms conjugate exactly as regular G_{PE} forms except that aspect marker *n* is replaced by the reduplicated stem phoneme.[95] While generally absent from Semitic, a number of such forms are attested in Ge'ez, alongside the D-form.[96]

7.2.3 Type V_2 reduplicating forms likewise differ according to whether they are biconsonantal or triconsonantal.[97] Reinisch records only three of these although Roper has twenty. As reduplicating forms also occur in other Cushitic languages the Beḍawiē V_1 forms invite the conclusion either that they were originally Semitic and were modified to conform to general Cushitic rules for creating such forms or, more likely, that they were new creations in the V_1 set, inspired by Cushitic V_2 originals.

8.3 The (Intensive) G_{VP}-Form

8.3.1 Apocopate 'intensive' forms (G_{VPA}) on triconsonantal V_1 verbs differ principally from their G-form equivalents in having *ā* as their first stem vowel (Table 8.1). The term 'intensive' is used by Reinisch, Roper and Hudson but is appropriate only to some Beḍawiē verbs of this type, for equally common are verbs denoting an habitual activity or an occupation, such as *dābil* 'be a dealer', and other verbs which

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[93] Reinisch lists only six verbs of this type in his dictionary and Roper none at all (*TB*, §216/7; *BdG*, §201/39). Almkvist does not discuss these forms.

[94] Reinisch, *BdW*, p42, 69.

[95] *BdG*, §239.

[96] Dillmann, *EtG*, p143. Beeston discusses ESA stems where the second consonant is repeated (such forms do not appear to occur in MSA). As gemination is rarely represented in the ESA script (ibid §2.5) could these forms be equivalent to the Beḍawiē frequentative/reduplicative forms? Beeston however makes it clear that the ESA forms do not have frequentative sense. (*DGESA*, §18.6).

[97] *TB*, §166; *BdG*, §310.

have neither intensive nor habitual sense.[98] The intensive of biconsonantal V_1 verbs is usually created by changing the stem vowel and conjugating as a V_2 verb.[99] Selected forms from the Haḍanḍiwa triconsonantal paradigm are given in Table 8.1.[100] With the exception of the prefixing frequentative/reduplicative form (§8.2), G_{VP} is by some distance the least common of the Beḍawiē prefixing derived forms.[101]

TABLE 8.1 V_1 TRICONSONANTAL INTENSIVE FORMS

	G_{VPA}	G_{VPB}
3ms	ikātím	ēktī́m
2fs	tekā́timi	tēktī́mi
3p	ekā́timna	ēktī́mna

8.3.2 The G_{VPA} form resembles the apocopate forms of the Arabic 'third measure' (*qābara : yuqābiru*) and the subjunctive of Dillmann's I, 3 stem in Geʿez (*yəqābər*).[102] In Semitic the G_V form is attested only in Arabic, MSA and N. Ethiosemitic ; if such forms existed in ESA they are not detectable from the orthography.[103] The G_V form in Ge'ez is defined by Dillmann as 'influencing' the object, but is relatively uncommon.[104] By contrast, the form appears to be common in Tigré and Tigriña, typically with intensive sense. The Arabic forms are discussed at length by Fleisch[105] and it is clear that, as well as the

[98] Almkvist (*BSNOA*, §228) terms these verbs 'frequentative', which is on balance a better name. Johnstone (*MhL* p xxxiii) denotes the equivalent Mehri forms 'intensive-conative'.

[99] For biconsonantal G_{VP} paradigms see *TB*, §213 and *BdG*, §239.

[100] Data from *TB*, §216. The 3fs, 1s and 1p forms can be inferred from the 3ms form, the 2ms from the 2fs and the 2p from the 3p. For the Bishari paradigms see *BSNOA*, §296 and for the Beni Amer paradigms *BdG*, §202/23/5 (G_{VPA}) and §239 (G_{VPB}). The Bishari and Beni Amer syllable structure is identical to that of the Haḍanḍiwa forms but the accent falls on the second syllable in the G_{VPA} forms forms and on the first in the G_{VPB} forms.

[101] Reinisch's *Wörterbuch* lists 23 G_{VP} verbs. With this compare 239 S_P forms, 169 T_P forms and 52 N_P forms.

[102] In this stem the Ge'ez subjunctive and imperfect forms are identical.

[103] Moscati et al, *An Introduction to the Comparative Grammar of the Semitic Languages [ICGSL]*, §16.6 ff; Beeston, *DGESA*, §18.1 ff.

[104] *EtG*, §78. The occasional form can be understood as signalling 'habituation' or 'occupation', as for example *dāyana* 'be a judge' and *ḍānawa* 'lead an ascetic life'.

[105] *Traité*, Vol II, §130.

functions more usually associated with the form, the Arabic G_V form also has 'intensive' function and occasionally signals repeated action. Therefore, although the functions of the Beḍawiē G_V-form differ somewhat from those of its Ethiosemitic, MSA and Arabic equivalents it is more likely to be an original Semitic form in Beḍawiē rather than a collection of loans, a conjecture supported by the fact that very few of these verbs appear to be of Arabic or Ethiosemitic origin, and also that there is no equivalent form in the V_2 set.[106]

8.3.3 While there is obviously no difficulty in relating the Beḍawiē triconsonantal G_{VPA} forms to their Arabic and Ge'ez equivalents, the G_{VPB} forms are more problematic. By analogy with the triconsonantal G_{PE} paradigm (Table 4.2) it could be conjectured that, from an initial **yukā́timun*, the evolution of the G_{VPB} form began with weakening of the final syllable, perhaps yielding a form **yukā́timn*.[107] This could have resulted in a shift of stress onto the final syllable, giving a form **yəkātī́m*. Long vowels now being in adjacent syllables, the *ā* may have been transposed to the first syllable and modified to give the attested form *ēktím*. As with the G-forms this would imply that in the Bishari and Beni Amer dialects stress subsequently returned to the first syllable. But on the whole this is a rather speculative sequence.

8.3.4 In Arabic, MSA and the N. Ethiosemitic languages the G_V form is paralleled by a T_V form whose T_{VPA} paradigm is on the pattern *yataqātil* (Arabic), *yətqātal* (Gə́ez) and *yəftəkīrən* (Mehri).[108] This form is quite common, in Ge'ez much more so than the G_V form, but is almost entirely absent from Beḍawiē.[109] Reinisch records only four forms in his dictionary and these are detectable only from sense, their paradigms being morphologically indistinguishable from those of the T_P form (see below at §8.5).

8.4 The (Causative) S_P-Form

8.4.1 S-forms, with approximately 'causative' or 'factitive' function, occur throughout 'Afroasiatic' and would therefore be expected in Beḍawiē, whatever its history. In Semitic, forms with *š* (or *s*) are assumed to be older and are generally confined to Akkadian, Ugaritic, ESA and South Ethiosemitic,

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[106] **Saho and 'Afar appear to have no equivalent to the G_V form.**

[107] **In Mehri the equivalent 3ms 'imperfect' form is *yarákbən*, identical to the 'conditional' form.**

[108] **As with the G_V form, Ge'ez and Mehri have a common stem for the imperfect and the subjunctive. For the Mehri paradigms see *MhL* p liv.**

[109] ***BdG*, §213. This form also appears to be entirely absent from Mehri.**

occurring elsewhere only sporadically.[110] Thus if Beḍawiē V_1 verb forms do indeed constitute evidence for a Semitic component in the language, a 'causative' form with an *s*-based morpheme would support a relatively early separation of Beḍawiē from neighbouring Semitic languages. Sample S_P forms are set out in Table 8.2, from which it will be seen that the S_{PA} and S_{PB} forms are differentiated by vowel length.[111] This situation is to some extent replicated in Mehri where, for regular triconsonantal verbs, the 'subjunctive' (S_{PA}) form is for example *yəhánsəm* (3ms, root *nsm*) and the 'imperfective form (S_{PB}) is *yəhənsūm* (*MhL* p xxxvii).

TABLE 8.2 S_P FORMS

Biconsonantal Forms			Triconsonantal Forms	
S_{PA}	S_{PB}		S_{PA}	S_{PB}
esodír	esodír	3ms	eskatím	eskatīm
tesódiri	tesódīri	2fs	teskátimi	teskátīmi
esódirna	esódīrna	3p	eskatímna	eskatīmna

8.4.2 In Akkadian the S_{PA} 3ms form is *ušapris*, with *ušapras* as the S_{PB} form ; ESA forms were presumably vocalised similarly. Thus the *s*-based morpheme in the Beḍawiē triconsonantal S_P paradigms appears to have lost its vowel, perhaps as a result of the general rightward stress shift proposed in §4.2.[112] The few Arabic verbs having *sa-* as their causative morpheme are conjugated as quadriradicals and their 3ms Sp forms are thus *yusáqlib* (S_{PA}) and *yusaqlíbu* (S_{PE}).[113]

8.4.3 The history of the biconsonantal S_P (and T_P, N_P) forms is problematical. Although a number of the relevant stems are of Cushitic origin, the majority are worn-down Semitic triradicals, principally

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[110] Lipiński, *OCG*, §41.9; Moscati et al, *Introduction*, §16.11.

[111] The Haḍanḍiwa, Beni Amer and Arteiga triconsonantal forms appear to be identical; the Beni Amer and Arteiga biconsonantal forms appear to have long *ō* throughout. Data derived from *TB*, §219; *BdG*, §240 and Hudson, 'Beja', p123 [§9.2 (iii)]; see also *BSNOA*, §219. Reinisch provides no unambiguous way of deriving the S_{PA} paradigm, Roper's paradigms are skeletal, nor is it possible to deduce accurate forms from Almkvist's data. Reinisch (*BdG*, §207) also discusses a 'second causative' form, which prefixes *si-* to the first causative morpheme (see also *BSNOA*, §227). This form, and other compound derived verbs, is not discussed by Roper and does not (?) occur in the Semitic languages.

[112] Saho S_P-forms may or may not display the *s*-based morpheme, depending on the phonological environment, so that in its causative forms Saho appears to stand midway between Beḍawiē, with its apparently more archaic forms, and Arabic / Geʿez / MSA, with their later forms lacking the sibilant.

[113] Fleisch, *Traité*, Vol. II, §129t, §147c.

geminates lacking a geminate radical, and those on originally I-weak roots. In the latter case it is not difficult to explain morpheme *–sō* as deriving from an original *-saw-*, (compare Mehri *yəháwrəd* (S_{PA}) vs *yəhəwrūd* (S_{PB}) on root *wrd – MhL* p xliii) but this explanation requires that the same pattern was applied to other biconsonantal stems by analogy, which is possible but by no means certain. The equivalent passive T_P (§8.5 below) and N_P forms (§8.6) appear to have evolved similarly.

8.5 The (Reflexive and Passive) Tp-Forms

8.5.1 Beḍawiē displays a T_P form which is broadly equivalent to the Arabic VIII[th] measure (T_{PA} = *yaqtabir*), Geʿez *yəqtabar*, Mehri *yəntəfūz* (root *nfz*) and perhaps ESA *qtbr*.[114] The Beḍawiē forms differ from these in that the *t*-based morpheme is prefixed to the first stem consonant, as in Aramaic, Tigré and Tigriña, except when the stem consonant is a sibilant. The morphology of the Beḍawiē T_P forms is rather complex and for comparative purposes it is perhaps best to begin with triconsonantal 'imperfect' (T_{PB}) forms, equivalent to Arabic *yaqtabiru*. As Table 8.3 shows, the triconsontal reflexive and passive T_{PB} paradigms are identical and the T_{PAD} (declarative) passive differs from the T_{PB} only in vowel quality.[115] This situation is again partly replicated in Mehri, where the regular triconsonantal forms are *yənt ītfəz* (T_{PA}) and *yəntəfūz* (T_{PB}) (*MhL* p xlvii). The Beḍawiē reflexive T_{PAD} forms differ from the passive principally in that the *t*-based morpheme is absent,[116] but that this is a relatively later innovation is supported by the fact that the reflexive and passive T_{PAC} (conditional) forms are identical, as for example *itrimíd* (1s reflexive) vs *it'ibík* (1s passive).[117]

TABLE 8.3 TRICONSONANTAL T_P FORMS (BISHARI)

	T_{PAD}		T_{PB}
	Reflexive	**Passive**	**Reflexive / Passive**
3ms	**égnaf**	**étfayāk**	**étfayīk**

[114] For Mehri see *MhL* p xlviii ; for ESA see Beeston, *DGESA*, §18.1.

[115] Bishari data from *BSNOA*, §177/278. Roper and Reinisch give little information on these forms, although the Beni Amer and Haḍanḍiwa paradigms appear to differ in the position of the accent (*BdG*, §241; *TB* §220/23).

[116] Roper (*TB*, §220) cites only the 1s form but it seems fairly clear that these forms are conjugated like G_{PA} intransitive verbs (Section 5 above), suggesting that the latter paradigm may in some circumstances have replaced the original reflexive paradigm. Reinisch (*BdG*, §212) has a long second vowel *ā* to match that of the passive, and mentions that the passive T_{PAD} form may also lack the *t*-based morpheme.

[117] *TB*, §220/23.

2fs	tégnafi	tétfayāki	tétfayīki
3p	egnáfna	etfayā́kna	etfayī́kna

8.5.2 Sample paradigms for biconsonantal T_P forms are set out in Table 8.4. As can be seen, in this case the reflexive and passive T_{PB} forms are not identical, the latter being characterised by morpheme *–tō*, analogous to *–sō* in the biconsonantal causative forms and presumably originating in the same way. As with the triconsonantal paradigms, the T_{PAD} passive paradigm differs from the T_{PB} paradigm only in vowel quality, and once again the reflexive T_{PAD} paradigm does not incorporate a *t*-based morpheme.[118]

TABLE 8.4 BICONSONANTAL T_P FORMS (BISHARI)

	T_{PAD}		T_{PB}	
	Reflexive	Passive	Reflexive	Passive
3ms	éram	etṓrām	ētrīm	etṓrīm
2fs	térami	tetōrā́mi	tētrīmi	tetōrī́mi
3p	erámna	etōrā́mna	ētrī́mna	etōrī́mna

8.5.3 As noted above, the evidence of the triconsonantal T_{PB} (imperfect) and T_{PAC} (conditional) forms suggests that the Beḍawiē reflexive and passive forms probably derive from a common original, and a common origin is also supported by the Arabic and Geʿez T_P forms, which can be both reflexive and passive.[119] Reinisch argues that the passive form/function is original and the reflexive function secondary.[120] In this he may be correct but his argument relies on the Beni Amer T_{PAD} forms having a long stem vowel in both the passive and reflexive forms, a feature absent from Haḍanḍiwa and Bishari. For the Semitic original of the T_{PA} form Moscati et al propose *yatqabir(u) to which, among Beḍawiē forms, T_{PAC} *itrimíd* and T_{PB} *estabī́r* bear the closest resemblance.[121] The latter could derive from an original *ištabiru in the same way as the equivalent S_{PB} form (§8.4).[122]

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[118] **Bishari data from *BSNOA*, §177 and §273. For Beni Amer and Haḍanḍiwa variants see *BdG*, §241 and *TB*, §220/23.**

[119] **Fleisch, *Traité*, Vol. II, §131p-z. Fleisch argues for 'resultative' rather than 'passive' sense.**

[120] ***BdG*, §214. But for Geʿez compare Dillmann, *EtG*, §80, who argues the reverse.**

[121] **Moscati, *Introduction*, §16.85.**

[122] **The equivalent suffixing form (T_S) is almost entirely absent from Beḍawiē, having largely been replaced by the N_S form, with its *m*-based morpheme (*BdG*, §320). In Saho and 'Afar prefixing reflexive forms the *t*-based morpheme precedes the first stem consonant, although such forms are uncommon in these languages, where**

8.6 The (Reciprocal/Passive) N_P-Form

8.6.1 Like the S- and T-forms, the N-form is widespread in Semitic, albeit confined to reduplicated stems in Ge'ez, rare in ESA and absent from Mehri.[123] The (prefixing) N_P form is much less common in Beḍawiē than the S_P and T_P forms and indeed Almkvist refers to it almost in passing. Sample N_{PA} and N_{PB} paradigms are given in Table 8.5 ; note that the consonantal component of the reciprocal/passive morpheme is generally *m* rather than *n*, as also is the case in the N_S form. [124]

TABLE 8.5 N_P FORMS (BISHARI)

Biconsonantal Forms			Triconsonantal Forms	
N_{PAD}	N_{PB}		N_{PAD}	N_{PB}
emōgā́d	emōgī́d	3ms	emdabā́l	emfadī́g
temōgā́di	temṓgīdi	2fs	temdábāli	temfádīgi
emōgā́dna	imōgī́dna	3p	emdabā́lna	emfadī́gna

8.6.2 Given the similarities between the triconsonantal N_{PB} and S_{PB} paradigms (Table 8.2) and between the N_{PAD} and T_{PAD} paradigms (Table 8.3) it is likely that triconsonantal N_P forms derive either from an original **anaqbir* (N_{PA} 3ms) and **anaqbiru* (N_{PE} 3ms) or from **anqabir* vs **anqabiru*, which latter of course matches the Arabic equivalent. Stem vowel *ā* in the N_{PA} forms is a problem, as it is in the T_{PA} passive forms, but taken in conjunction with the intransitive G_P forms (Section 5) it is possible that *ā* has become a regular marker of intransitive/passive in Beḍawiē.[125]

8.7 Summary

8.7.1 At least three hypotheses can be proposed to explain the morphological and semantic similarities between the prefixing derived forms of Beḍawiē, those of the Semitic languages in general, and Ge'ez and Arabic in particular.

1. **The forms are 'Afroasiatic', rather as proposed by Zaborski for the G_P forms (§6.2 above);**
2. **They are loans into Beḍawiē from N. Ethiosemitic, Arabic or S. Arabian;**

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reflexives of type V_1 verbs are frequently of type V_2, with suffixed *t*.

[123] Dillmann, *EtG*, §87; Beeston, *DGESA*, §18.2.

[124] The N_{PA} paradigms are based on *BdG*, §217/8 and the N_{PB} paradigms on *BdG*, §243. For the equivalent Bishari, Haḍanḍiwa and Arteiga paradigms see *BSNOA*, §209 ff; *TB*, §224/225; 'Beja', p123. [9.2.B. (iv)].

[125] In Saho both *n* and *m* may occur as the consonantal component of the deriving morpheme, the latter when prefaced to a labial stem consonant. The Saho N_P form appears to be almost exclusively passive in sense.

3. They reflect a Semitic stratum in Beḍawiē.

8.7.2 It is suggested at §6.2 that Zaborski's conjecture that the Cushitic G_P forms are an Afroasiaitic heritage rests on shaky foundations. But this is even more the case with prefixing derived forms, which are almost entirely absent from Cushitic languages other than Beḍawiē, Saho and 'Afar. Moreover, not only do these forms closely match their Semitic equivalents both morphologically and in the type of sense they convey, but the ratios of S_P, T_P and N_P forms in Arabic and Beḍawiē are very similar, namely 54% : 29% : 17% for Arabic (based on a 100-verb sample), as against 52% : 37% : 11% for Beḍawiē.[126] Furthermore the G_{VP} (intensive) form appears to be confined to Arabic, the Ethiosemitic languages, MSA and Beḍawiē, and has no equivalent suffixing form, thus being even less likely to be of Cushitic origin.

8.7.3 As ever, although it cannot be proven that the Beḍawiē derived forms in general are not Semitic loans, rather than a feature of an original Semitic stratum, relatively few have a clear semantic correlate elsewhere in Semitic. But then if these forms did originate in loans we would have the interesting situation where a presumably random set of lexical items has come to form the nucleus for a productive grammatical system ; while not impossible, this seems rather unlikely. Furthermore the loan hypothesis would not account for the total absence of D-forms from Beḍawiē, a form common in N. Ethiosemitic and Arabic which might be expected to occur among a repertoire of derived-form loans, although see §8.1.6..[127]

8.7.4 Thus the most convincing explanation for Beḍawiē prefixing derived forms is that they comprise a substantial and particularly transparent component of the Semitic stratum, standing alongside Cushitic suffixing derived forms in the same way that the postulated Semitic G_P forms are paralleled by Cushitic G_S forms. As might be expected, analogy has operated to a considerable extent, for example in the standardisation of *m* rather than *n* as the N_P-form deriving morpheme. On the other hand, given the apparent antiquity of the putative Semitic stratum in Beḍawiē, it may be that *s* (rather than *š*) is the original (i.e. Semitic) deriving morpheme in the S_P form, rather than an innovation by analogy with the Cushitic S_S form.

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[126] Given the restricted application of their *n*-forms, this comparison cannot be extended to the N. Ethiosemitic languages.

[127] D-forms are common in Saho and 'Afar, some of which appear to be loans and others to be secondary formations from equivalent G-forms.

9. G-form Verbs on Semitic Weak Roots

9.1 Geminate Roots

9.1.1 Verbs on Semitic geminate roots occur both in the V_1 (80) and V_2 sets (34). G-form verbs in the V_1 set comprise those in which both geminate consonants, separated by a vowel, are preserved throughout the various paradigms (total 69)[128] and those where only one geminate appears (11). An example of the former is *adrír* 'take supper', which has Geʿez and Tigré cognates, and of the latter *adín* 'think', related to Arabic *ẓnn* (both Beḍawiē forms 1s, G_{PAD}). In Geʿez subjunctive forms the geminate radicals are separated in transitive verbs but in intransitives they typically fall together. Tigriña, although preserving traces of the Geʿez intransitive pattern, in general favours the pattern with separated geminates; [129] Tigré appears to have reversed this process, so that the 'intransitive' pattern is the default. ESA, MSA (Mehri) and Ancient North Arabian (ANA) have separated geminates only.[130] Whether the difference in Beḍawiē V_1 geminate verb morphology similarly reflects an original distinction between transitive and intransitive verbs is difficult to say, for intransitives occur among both types.

9.1.2 The cognates (firm and conjectured) of Beḍawiē V_1 geminate verbs are almost equally N. Ethiosemitic and Arabic (45% and 46% respectively) ; 23% have MSA cognates, a small number of which are confined to MSA.[131] All eleven verbs with only one geminate radical appear to have Arabic cognates, and occasionally also N. Ethiosemitic ; a number also have MSA cognates although none is unique to MSA. Thus the great majority of the forms with one geminate could be Arabic loans, weakening the transitive vs intransitive conjecture, particularly as Arabic coalesces geminate radicals in the many cases where the second geminate is not followed by a vowel[132] Of the thirty-four V_2 verbs eight have lost a geminate radical and, not unlike their equivalents in the V_1 set, have only Arabic cognates. The remainder are triconsonantal and, with three exceptions, also appear to derive from Arabic originals,

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[128] For exceptions to this generalisation see *TB*, §231.

[129] See F. Praetorius, *Grammatik der Tigriñasprache in Abessinien* (1871), §188.

[130] For ESA see Beeston, *DGESA*, §23.10 and for MSA see *MhL* p xxiii. For ANA see M.C.A. MacDonald, 'Ancient North Arabian' [ANA], in R.D. Woodward (ed), *The Ancient Languages of Syria-Palestine and Arabia*, p201-6.

[131] For example Beḍawiē *dig^{w}ag^{w}* 'be agile' vs Mehri *dkk* 'spring on'

[132] See the paradigms in Wright, *Arabic Grammar*, Vol I, p302.

some of which are D-forms and others substantives ; there are no V_2 forms with a unique MSA cognate.[133]

9.2 I-weak Roots

9.2.1 There would apppear to be twenty Beḍawiē V_1 G-forms with I-weak Semitic cognates, dividing roughly between those where the initial radical is omitted, or is preserved only as a labiovelar phoneme[134], and those where the radical (almost always *w*) is preserved. In Geʿez, initial *w* is often omitted from the subjunctive (G_{PA}) form, whereas Tigriña occasionally preserves the first radical in its G_{PA} forms (Praetorius, *Tigriñasprache*, §182) ; Tigré on the other hand appears always to preserve initial *w*. The situation in Mehri is also reminiscent of Beḍawiē in that some I-*w* G_{PA} forms omit the initial consonant but others retain it, although the equivalent G_{PE} forms always have the *w* (*MhL* p xxviii). Like Arabic, Epigraphic South Arabian does not usually retain the initial consonant in its G_P forms. [135]

9.2.2 As with the geminates, the Beḍawiē I-*w* cognates are equally shared between N. Ethiosemitic and Arabic, with very few MSA. Six of the verbs preserving a first radical also incorporate a geminate or a III-weak radical and are thus 'doubly weak', so that analogy appears to have favoured the first weak radical rather than the latter two features. The other five verbs comprise three whose final radical is *hamza* (from *ʾayn*) and two where an original *w* has become *y*. There are only two V_2 verbs with Semitic I-weak cognates, both originally Arabic.

9.3 II-weak Roots

9.3.1 With very few exceptions the weak radical, almost always *y*, is preserved in Beḍawiē II-weak V_1 verbs, as for example 1s G_{PA} *a'ayúk* 'chew'.[136] In N. Ethiosemitic and Arabic G_{PA} forms (subjunctive and

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[133] Both geminate radicals appear in the majority of Saho V_1 geminates, always separated. A smaller proportion (13 per cent) display only one geminate and like their Beḍawiē equivalents appear to have Arabic cognates. Most Saho V_1 geminates have Ethiosemitic cognates and many are phonologically closer to their 'originals' than most of the Beḍawiē verbs.

[134] For example *g^{w}oi* 'be tired' equivalent to Ge'ez *wh'*, and *k^{w}ita'* 'swallow', equivalent to Geʿez *wk̲t* and Tigré *wḥṭ*.

[135] Only seven I-weak roots are attested in the Saho V_1 set, of which two are marginal. Of the five unambiguous verbs four preserve the first radical (*w*) and all but one are common to Arabic and Ethiosemitic. The exception is *daʾ* 'know', whose cognates are I-*y*.

[136] Cmpare Geʿez subjunctive *ʾaḥik* with the same sense (root *ḫyk*), where Semitic *ʾa* → Beḍawiē *a* and Semitic *ḫ* → Beḍawiē *ʾ*.

majzūm respectively) the 'original' weak medial radical reduces to the equivalent short vowel, *u* or *i*, whereas in Arabic G_{PE} forms (excluding the energic) the vowel is *ū* or *ī*. In ESA the medial radical may or may not be represented in the script, although these variants apparently do not indicate differing senses or pronunciations. On the evidence available for ANA, weak radicals are represented in the orthography in all environments and were not used as *matres lectionis*.[137] In Mehri II-weak forms (subjunctive and imperfect, but excluding duals) the weak radical is reflected either in a long vowel or a diphthong (*MhL* xxix).

9.3.2 As with I-weak verbs, the cognates of Beḍawiē II-weak V_1 roots divide almost equally between N. Ethiosemitic and Arabic, with little representation in MSA. In the V_2 set the forms (seventeen in total) are more varied, as usual, but the weak radical is preserved only in stems deriving from Arabic D-forms, as for example *gēyēr* 'change', from Arabic *2ġyr*. Again, as with the geminates, the majority of the V_2 cognates (although not all) are Arabic.

9.4 III-weak Roots

9.4.1 Many Beḍawiē V_1 roots have Semitic III-weak cognates. In its G_{PAD} forms, morphologically equivalent to the Geʿez subjunctive and Arabic *majzūm*, Beḍawiē retains final *i* as a relic of the weak third radical ; compare for example Beḍawiē (3fs, G_{PA}) *tifrí* 'she gave birth'[138] with Mehri *təbrē* (same sense), and with Geʿez *təfri* (subjunctive) and Arabic *tafri* (apocopate) from the same root but with different senses. The great majority of the Beḍawiē verbs are conjugated as III-*y* even where the cognate is III-*w*, as is also the case in Mehri. In ESA and ANA the final radical may or may not be present, but whether these are orthographic variants or reflect a morphological distinction between G_{PA} and G_{PE} forms, is unclear.[139]

9.4.2 Once again the cognates are both N. Ethiosemitic and Arabic, weighted somewhat towards the

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[137] For ESA see Beeston, *DGESA*, §23.6 and Nebes and Stein, 'ASA', p157. For ANA see MacDonald, 'ANA', p186, 201-6.

[138] The final vowel is omitted from the G_{PAC} (conditional/pluperfect) forms (§3.2 above).

[139] Beeston, *DGESA*, §23.8; MacDonald, 'ANA', p186, 201-6. Saho displays both III-*w* and III-*y* roots (total 31) and the weak radical is preserved (or incorporated by analogy) in all three G_P forms, for example 3fs declarative G_{PA} *tifriyä*, on the same root as the above examples. As with other types of weak verb many Saho forms have close cognates in the N. Ethiosemitic languages.

latter ; the MSA representation is again very modest, although the occasional cognate appears to be uniquely MSA.

9.5 Summary

9.5.1 Although the data is complex, and setting aside the numerous transparent loans from Arabic and N. Ethiosemitic, the morphology and sense of many examples of the foregoing verb types seem best understood as evidence for a language with its own original repertoire of Semitic weak verbs. For although the majority of verbs which are not transparent loans can be roughly divided between those with fairly clear N. Ethiosemitic or fairly clear Arabic cognates, there are others which on present evidence show substantial phonological and or semantic differences from their proposed cognates - a possible indication of their antiquity - together with a number which appear to have only MSA cognates or no currently identifiable correlate.

10. Other Semitic Features in Beḍawiē

10.1 Prefixing and Suffixing Verb Lexical Affinities

10.1.1 Approximately 50 per cent of Beḍawiē V_1 verbs (253 of 503) can be related with greater or lesser certainty to Arabic equivalents, as against 44 per cent in the V_2 lexicon (199 of 457).[140] 40 per cent of V_1 verbs then have N. Ethiosemitic equivalents (204), compared with 22 per cent (103) in the V_2 lexicon.[141] A further 17 per cent of V_1 verbs have ESA and/or MSA cognates (84 items, mostly MSA) along with about 4 per cent of V_2 verbs (20 items). This raw numerical evidence for the distinctness of the two sets can be supplemented in several ways :

1. **The substantial percentage of stems of Arabic origin in the V_2 lexicon is partly accounted for by the numerous transparent loans originating in Arabic substantives ; such verbs are rare in the V_1 set;**
2. **Many V_2 verbs of Arabic origin begin in vowel *a* and preserve all three Semitic root consonants, as for**

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[140] Lexical data compiled from Reinisch (*BdW*), Almkvist (*BSNOA*) and Roper (*TB*).

[141] Many items have cognates in more than one language and are included in two or all three sets of percentages, as appropriate. If the analysis is confined to verbs attested by both Reinisch and Almkvist (such that the overall number of verbs considered is reduced), Ethiosemitic items in the V_1 set rise to 51 per cent and 'Arabian' items fall to 48 per cent. The difference in the V_2 set percentages is much less marked ('Arabian' 42 per cent, Ethiosemitic 28 per cent). This is of interest because historically the (northern and western) Bishari would presumably have been less exposed to Ethiosemitic influence.

example *afham* 'understand'. A small number of verbs have both this and a more regular Semitic pattern, which latter is occasionally V_1;[142]

3. A number of V_2 verbs clearly originate in Arabic D-forms, for example *fakkar* 'think' (Arabic *2fkr*), *siffi* 'strain liquid' (Arabic *2sfw* 'clarifiy') ; such forms are entirely absent from the V_1 set (§8.2 above);

4. Analysis of verbs with definite Arabic or S. Arabian cognates shows that about 50 per cent of relevant verbs in the V_1 set display substantial phonological deviation from their cognates, as compared with 25 per cent in the V_2 set. This invites the conjecture that the greater phonological 'wear' on the former results from the Semtic cognates of V_1 verbs being 'older' than those of the relevant V_2 verbs.[143]

5. Although ESA and MSA matches with Beḍawiē verbs are less common, of twenty-eight ESA roots so far identified with Beḍawiē equivalents, twenty six have parallels in set V_1 as against only two in set V_2, and of the 76 Mehri roots so far identified with convincing Beḍawiē parallels 51 occur in the V_1 set.[144]

10.1.2 The distribution of verbs of likely Cushitic origin between the V_1 and V_2 sets is more striking, in that only 38 examples (18 probable, 20 possible) have so far been identified in set V_1 (7.5 per cent) compared with 128 (69 probable, 59 possible) in set V_2 (28 per cent), a result predictable from the essentially Cushitic morphology of the V_2 verb.[145] Almost all V_1 verbs of Cushitic origin have rather 'basic' senses, as for example 1s *áde* (G_{PA}) vs *ánde* (G_{PE}) 'say' ; three of these are paralleled by Somali prefixing verbs (see §6.1 above) and two others by Saho G_P forms.

10.1.3 Thus the lexical evidence perhaps suggests a possible history of the Beḍawiē verb along the following lines:

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[142] Compare for example *aškir* (V_2) vs *šekir* (V_1) 'be drunk' (Arabic *sakara*) and *an'al* (V_2) vs *na'al* (V_1) 'curse' (Arabic *la'ana*). Reinisch (*BdG*, §308, Note) is of the opinion that all verbs could originally have been conjugated either as V_1 or V_2, on the ground that this is indeed the case with a small number of verbs. This is much to be doubted.

[143] This assessment is based on loss of phonemes, metathesis, etc., but ignores features such as loss of pharyngeals, which is common to both sets. Some Arabic loans into the V_1 set nevertheless remain fairly close to their originals, as for example *demim* 'guarantee' (Arabic *ḍmm*), *gadāb* 'become angry' (Arabic *ġḍb*)

[144] A number of Mehri and Beḍawiē V_1 correlates are of course shared loans from Arabic ; the same seems also to be particularly true of the Mehri/Beḍawiē cognates in the V_2 set.

[145] Confining the analysis to V_2 verbs listed by both Reinisch and Almkvist, 32 per cent of verbs in set V_2 are of probable or possible Cushitic origin.

1. The mixing of earlier Semitic migrants from Arabia with the indigenous Cushitic population resulted in the introduction of an essentially Semitic verb set (V_1) with correlates in N. Ethiosemitic, Arabic and S. Arabian„[146] alongside the original Cushitic set (V_2). In the earliest phase a small number of Cushitic verbs were brought into the V_1 set and, for whatever reason, these tended also to occur in neighbouring Cushitic languages. Some Semitic verbs were presumably taken into the V_2 set at the same time, although the large-scale, apparently subsequent, incorporation of Semitic elements into the latter set makes this conjecture difficult to develop;

2. At some time the V_1 set became for the most part closed so that subsequent loans from Arabic and the Ethiosemitic languages (verbs and substantives) were taken predominantly into the V_2 set, although a small number of items continued to be taken into the V_1 set.

10.2 Lexicon (General)

10.2.1 Swadesh Listing

10.2.1.1 A Swadesh listing of about 200 core lexical items in Beḍawiē yields around 54 per cent which with greater or lesser probability can be assigned to the putative Semitic stratum ; a further 28 per cent have Cushitic cognates, a few are Beḍawiē innovations and about 11 per cent remain undecided.[147] Of Semitic items, about 26 percent appear to have Arabic cognates, a similar proportion are N. Ethiosemitic (mainly Geʿez) and about 13 per cent are MSA (on which see further at §10.2.3 below).

10.2.1.2 As with the V_1 verb set, the Swadesh listing includes items where phonologically the Beḍawiē form differs markedly from its postulated Semitic or Cushitic cognate. Compare for example Beḍawiē *hamag* with Geʿez *qamḥ* 'fruit', and among words of Cushitic origin *enga* vs Bilin *ingerā* 'back'. Semitic words in the Beḍawiē listing in fact range from transparent loans, for example *deríb* 'road' from Arabic *darb*, to those which at first glance are almost impenetrable, as Bedawie *éndi* vs Geʿez *ḫaṣṣin* 'iron'.[148] Many of these shifts are consequent upon the absence or loss of the relevant Semitic phoneme from

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[146] **No cognate, Semitic or Cushitic, has so far been identified for about 15 per cent of V_1 verbs. About 7 per cent of these are triradical and therefore unlikely to be Cushitic, except where a Cushitic deriving morpheme has been suffixed to the stem. Some of the remainder could be Cushitic but most will probably be worn-down Semitic triradicals.**

[147] **Compare Saho (37 per cent Cushitic, 41 per cent Semitic) and Bilin (65 per cent Cushitic, 24 per cent Semitic).**

[148] **Compare Tigriña *ḫənṣi*, (Leslau, W. *Comparative Dictionary of Ge'ez [CDG]*, 1987, p267).**

Beḍawiē, but other changes have occurred even where Beḍawiē has the phoneme in question.[149] Given the complex pattern of linguistic relationships, synchronic and diachronic, between the Beja and the peoples with whom they have associated and interacted, postulating sound laws governing these associations is not straightforward.

10.2.1.3 A further general characteristic is the range of Beḍawiē phonemes (or none) equivalent to a given Semitic phoneme ; for example there are at least nine equivalents to Arabic *ḥ* and six to Geʿez *ṣ*. Semitic *s, š* and *ṣ* comprise another group with complex correspondences, among the more striking being Geʿez and Arabic *sawṭ* 'whip' (Tigré *šawṭ*), equivalent to Beḍawiē *kawiḍ*. Arabic and Tigré *š* (but Geʿez *ṣ*) commonly correlate with Beḍawiē *š* in word-initial position, so *kawiḍ*. might be explained by the fact that earlier *š* not uncommonly shifts to *č*, as for example in Tigré. If this was also the case at some point in Beḍawiē (which synchronically has no phoneme *č*) a further shift to *k* (and hence *g*) would be predictable. But then compare Beḍawiē *kʷlél̄a* 'cough', related to Arabic *sulāl* 'consumption'. Beḍawiē *k* is unlikely to result from Arabic *s* and thus *kʷlél̄a* must either be original to Beḍawiē or be related to an unattested Ethiosemitic form with original *š*.

10.2.1.4 Another example is the tendency to represent Arabic *j* by (retroflex) Bedawiē *ḍ*, implyimg that some Beḍawiē words are loans from an Arabic dialect with *j*, e.g. Arabic *jalaba* 'transport (cattle, etc.)' vs Beḍawiē (V_1) *delib* 'trade' (where Beḍawiē *ḍ* → *d*). But other words reflect Semitic *g* rather than *j*. Some of these may originate in an Arabic dialect where *g* replaces *j*, but as all the N. Ethiosemitic and S. Arabian languages have *g* rather than *j* it seems more likely that Semitic words with a Beḍawiē equivalent in *k* or *g* are loans from these languages - or are original to the Semitic stratum in Beḍawiē. Thus for example V_1 verb *gʷa'* 'push' may originate in Arabic *waja'a*, but if not original to Beḍawiē is more likely to be related to Geʿez *wag'a* and Tigré *wäg'a*.[150]

10.2.1.5 Thus the circumstances under which one Beḍawiē equivalent is preferred to another are often unclear. Table 10.1 lists a sample of apparently Semitic words in Beḍawiē which differ substantially from their presumed original. note that several are also attested in ESA and/or MSA.

TABLE 10.1 POSSIBLE ORIGINAL SEMITIC WORDS IN BEḌAWIĒ

Sense	Beḍawiē	Arabic	Geʿez	Notes

[149] See generally the section on phonology in *BdG*, §4ff.

[150] *BdG,* §54; *CDG*, p607. The root also occurs in MSA.

Sense	Beḍawiē	Arabic	Geʿez	Notes
ant	émbira	nimla		
be fine (thin)	aḍam		qaṭana	Also ESA.
beetle	kónšib	hunfas	ḥənzəz	
blow [n] (Ar) imprint (Ge)	kaḍau	habṭa	hafṭat	
coccyx (Bd) anus (Ar)	kaḍ́m	ḥaddāfa		
cover (v)	kʷabil		galbaba	
iron	éndi		haṣṣin	*CDG* 267.
neck	kalif		ḥaddāf	*CDG* 225.
rest (n)	ād	had'	had'a	Also MSA. *CDG* 214.
separate	feḍag		śaṭaqa	
small	de'	ṣaʿw		
sneeze (v)	'afid	‘aṭasa	‘aṭasa	Also MSA.
stone	áwe		'əbn	Also ESA.
swallow (v)	kʷata'		wakaṭa	*CDG* 611
tree	hinde		‘aḍ	Also ESA. *CDG* 57. Cf. Tigriña *‘ənṣäti*

10.2.2 Nouns with Prefixed m(v)-

10.2.2.1 The Semitic languages, along with Egyptian, display a range of nouns in which morpheme *m(v)-* is prefixed to a G-stem. The details vary from language to language but in general these nouns have local, temporal, instrumental or abstract (infinitive) sense.[151] Such forms are fairly common in Beḍawiē, rather less so in Saho and ‘Afar, but are at best uncommon in or absent from the Agaw and Highland East Cushitic families and other Lowland East Cushitic languages. In Beḍawiē (and Saho-‘Afar) *m(v)-* forms occur almost exclusively in conjunction with type V1 verbs, as can be seen from the sample forms in Table 10.2.[152]

TABLE 10.2 SELECTED NOUNS WITH PREFIX *M(V)-*

Noun	Sense	Verb	Notes
m'áfai [Ro] ma'afáy [Re]	nail, peg [Ro] securing ring [Re]	‘afi : restrain	Cf. Arabic *áfw* ‘refrain’.
magér	homecoming	agir : turn back	Cf. Arabic *marja'* ‘place of return’.
mīyai [Ro] miyáy [Re]	receiving	ah : take	Cf. Arabic *'ahaḍa* ; ESA *'ḥd* ; Geʿez *'ahaza*.
ma'ám [Re]	riding	'ām : ride	Cushitic stem

[151] Moscati et al, *Introduction*, §12.46.

[152] Compared with over fifty forms associated with V_1 verbs, only three have so far been identified for V_2 verbs. In the table ‘Ro’ indicates a form from Roper’s vocabulary and ‘Re’ a form from Reinisch’s dictionary.

Noun	Sense	Verb	Notes
mi'át [Ro] ma'át [Re]	footprint	'at : tread	Saho *mā'át*. Cf. Arabic *ma'tāt*^{un} 'road'.
m'álau [Ro] maláû [Re]	adze		Geʿez *maq*^{w}*laz*.
méb'en [Re]	fear	bə'ān : fear	Cf. Geʿez *bḥrr* and Arabic *bhr*. Both 'be startled'.
mīmaš [Ro] mīmāš [Re]	grave	bis : bury	ESA *fṣy* 'inter'.
mabáy [Re]	going	bāy : go	Cushitic stem
miyád [Re]	speech	di 'say'	Cushitic stem
madha [Ro]	leanness	dāh : b thin	Cf. Arabic *ḍāqa*.
mádar [Ro] madér [Re]	murder	dir : kill	Cf. ESA *dhr* 'destroy'.
maḍha [Ro] maḍáh [Re]	fatness	ḍah : b fat	Cf. Arabic *maḍḥam* 'corpulent'. Final *m* → *b* → *zero*?.
máḍam [Ro]	bed	ḍim : spread bed	Cushitic stem. Cf. Saho V_2 *ḍin*.
méfnek [Re]	bite	fenik : bite	Cf. Geʿez + Arabic *ḥnk* 'chew'.
méfrēi	birth	firi : give birth	Cf. Geʿez *mafrəy* 'fruitful'.

10.2.2.2 Some forms (not listed) are without question Semitic loans, as for example *meftáh* 'key' and *médhar* 'blessing', the latter related to Tigré *madḥar* and Geʿez *madḵar*. More interesting are Beḍawiē forms which undoubtedly have a Semitic background but which appear to have no direct parallel in any other Semitic language. For example Beḍawiē *méfnek* 'bite' on root *fenik* is related to Arabic and Geʿez *ḥnk* 'chew',[153] but neither Arabic nor the N. Ethiosemitic languages appear to have a form equivalent to *mefnek*.

10.2.2.3 There are also *m(v)-* forms with Semitic cognates from which they differ markedly. For example *m'álau* 'adze' is clearly related to Geʿez *maq*^{w}*laz* 'axe' and *metung*^{w}*li* 'grindstone'[154] to Arabic *miṭḥana* and Tigré *maṭḥan*. Although the phonological history of *m'álau* is obscure, the worn-down form could once again suggest that it is original to Beḍawiē.[155]

10.2.2.4 An important subset of these nouns comprises infinitives from V_1 intransitive verbs on triconsonantal stems (Section 5 above), as instanced by *mégrek* 'drowning' from *gerāk* 'drown', which is

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[153] For *ḥ* → *f* see *BdG*, §61.

[154] This is one of the forms of this word cited in *BdW*, p175. Roper has *entēwa* as the Haḍanḍiwa form. The *n* of Reinisch's form may be intrusive, the original *n* of *miṭḥana* having become *l*. For a discussion of the various ways in which nouns of this type can become phonologically modified see *BdG*, §72.

[155] *CDG*, p431. Geʿez *q*^{w} typically becomes *k*^{w} in Beḍawiē (*BdG*, §35) and *z* becomes *d* or a sibilant (§7).

related to Arabic root *ġrq* with the same sense. There are about thirty such verbs, of which fifteen have nominal forms with prefix *m(v)-*. Although many of these roots occur in Ethiosemitic or Arabic, there again appear to be no equivalents to the Beḍawiē *m(v)-* forms.[156]

10.2.2.5 Some forms associated with Cushitic V_1 stems, for example *mi'át* 'footprint' from *'at* 'tread' and *miyád* 'speech' from *di* 'say' have equivalent forms in Saho, namely *mā́'at* 'footprint' and *maḷahṓ* 'speech', from V_1 stems *'at* 'trample down' and *ḍah* 'say'. The stem for 'say' is paralleled elsewhere in Cushitic, as for example Bilin *duw*, where however the *nomen actionis* has the typically Cushitic form *dûnā.*

10.2.2.6 As with the derived verbs (§8.7.3), it is possible that some of these nouns originate in a productive system triggered by a nucleus of Semitic *m(v)-* loans into Beḍawiē, a possibility supported by a small number of *m(v)-* forms on Cushitic stems, but once again there would appear to be no parallel for such a development elsewhere in Semitic or Cushitic (other than Saho-ʿAfar). Therefore, although there are of necessity less well-defined strands in the foregoing argument, in particular the phonological correspondences between Beḍawiē and Semitic forms, the likliest explanation for nouns with prefixed *m(v)-* remains that at least some such forms are original to the putative Semitic stratum.

10.2.3 Correlates in the MSA Languages

10.2.3.1 Table 10.3 comprises a list of possible Beḍawiē correlates with Mehri and Śḥeri. These are judged to be the most convincing examples, ie. those apparently without Arabic correlates, except for forms which are arguably loans from MSA into Arabic.[157]

TABLE 10.3 BEḌAWIĒ –MSA CORRELATIONS

Sense	Beḍawiē	Mehri	Remarks
belt	haba	ḥēmər	Ro.
camel foal to 6 months [Bd] very young camel [Mh]	hīwa	ḥəwōr(ət)	Ro. Ar (ḥuwār) [L] Loan into Ar?
catch	til	tər	Ro. $G_{PA(B)}$ (itla') *MhL* 403 also has 'drag, lead

[156] Such infinitives are common in Tigriña but there would appear to be none with a Beḍawiē correlate. There are generally few - if any - Tigriña loans into Beḍawiē.

[157] Coventions as follows : Ro = Roper ; Re = Reinisch ; L = Lane ; A = Almkvist ; $G_{PA(M)}$ = Mehri subjunctive ; $G_{PE(M)}$ = Mehri imperfect ; Ś = Śḥeri form ; H = Ḥarsusi ; J = Jibbali ; $G_{PA(B)}$ = Beḍawiē perfect ; $G_{PE(B)}$ = Beḍawiē imperfect.

Sense	Beḍawiē	Mehri	Remarks
			away' No Mh paradigm.
cloud	afra	'āfōr	Re. Ro = afrad
corner	girma	qərnēt	Ro. Re only = 'head'.
curse	'ad	d'é (Ś)	Re. S-form in Mh [*MhL* 62].
defend	habi	ḥōmi	Ro + Re. $G_{PA(M)}$ (yəḥōmi) ; $G_{PA(B)}$ (íhabi). $G_{PE(M)}$ (yəḥámyən) ; $G_{PE(B)}$ (ahambi).
drag [Bd] crawl [Mh]	rifif	rəś	Ro + Re. See *BdG* §61. $G_{PA(B)}$ (írfif) ; $G_{PA(M)}$ (yərśēś). Cf. Bd (mirfáf : reptile).
drink milk	šifi	śəkaf	Ro + Re + A. $G_{PA(M)}$ (yəśkōf) ; $G_{PA(B)}$ (išfi).
dry (adj)	ēša	qéša' (Ś)	Ro. Mh (qáyśa).
ember	ḍahalā́y	ṯḥəmét (Ś)	Ro + Re. Re has initial ḍ. Has So+Sa+Af cognates [*BdW* 64]., e.g. Af (dikhenṓ).
eyelash	šambehani	śəfəryēn	Ro + Re. *BdW* 215.
foot	l/ragad	gēdəl	Ro + Re. Sa (rigid).
fruit	hā́māg	yəmlēk	Ro + Re. For Mh details see *MhL* 461. (*hā́māk > yamāk > yəmlēk)?.
goat	ragáne	ráwn	Ro. Mh = coll. w/- art. *ḥā-*. Mh √ 'rn [*MhL* 7].
grandfather	hoba [Ro] hṓb[Re]	'ōm 'om [Ś]	Cf. Bd *hot* : grandmother. Bd m > b, then taken to be masc. abs, so that *hob* ‖ *hot* ? Cf. Ge 'emḥēw [m] vs 'emḥēwt [f])
hair	ḍifi	śəft	Ro. Bd is a hairstyle.
harm [n]	ídir	źar	Ro. [*MhL* 477].
hide	'ar	qərū	Ro. [*MhL* 237]. $G_{PA(M)}$ (yəqrē) ; $G_{PA(B)}$ ('ir). Sa_1 √ 'ar ; $G_{PA(S)}$ (á'ore).
hide	k^{w}ibil	kəbūn	Ro + Re + A. $G_{PA(M)}$ (yəkbēn) ; $G_{PA(B)}$ (ik^{w}bil)
hire	kiri	kōri	Ro + Re + A. $G_{PA(M)}$ (yəkōri) ; $G_{PA(B)}$ (íkeri). Cf. Ti (karaya) ; Ar (3kry). Loan into Bd + Mh?.
incisor	simariai (f)	məṯənyēt	Ro. [*məsənyē > simanyē?].
mad	halē [Ro] halā́y [Re]	ḥáywəl	*MhL* 194. Cf. Ar (kyl) + Ge (kly) = imagine
mist	s'āy	źiōt [Ś]	Ro. Re has 'nebelwolke'. Mh (źəbōbət) . Cf. Ar (ḍabāb).
overflow	fif	fēź [Ś]	Ro + Re. $G_{PA(B)}$ (ifif) ; $G_{PA(M)}$ (yəfyēź) [*MhL* 111]. Cf. Tigré (fas : spread ; discharge) [*BdW* 77].
owl	milaike(t)	mənwə'ēt (H)	Ro. Mh is *mənwāt*.
pass over river [Bd] go back and forth [Mh]	dif	zəf	Ro + Re + A. $G_{PA(M)}$ (yəzfēf) ; $G_{PA(B)}$ (idif)
precipice	šake	daḥq	Ro
rise (new moon) [Bd] rise (sun) [Mh]	hai	fəz	Ro. V_2 to distinguish from (ha(i) : be)?
scratch	$šik^{w}$in	śəkām	Ro.
shield (of hide) [n]	g^{w}ibe [Ro] gū́be [Re]	gawb	Sa + Af (gōb). Ar (jawb) [loan? Ar √ jwb has range of senses].
stoop	hab	kbūb (Ś)	Ro. $G_{PA(J)}$ (yɛ́kkəb) ; $G_{PA(B)}$ (iháb). Mh uses S-fm. No other cognate.
suckle	dūg	ādōg	Ro + Re + A. Bd = V_2. $G_{PA(M)}$ (yādēg) [*Mh*L 11]. Cf. Sa_2 (daw).
sun	yīn	yum [Ś]	Ro + Re. Rel'd to *yawm* [*MhL* 462, *BdW* 241].
tan	ḍif	wəṭáwb	Ro + Re. $G_{PA(B)}$ (iḍíf) ; $G_{PA(M)}$ (yāṭāb). Cf Ś (ṭob). Also Mh (ṣəbōġ : dye)
tonsil	tiwīt	təbəlōt	Ro. Bd has base sense 'gland'.
turn round (Bd) turn one's back (Mh)	g^{w}ibi	aqōfi	Ro. $G_{PA(B)}$ ($íg^{w}$ibi) ; $G_{PA(M)}$ (yaqōfi).
virgin	'āgir	'āgəm	Ro + Re.

Sense	Beḍawiē	Mehri	Remarks
well (n)	re	ġor [J]	Ro + Re. [*MhL* 40]. Cf. Sa (rau) ; Ge (gawaya)
with	hai	hāl	Ro. [*MhL* 155].

10.3 Adjectives in Predicate Constructions

10.3.1 In predicate constructions, Beḍawiē adjectives with a final consonant take the endings shown in Table 10.4, with which are compared their (more restricted) Geʿez, Arabic and Mehri equivalents.[158] The Beḍawiē forms are Beni Amer but are consistent with those cited by Roper for Haḍanḍiwa and Almkvist for Bishari.[159]

TABLE 10.4 PREDICATE ADJECTIVE ENDINGS

	Beḍawiē	Ge'ez	Arabic	Mehri
1ms	nigī́s-u	|	|	|
1fs	nigī́s-t-u	|	|	|
2ms	nigī́s-wa	ṣādeq	kabīr-u^{n}	mrīṣ
2fs	nigī́s-t-wi	ṣadeq-t	kabīr-at-u^{n}	mrīṣ-at
3ms	nigī́s-u	|	|	|
3fs	nigī́s-t-u			
1mp	nigīs-ā́b-(ān)a	|	|	|
1fp	nigīs-ā́t-(ān)a	|	|	|
2mp	nigīs-ā́b-āna	ṣādeq-ān	kabīr-ūna	marwōṣ
2fp	nigīs-ā́t-āna	ṣādeq-āt	kabīr-āti	marwaṣ-tan
3mp	nigīs-ā́b-(ān)a	|	|	|
3fp	nigīs-ā́t-(ān)a			

A number of observations can be made about the Beḍawiē forms:

1. **On the analogy of the 1s and 3s forms, the 2ms and 2fs forms probably originate respectively in *nigī́s-u-a and *nigī́s-tu-i, where final –*a* and –*i* mirror those of the 2s V_1 verb forms (Table 2.1);**
2. **Reinisch notes that the 2p ending –*āna* can also appear in the Beni Amer 1p and 3p forms ; these variations do not appear to occur in Haḍanḍiwa or Bishari. Note the resemblance between the Beḍawiē and Mehri fp forms; [160]**
3. **Morpheme *ā́b* in the Beḍawiē mp forms is something of a problem. It may have been introduced by analogy with feminine plural *ā́t*, but could it be related to morpheme –*ān/-āna* in the Geʿez and Arabic**

[158] **Mehri (Mahriyōt) data from Watson, *TSM* Table 72 (p105). Table 72 (and 73) shows a variety of patterns of which the forms in Table 10.4 are fairly typical.**

[159] ***BdG*, §139/40; *TB*, §63; *BSNOA*, §92.**

[160] **Reinisch analyses –*āna* as the plural of some substantive verb, but if so which?**

mp forms, i.e. *ān* > *ām* > *āb*?

4. When the adjective ends in a vowel the feminine singulars are regular and the plurals are fairly predictable from the equivalent forms ending in a consonant. The masculine singulars insert *b* to parallel feminine *t*, for example (1s) *daûrī́-b-u* vs *daûrī́-t-u.* [161]

10.3.2 That the Beḍawiē series is in some degree related to the equivalent Semitic forms seems at least plausible. This then invites the conjecture that final *u* in the Beḍawiē singular forms may be a remnant of the Semitic nominative morpheme, retained in Classicial Arabic but lost from Geʿez and Mehri. But the feature whereby (apparently) accusative marker *b* is introduced when the adjective (or predicate noun) ends in a vowel could suggest that, synchronically, the predicate should be viewed as an 'absolute' or 'accusative' form rather than a nominative, whatever the history of the construction.

10.3.3 The possible preservation of the Semitic nominative case marker in the singular forms and its absence from equivalent forms in the N. Ethiosemitic languages, together with the fact that these constructions are more or less preserved across the whole language, suggests once again that they may be Semitic originals. If on the other hand they were introduced from Arabic (presupposing a source Arabic dialect that had preserved case endings) then, given the ubiquity of these constructions in Beḍawiē and the modifications they have undergone, they could not be regarded as a (relatively) recent innovation. Finally, the possibility of a more Arabian than N. Ethiosemitic origin for this construction is further supported by the (unmarked) *noun-predicate* ordering of the Beḍawiē construction, as in Arabic and Mehri (*TSM* §3.1.1), in contrast to the Geʿez order *predicate-noun*.

10.4 Definite Article and Demonstrative Pronouns

10.4.1 From the discussion in Moscati et al[162] it is clear that the definite article in Semitic is a relatively late innovation, being entirely absent from the older languages. The Cushitic data invites a similar conclusion, for most Cushitic languages either entirely lack the article or have a fairly simple system.[163] No other language - Semitic or Cushitic - has a system as complex as that of Beḍawiē. Using *kām* 'camel' as a template (plural *kam*), typical forms of the article and the near deictics are set out in

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[161] **Reinisch regards *b* as the masculine accusative marker.**

[162] ***Introduction*, §12.77.**

[163] **Somali is a partial exception to this generalisation.**

Table 10.5.[164] Inspection of near deictics in other Cushitic languages suggests that the Beḍawiē forms are typically Cushitic except for the absence of *k-* as a masculine marker.[165] It is not entirely clear whether the forms of the article derive from the associated deictics or vice versa.[166] Appleyard proposes that earlier forms of the article were nominative **wu* (m), **tu* (f), and 'accusative' **wa*, **ta*.[167]

10.4.2 An interesting characteristic that Beḍawiē shares with Mehri and other MSA dialects, but not with Arabic, is that the article is retained when a noun is accompanied by a possessive suffix. Compare Beḍawiē *i-gauw-ūk* (cf. *TB* §102) with Mehreyyet *a-bit-k* (*TSM* §2.4.12, p67), both meaning 'your (ms) house' ; the Mehri article appears to originate in *ha-*. Should the two structures indeed derive from a common original it may be that Beḍawiē has elaborated the South Arabian pattern by incorporating Cushitic deictic and case components.

TABLE 10.5 DEFINITE ARTICLE AND NEAR DEICTICS

		Nominative		Oblique	
		Article	Deictic	Article	Deictic
masc	sing.	ū-kām	ūn-ū-kām[168]	ō-kām	ōn-ō-kām
	plural	ā-kam	ān-ā-kam	ē-kam	ēn-ē-kam
fem.	sing.	tū-kām	tūn-tū-kām	tō-kām	tōn-tō-kām
	plural	tā-kam	tān-tā-kam	tē-kam	tēn-tē-kam

10.4.3 The Beḍawiē far deictics all have initial *b-* as the marker of distance, together with *-ē-* as marker of singularity and *–alī-* of plurality (Table 10.6).[169] Masculine nominative and oblique case are

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[164] Article forms as per *BdG*, §112 and *BSNOA*, §54. Deictics as per *BdG*, §177 and *BSNOA*, §137. Compare *TB*, §26 and §83, where the oblique case morpheme is *o* rather than *ō*. Reinisch and Roper cite simpler variant forms before nouns beginning with a laryngeal or vowel, or as determined by syllable structure or the position of the accent on the accompanying noun or phrase.

[165] Compare Somali *kan* (m) and *tan* (f), which are case-free (Reinisch, *SoG*, §227) ; see also Appleyard, 'BCL', p180. The *n*-based near deictic appears to be a common 'Afroasiatic' feature. For Semitic see Moscati et al *Introduction*, §13.29 ff, and for Egyptian, A. Gardiner, *Egyptian Grammar* (Oxford 1988), §110. Note also the ESA suffixed nearer deictic/article *–n* (Beeston, *Description*, §28).

[166] *BdG*, §182 Note 1; Appleyard, 'BCL', p179/80.

[167] He also explores the possibility that the masculine forms may derive from Cushitic **ku*, **ka*, but concludes on phonological grounds that this is unlikely.

[168] 'This camel' in Beḍawiē is expressed as 'this the camel'. The same is true of the far deictics.

[169] *BdG*, §178; *BSNOA*, §137. Reinisch argues (*BdG*, §182 Note 2), probably correctly, that the far deictic was

marked by *–n* and *–b* respectively, but case is not distinguished in the feminine forms, which are marked for gender by *-t*. No other Cushitic language appears to have far deictics incorporating an *l*-based morpheme in their plural forms, whereas such morphemes are common in Semitic.[170] The other components are either Cushitic (gender, distance) or a Beḍawiē innovation (case).[171]

TABLE 10.6 FAR DEICTICS

	Masculine		Feminine	
	Singular	Plural	Singular	Plural
Nominative	bēn	balī́n	bēt	balī́t
Oblique	bēb	balī́b		

10.4.4 Among the Saho and 'Afar deictics are *ā* 'this' and *(w)o* 'that', which are gender and number neutral. Reinisch is inclined to see these forms as related to the Beḍawiē masculine singular nominative article *ū* and oblique form *ō*.[172] But if this were the case it would require an original Beḍawiē far deictic at some point to have been re-assigned as an oblique article/near deictic, which in turn would require the current Beḍawiē far deictics to be a subsequent innovation in replacement of the originals.

10.4.5 It is interesting to note that, aside from Akkadian, the only Semitic language differentiating nominative and oblique case in its (far) deictics is ESA, although its plural forms do not display an *l*-based morpheme.[173] It could thus be conjectured that the Beḍawiē article and demonstratives, in their uniqueness and complexity, to some extent reflect a Semitic dialect that, like ESA, differentiated nominative and oblique case in its demonstratives, even though morphologically the Beḍawiē and ESA forms have little in common and there is no supporting evidence in MSA.

10.5 Case

10.5.1 As Table 10.5 shows, nominative case in Beḍawiē definite nouns is marked on the accompanying article or deictic, the associated oblique form otherwise being used ; nominative case in

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originally *ba.*

[170] Moscati et al, *Introduction*, §13.31.

[171] Compare the Egyptian deictics (near and far) incorporating an initial element *p-* (Gardiner, *Egyptian Grammar*, §110). The far deictics in the other Cushitic languages accessed bear little resemblance to those of Beḍawiē, but Reinisch has no doubt that the *b-* element is essentially Cushitic.

[172] Reinisch, *Irob-Saho*, p32; *BdG*, §182 Note 1.

[173] Lipiński, *Outline*, p326/7.

indefinite nouns is indicated by syntax. But recall the discussion in §10.3, where it is suggested that morpheme *–u* in singular predicate constructions may be a relic of the Semitic singular nominative marker.[174] Other Cushitic languages mark nominative case differently (e.g. Highland East Cushitic) or not at all (Saho).[175] As the current consensus appears to be that *–i* was the original nominative marker in Cushitic[176] the way in which Beḍawiē marks nominative case is thus strictly neither Semitic nor common Cushitic.[177]

10.5.2 Beḍawiē stands apart from the other Cushitic languages in marking with final *-b* the accusative of indefinite masculine nouns and adjectives ending in a vowel, for example *awḗ-b dabalā́-b íkta'* [stone – small – he smashed] 'he smashed a small stone', albeit not in all contexts.[178] Although considered 'something of a mystery' ['BCL' p182], there is no great difficulty, neither phonologically nor functionally, in associating this morpheme with Semitic mimation, which likewise occurs only with indefinite forms, although its 'loss' from nouns and adjectives ending in a consonant is admittedly something of a problem. The Cushitic languages generally display an 'absolutive' (i.e. unmarked) form of the noun, which is argued originally to have had suffix *–a* and is typically used as a citation form or as an accusative.[179] In this connection it is striking that in answer to the question 'what is the word for *x* in Beḍawiē' the relevant word is always cited in the accusative, e.g. (masculine) *awḗ-b* 'stone'. This otherwise puzzling phenomenon would be explicable if final *–b* were indeed a remnant of mimation, such that Beḍawiē citation forms originate in Semitic mimation added to the Cushitic absolutive.[180] However, if this analysis is valid, the limited range of application of Beḍawiē *-b* would imply virtual collapse of the

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[174] **Cf. Appleyard's conjecture ('BCL', p182) that the Beḍawiē nominative marker may originally have been *–u*.**

[175] **For Highland East Cushitic case markers see G. Hudson, 'Highland East Cushitic', in *NSLE*, p253 [§5.2.5]. The Saho form *bā́'elā* (nom + acc) 'spouse' [cf. *bā'elī́* (gen)] could be taken as evidence for *–ā* as nominative marker, but suffix *–ā* more likely results from a modification of the function of the absolutive form (see §10.5.2).**

[176] **Hayward, 'Afroasiatic', p88; Appleyard, 'BCL', p177 fig. 1.**

[177] **See also §9.8.2 below in respect of the suffixed possessive pronouns.**

[178] ***BSNOA*, §58; *BdG*, §122c; *TB*, §43. Roper observes that this ending occasionally occurs also with the nominative case but this is not recorded by Reinisch or Almkvist.**

[179] **Hayward, 'Afroasiatic', p88; Appleyard, 'BCL', p177.**

[180] **Note in this connection that Beḍawiē tribal and place names commonly end in *-ab* (Paul, *History*, p137).**

original Semitic system.

10.6 Genitive Construction

10.6.1 The genitive construction in the Cushitic languages can initially be analysed along two dimensions, a) the ordering of the *nomen regens* and *nomen rectum*, and b) the use of dedicated genitive morphemes. Oromo, Somali and Rendille generally display the order *regens-rectum*, as in the Semitic languages, whereas Highland East Cushitic, Saho-'Afar and Beḍawiē have *rectum-regens*, apparently without exception. The Agaw language Bilin employs both constructions, although *regens-rectum* appears to be an innovation, perhaps on the analogy of the equivalent construction in adjacent Tigré and Tigriña.[181]

10.6.2 Genitive morphemes, when used, are almost invariably applied to the *n-rectum*. Such morphemes seem to be absent from Oromo, and in Somali, Rendille, etc. occur only with a feminine singular *n-rectum* and its (grammatically masculine) plural. Morpheme *–i* as marker of a masculine *n-rectum* occurs in Saho, 'Afar, Beḍawiē and Bilin among the languages considered here ; feminine nouns are marked by a *t*-based morpheme in Somali, Rendille, Saho, 'Afar and Beḍawiē, along with certain Highland East Cushitic languages. Beḍawiē alone also displays the feature of systematically (as opposed to sporadically) marking on the *n-rectum* feminine gender in the *n-regens*.[182] In general, in the southerly-trending geographical sequence Beḍawiē, Saho-ʿAfar, Somali, the further south the language the more simplified and perhaps more fossilised the genitive constructions appear to become. Thus the Somali and Saho-'Afar constructions can to some extent be explained diachronically by reference to those of Beḍawiē, but the reverse is not the case, suggesting perhaps that Beḍawiē may preserve something of the original construction.[183]

10.6.3 If the *t*-based feminine morpheme is not original to Cushitic, as is suggested in *TAF* §6.4, interaction between earlier and later Semitic influence on Beḍawiē is suggested by pairs such as *tak* vs

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[181] **L. Reinisch, *Die Bilīn-Sprache in Nordost-Africa* (1881), §150-6.**

[182] **For the Beḍawiē genitive construction generally see *BSNOA*, §68ff; *BdG*, §125ff; *TB*, §49-51.**

[183] **Although the use of *–i* (feminine *–ti*) as a marker of the *n-rectum* is widespread in Semitic it has not been preserved in Geʿez (Dillmann, *EtG*, §144a and §153.1), where the *n-regens* is typically marked by final *–a* (Moscati, et al, *Introduction*, §12.64ff).**

ták-at 'man' vs 'woman', the latter incorporating feminine suffix *–at*.[184] For when *tak-at* is *n-rectum* in conjunction with a masculine *n-regens* then *–ti* is suffixed to the former, as *tak-át-ti kām* 'the woman's (male) camel'. Thus feminine gender is marked twice on the *n-rectum*, suggesting that the 'original' Semitic *–at* was no longer capable of expressing genitive sense, except through position, and that a further Semitic morpheme *–ti* was utilised to make good the defeciency and was in a sense 'misapplied' to the feminine *n-rectum*. But for this conjecture to hold, morpheme *–ti*, or some equivalent, must have been pronounced regularly in the 'source' Semitic language (as in N. Ethiosemitic), rather than being confined to particular syntactic environments, as in modern dialects of Arabic.

10.6.4 An apparently unique feature of the Beḍawiē genitive construction is the mapping of the gender of a feminine *n-regens* onto the accompanying *n-rectum*, whether masculine or feminine. In the extreme case of *tak-at* 'woman' this results in a *t*-based feminine morpheme occurring three times, as in *ták-at-tī-t kām* 'the woman's female camel', where *–at* marks feminine gender in the noun, the penultimate *–tī-* marks a feminine *n-rectum* and final *–t* marks a feminine *n-regens* in association with the *n-rectum*. Although feminine gender in the *n-regens* is mapped onto a masculine *n-rectum* in Saho constructions such as *ábba-t nūmā́* 'father's wife' (stepmother), no construction comparable to that in Beḍawiē seems to occur elsewhere in the Cushitic languages.

10.7 Gender

10.7.1 As noted at §10.4, gender in Beḍawiē definite nouns is generally marked on the accompanying article rather than on the noun itself. However there are circumstances where the Semitic *t*-based feminine morpheme occurs, sometimes systematically but also sporadically. This morpheme is more common in Beḍawiē than in any other Cushitic language and occurs in what appear to be typically Semitic structures, as for example the predicate construction (§10.3).

10.7.2 Aside from the many indefinite feminine nouns with suffixed *–t*, for example *yās* 'dog' vs *yās-t* 'bitch' vs *yas-t* 'bitches',[185] feminine *–t* also occurs in the following constructions ;

1. When a possessive suffix or genitive marker *–I* (§9.6.2)is attached to a feminine noun *–t* appears before the suffix,. for instance, from *'ála* 'neck', *tə-'alā́-t-i atwi* 'I twisted my neck', where *–i* is the 1s suffix.[186]

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[184] *Takat* appears to be unique in displaying the feminine morpheme *–at* in all environments. See below at §10.7.

[185] For these examples see *TB*, §42 and §147.

[186] Recall that, in contrast to Semitic with the exception of MSA (Watson, *TSM* §2.4.1.2) the article is retained before

2. Feminine *–t* also occurs with adjectives qualifying a feminine noun, as: *win-t kām* 'large female camel' and *tū́-kām tū́-win-t* 'the big female camel' (nominative).

10.7.3 There are also nouns with a feminine plural in *-Vt*, where *V* is either *ā* or *ē*, but these are uncommon except in predicate constructions (§10.3). Among them are:[187]

***yā* (acc. *yat*), pl. *yāt* 'goat'**

***miš'áli* (acc. *miš'alī́t*) pl. *miš'álēt* 'hooked stick'[188]**

***'ā* pl. *'āt* 'milk'**

***'it* pl. *'ēt* 'small white sea-shell'**

***s'e* (acc. *s'et*) pl. *s'ēt* 'tick';**

***'ihe* pl. *'ihḗt* 'hopper locust';**

With the exception of *miš'álēt*, these words are not obviously Semitic and are also short, which may explain the 'preservation' of their external plural forms.

10.8 Pronouns

10.8.1 Independent Subject Pronouns

10.8.1.1 The initial *h* of Beḍawiē 1p form *hēnén* does not appear to be paralleled in any other Cushitic language, but is of course reminiscent of the *ḥ* common in equivalent Semitic 1p forms ; it may thus be a Semitic form, but compare for example Saho *nīnu*.[189] Although Beḍawiē 1s form *ane* is also reminiscent of Semitic equivalents it has clear parallels in several other Cushitic languages.[190] Beḍawiē diverges from the Semitic and Cushitic patterns in its second and third person forms, which comprise morpheme *bar* (m) or *bat* (f) followed by a form of the suffixed possessive pronoun, eg. *barū́k* (2ms).

10.8.2 Suffixed Possessive Pronouns

10.8.2.1 The possessive pronouns listed by Reinisch, which reflect the Beni Amer and Halenga dialects, can fairly readily be reconciled with the forms in a number of other Cushitic languages. But these forms in turn can be reconciled with those of the Semitic languages.[191] Table 10.7 compares the

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a suffixed pronoun.

[187] These are all Haḍanḍiwa forms ; there appear to be no equivalent forms in the Beni Amer and Bishari dialects.

[188] Perhaps related to Arabic *maš'ala* pl. *mašā'il* 'support for a light' (Lane). Other feminine nouns with prefixed *m-* have plurals in (regular) *–a*, for example *m'álau* vs *ma'alā́wa* 'adze'.

[189] *BdG*, §157; *BSNOA*, §100. Compare *BdG*, §158 and *BSNOA*, §101 for the oblique-case forms.

[190] 'Afroasiatic' pronouns are discussed in section §6.2 of *The Afroasiatic Fallacy (TAF)*.

[191] Reinisch *BdG*, §168ff (compare *BSNOA*, §105 ff; *TB*, §102 ff). Semitic forms in Lipiński, *Outline*, §36.16ff and reconstructed Cushitic forms in Hayward, 'Afroasiatic', p87 [§4.3.1].

Beḍawiē forms added to nominative singular nouns with sample forms from Mahriyōt (*TSM* Table 22, p68).[192] With Beni Amer *ūs* (3s) and *ūsna* (3p) contrast Haḍanḍiwa and Bishari *–ū* and *–ūhna* respectively.[193] which probably originate in a shift *s* → *h*, not uncommon in Beḍawiē.

TABLE 10.7 BEḌAWIĒ AND MEHRI POSSESSIVE SUFFIXES

	Singular		Plural	
	Beḍawiē	Mehri	Beḍawiē	Mehri
1	-ū	-ī	-ūn	-ān
2m	-ūk	-ūk	-ūkna	-īkam
2f		-īš		-īkan
3m	-ūs	-ēh	-ūsna	-īham
3f		-īs		-īsan

10.8.2.2 Beḍawiē constructions incorporating 2nd and 3rd person suffixes can be quite complex. When a noun is nominative the accompanying suffix has vowel *ū* with a singular noun or *ā* with a plural, for example *i-kām-ū́kna* 'your (p) camel (s)', but when the noun is in the oblique case the suffix has *ō* singular and *ē* plural (*TB* §105). When attached to a noun in the genitive the case of the suffix morpheme reflects that of the overall genitive construction, for example *dūr-it-ūk tū-'or tíbe* [uncle-[fem n-regens]-your] the-daughter went] 'your uncle's daughter went' (*TB* §106), where *tū-'or* and *-ūk* are both nominative, so that in effect the case vowel of the suffix matches that of the definite article (Table 10.5).

10.8.3 Suffixed Object Pronouns

10.8.3.1 The object pronouns added to G_{PA} ('perfect') and G_{PE} ('imperfect') verbs incorporate intial *–ho* but, with the exception of 1s form *–heb*, can otherwise be related to the possessive pronouns.[194] Object pronouns in the other Cushitic languages also tend to match the equivalent possessive pronouns, so that *–ho* must be a Beḍawiē innovation, especially as object pronouns affixed to 'conditional' (G_{PAC}) forms lack *–ho* and are clearly related to the equivalent possessive forms. [195] Thus to the extent that the suffixed possessive pronouns may be Semitic in origin so too are the object pronouns.

10.9 Number

10.9.1 The plural forms of Beḍawiē nouns having a distinct plural are either 'external' (most

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[192] **The forms of the Mehri 'dependent' pronouns are many and varied (*TSM* §2.4.1.2) and those shown in Table 10.7 are not necessarily the earliest.**

[193] **The more usual Haḍanḍiwa forms are *–ū* and *–ā* respectively**

[194] ***BdG*, §174 ff. Compare *BSNOA*, §133.**

[195] ***TB*, §100.**

commonly) or 'internal'.[196] External plurals typically suffix *–a* to the singular, e.g. *mōk : mōk-a* 'neck', and when the base is triconsonantal the plural marker is commonly accompanied by modification or loss of a stem vowel and/or stress shift, eg *deráb : dárb-a* 'road'. Internal plurals are differentiated from their singular by vowel modification and/or stress shift, e.g. *finjā́n* (sing.) vs *fínjan* (pl.) 'cup' and *kām* vs *kam* 'camel'. The words for *road* and *cup* are of course Arabic and instance the way in which such nouns are assimilated into the Beḍawiē number system and do not preserve their Arabic plurals (*durūb* and *fanājīn*), even though *finjan* remains what in Arabic would be a broken plural. There are other, less common, patterns but with the possible exception of the feminine plurals discussed in §10.7, none which suggest Semitic influence.

10.9.2 Indeed, although the rules for forming plurals vary considerably among the Cushitic languages (*TAF* §6.7), there is nothing to suggest that the Beḍawiē system is not essentially Cushitic.[197] For instance, although not the most common method, a number of external plurals in Saho are formed by adding final *ā* or *uwā*, as for example *burgū́d vs burgū́d-ā́* 'adolescent boy', *bār vs bār-uwā́* 'night'. Internal plurals are also common in Saho, as for example *dibín vs dibūn* 'chin'. In Bilin by contrast, although various kinds of internal plural are fairly common, the majority of plurals are on the pattern *bitā́ vs bit* 'louse', a pattern which although also occurring in Saho appears to be absent from Beḍawiē, where nouns whose singular ends in a vowel are either unchanged in the plural or mark plurality by stress shift.[198]

10.10 Accent and Tone

10.10.1 Almkvist, Reinisch and Roper all have difficulties with the accent in Beḍawiē.[199] The Cushitic languages display tone systems of varying complexity[200] and R. Hudson proposes for Beḍawiē what is in

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[196] ***BdG*, §114ff; *BSNOA*, §52ff.**

[197] **Reinisch (*BdG*, §80e) conjectures that the Beḍawiē ending derives from *–ā < -ān*, but offers no supporting evidence. As such it would of course be similar to the Ge'ez sound plural morpheme.**

[198] **Singulars and plurals formed from generic nouns are rare in Bedawie, in contrast to Bilin, Saho and 'Afar. Roper (*TB*, §41) offers a small number of examples but Reinisch has none.**

[199] ***BSNOA*, §40 ff; *BdG*, §97/8; *TB*, §25.**

[200] **See for example Hetzron, *VSSA* for Awngi. In none of his grammars and dictionaries of Cushitic languages does Reinisch recognize tone.**

effect an underlying tone system realised as a system of accents.[201] He argues that monosyllabic stems (at least) conform to one of three underlying patterns, 'no inherent accent, inherent falling, inherent level', which have differing consequences for their realisation as accents. Although Hudson's conjecture is triggered by what appears to be a small number of anomalous forms and perhaps reflects the then-current influence of transformational grammar, it does offer a potential explanation for Beḍawiē accent patterns. For it may be that the 'very elusive' (Roper) Beḍawiē system results from the interaction of a tonal (Cushitic) system with an atonal (Semitic) system. The difficulty then is that, although the original systems of accents in Arabic and the Ethiosemitic languages are reasonably well understood, the variety of tone systems in the attested Cushitic languages makes it difficult to determine what an original Beḍawiē tone system might have looked like and hence how it might have interacted with a Semitic system of accents. This is an area that requires considerably more investigation, based on short sequences of text rather than individual words.

11. Conclusion

11.1 It is suggested that the various kinds of evidence presented above, taken together, are best explained by the proposal that Beḍawiē is a composite Semitic and Cushitic language, rather than by assuming that the many Semitic phenomena in the language result entirely from borrowing from N. Ethiosemitic and Arabian languages. But if the composite language hypothesis is indeed valid, the relationship of Beḍawiē to the Arabic, S. Arabian (Epigraphic and Modern) and N. Ethiosemitic languages is not straightforward. For instance, an important piece of evidence for the hypothesis is the presence in Beḍawiē of an N_P-form deriving verb (see §8.6), a form generally absent from N. Ethiosemitic and S. Arabian but reasonably common in Arabic. Indeed the statistical correlation between the percentages of S-, T- and N-forms in Arabic and Beḍawiē (§8.7) is a very strong +0.94, so that if the Beḍawiē forms are not loans from Arabic (which in general they are not), they must either reflect a Semitic component originating in a dialect in this respect related to Arabic, or constitute a productive system that evolved from a nucleus of Arabic loans. But the latter explanation, while not impossible, becomes less probable when taken in conjunction with the other evidence presented above. For instance the Beḍawiē 'causative-factitive' stem (§8.4), utilises an S-based deriving morpheme, a feature attested in ESA and certain MSA dialects but not in N. Ethiosemitic or Arabic (nor indeed in Ancient North

[201] **'Beja'**, ***NSLE***, **p100.**

Arabian).

11.2 As should be clear from Sections 2 to 4, Beḍawiē G_P-form verbs display clear morphological and functional parallels with G_P-forms in the older Semitic languages, including ESA, but again not with Arabic or N. Ethiosemitic. There are of course grey areas in the proposed evolution of the G_{PE} form (§4.2 and Appendix A), albeit that these can to some extent be clarified by reference to the equivalent Mehri forms. Similarly, the otherwise rather puzzling morphology of the Beḍawiē intranstive verbs can be fairly elegantly explained by reference to equivalent forms in Mehri (§4.2)..

11.3 The presence in other Cushitic languages of a small number of verbs with prefixing subject pronouns might appear to be something of a problem for this line of argument although, as suggested in Section 1, the early history of contact between Cushitic and Semitic speakers is in all probability considerably more complex than has hitherto been taken to be the case.

11.4 When allowance is made for loans, the lexical data discussed in §10.1 and §10.2 initially suggest a somewhat closer relationship with Arabic than N. Ethiosemitic. But Mehri on the other hand offers a number of convincing matches with Beḍawiē which appear to have no parallel elsewhere in Semitic (§10.2.3) even though of course these parallels could simply be loans, resulting from the many contacts between the Beja and S. Arabians at various times.

11.5 But **the particular correspondences between the MSA and the Beḍawiē verbal systems, together with the lexical evidence of §10.2.3, tend to suggest that the Semitic component in Beḍawiē may originate in some South Arabian dialect. In this context the Sabaean kingdom *d'mt* postulated for the area of modern-day Eritrea and N. Ethiopia during the mid-first millennium BCE is suggestive, for geographically *d'mt* would have been adjacent to and indeed have overlapped the modern-day Beja homeland. Perhaps also of significance in this respect is the fact that the camel is first recorded in Egypt at around 550 BCE, having been domesticated at some time around 1000 BCE, and the northern Beja (the Bishari in particular) being famed camel breeders.[202]**

11.6 Comparison has frequently been made in the foregoing between Beḍawiē and the more or less mutually intelligible Saho and 'Afar, spoken respectively in modern-day Eritrea and in Ethiopia towards the Red Sea. Although masked by their classification as Lowland East Cushitic these languages are

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[202] **Mehri tribal names are commonly of the form *bīt X* (Watson, *TSM* §2.3.1.2). Is it possible that 'Bishari' originates in such a form - perhaps even *bīt Śḥɛrí*?**

without doubt the closest Cushitic relatives to Beḍawiē, in particular displaying the same kind of dual verbal system found in the latter, albeit with somewhat different morphological characteristics. Should it prove possible to sustain the composite-language hypothesis for Beḍawiē might it also be possible to extend it to these languages? But the differences between Beḍawiē and Saho-'Afar should not be underestimated. If there is indeed a fairly close diachronic relationship between the two verbal systems the relative paucity of lexical matches, together with the differences in the conjugations of their respective G_P forms suggests that, if both derive from a common original, either the separation occurred a very considerable time ago or one or both languages changed very rapidly after their separation.

Appendix A

The Evolution of the Beḍawiē G_{PE} Forms

Table A1 sets out a proposed evolution of the Beḍawiē G_{PE} forms from their proposed Semitic originals. The target paradigms are those of the Haḍanḍiwa dialect, which show detail but essentially minor differences from those of the other dialects (Tables 4.1 and 4.2). The rules and conventions for reperesenting stress are as discussed in §8.2 of *MPSVS*. The following notes pertain to steps in the evolution proposed in Table A1.

1A. Early Semitic forms generally as proposed in §8.5 of *MPSVS*. There is a case for locating the main accent on the penultimate syllable, but the evolution of these forms from Sigmatic proposed in *MPSVS*, with their postulated leftward shift in stress, points to the pattern cited.

1B. As outlined in *ACSE* the Semitic forms proposed for 3p, 2p and 2fs assume that final *–un* was originally added directly to the equivalent G_{PA} forms, which were then modified as shown in the table to give forms approximating to the attested Semitic forms. In these forms the main stress is taken to have resided on the final syllable.

2A. In (at least) the common South Semitic forms, i.e. the precursors of the Modern South Semitic and North Ethiosemitc forms, 'non-singulative' morpheme *–un* weakens, resulting in the main accent shifting to the second syllable (but see note 2C). Given that weakening of this morpheme is also apparent in the North West Semitic paradigms a similar shift may also have taken place there.

2B. As the main accent in the postulated Common Semitic 2fs, 3p and 2p forms resides on the long final syllable the rightward shift postulated for the other forms (2A) is replaced by an analogous (?) leftward shift and the aspect morpheme reduces to [in_2] (2fs), [un_2] (3mp) and [na_2] (3fp). With these forms

compare the Mehri regular 3p/2p imperfect forms *y/tərə́kzəm* and *tərə́kzən*, with accent on the second syllable, although note that Mehri 2fs form *tərēkəz* has lost its final syllable.

2C. Most Beḍawiē biconsonantal G_P forms originate either in Semitic roots with a weak radical (Section 8), or in the weakening of an originally strong Semitic triradical, although a small number utilise Cushitic biconsonantal stems. The biconsonantal forms proposed at Step 1 should thus be understood as mostly originating in verbs on weak roots (compare the equivalent Mehri forms in *MhL* p xxviii to xxxii), the stress patterns of the weakened strong roots and verbs on Cushitic stems then becoming analogous to those of verbs on weak roots. Note that in this context the Step 1 stress patterns of triradical forms could also have evolved by analogy with those of the biconsonantals.[203]

3A. The weakening of the final syllable at Step 1 results in its loss, so that the main accent now resides on the (new) final syllable. The 2fs, 3p and 2p forms remain unchanged at this step.

4A. The final consonant cluster yielded by Step 2 is unstable and results in the transposition of 'non-singulative' morpheme *n* to precede the final syllable and thus to the creation of a closed syllable *qan* in triconsonantal forms.

4B. Closed syllable *qan* in the 2fs triradical form is taken to have been introduced by analogy with the 2ms and other forms, the feminine gender/aspect morpheme *–in* having been preserved at Step 2. In contrast, the 2p and 3p forms are argued to have introduced a new syllable *–qa-*, partly by analogy with the other forms although without the shift of morpheme *n* as in the 2fs. It is perhaps at this point that the distinct Semitic mp and fp suffixes coalesced to become *–na* in Beḍawiē, and so matching the equivalent Cushitic morphemes.

4C. The 2ms form is taken to have acquired final *a* by analogy with the 2fs form.

4D. In the simpler biconsonantal forms 'non-singulative' *n* is merely added to the first syllable. In the 2fs form *n* is transposed to the first syllable by analogy with the equivalent triconsonantal form ; the biconsonantal 2ms form assumes final *–a* in the same way as the equivalent triconsonantal form.

4E. The target biconsonantal 3p and 2p forms in the the Haḍanḍiwa dialect require the main accent to be

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[203] The main accent in prefixing verbs on Cushitic stems may originally have fallen on the stem syllable, although adding prefixed subject pronouns to these stems could have resulted in an initial leftward shift of the accent. Somali and Rendille forms with prefixed pronouns have the main accent on the stem syllable (Table 6.3) but the equivalent Saho forms have the accent on the subject pronoun (Table 6.1).

shifted to the first syllable, but this is not the case in the other dialects, although the first vowel is lengthened in all cases.

5A. In triradical 3ms forms the weak first syllable is lost and the vowel in the final syllable becomes long (in consequence of receiving the main accent).. However, other than analogy there is no clear reason why the 3fs pronominal morpheme should be lost ; compare the 1s triconsonantal and 3fs biconsonantal forms where the pronoun is retained. See also note 5C.

5B. Except for their distinct final syllables there is no obvious reason, on the basis of the proposed evolution, why the stress pattern in the 2s forms assigned at Step 3 should not be retained and match that of the 3s forms. The 2s forms lose their pronominal morpheme by analogy with the 3s forms. If the parallel between the Beḍawiē and regular Mehri triradical paradigms is valid, it is at this point that the main accent in the whole Mehri paradigm shifts one syllable to the left although, unlike Beḍawiē, the pronominal morphemes are retained throughout.

5C. The Haḍanḍiwa 2p and 3p forms have undergone further modification in that the first syllable is lengthened, although for no immediately obvious reason : in the 1p form the same change may have occurred by analogy with the other plural forms (see also 5D). These changes do not occur in the Beni Amer and Bishari dialects (see Table 4.2).

5D. The long *ē* in the first syllable (biconsonantal and triconsonantal) and the absence of morpheme *n* from the 1p forms, which might otherwise be expected to parallel the 1s forms, may parallel the long vowel and syllable structure of the 2p/3p forms (the long vowel again does not occur in Beni Amer and Bishari).

TABLE A1 PROPOSED EVOLUTION OF THE BEDAWIE G_{PE} FORMS

	Bedawie Form	Notes	Step 3	Notes	Step 2	Notes	Step 1	Notes	Proposed Semitic Form	Notes	
3ms	kan$_2$-tīm$_3$ in$_2$-dīf$_3$	5A	(i$_1$)-qan$_2$-bur$_3$ in$_2$-qīb$_3$	4A 4D	(y)iq$_2$-burn$_3$ (y)i$_2$-qībn$_3$	3A	(y)iq$_2$-bu$_3$-run$_1$ (y)i$_2$-qi$_3$-bun$_1$	2A 2C	(y)iq$_3$-bu$_1$-run$_2$	1A	3ms
3fs	kan$_2$-tīm$_3$ tin$_2$-dīf$_3$	5A	(ti$_1$)-qan$_2$-bur$_3$ tin$_2$-qīb$_3$	4A 4D	tiq$_2$-burn$_3$ ti$_2$-qībn$_3$	3A	tiq$_2$-bu$_3$-run$_1$ ti$_2$-qi$_3$-bun$_1$	2A 2C	tiq$_3$-bu$_1$-run$_2$	1A	3fs
2ms	kán$_3$-tīm$_2$-a$_1$ tín$_3$-dīf$_2$-a$_1$	5B	(ti$_1$)-qan$_3$-bur$_2$-a$_1$ tin$_2$-qīb$_2$-a$_1$	4C 4C/D	tiq$_2$-burn$_3$ ti$_2$-qībn$_3$	3A	tiq$_2$-bu$_3$-run$_1$ ti$_2$-qi$_3$-bun$_1$	2A 2C	tiq$_3$-bu$_1$-run$_2$	1A	2ms
2fs	kán$_3$-tīm$_2$-i$_1$ tín$_3$-dīf$_2$-i$_i$	5B	(ti$_1$)-qan$_3$-bur$_2$-i$_1$ tin$_2$-qib$_3$-i$_1$	4B 4C/D	tiq$_1$-bur$_3$-in$_1$ tiq$_1$-būn$_3$		tiq$_1$-bur$_3$-in$_2$ tiq$_1$-būn$_3$	2B	tiq$_2$-bur$_1$-ī$_3$-un$_2$ > tiq$_2$-bu$_1$ rīn$_3$	1B	2fs
1s	a$_1$-kan$_2$-tīm$_3$ an$_2$-dīf$_3$	5A	’a$_1$-qan$_2$-bur$_3$ an$_2$-qīb$_3$	4A 4D	’aq$_2$-burn$_3$ ’a$_2$-qībn$_3$	3A	’aq$_2$-bu$_3$-run$_1$ ’a$_2$-qi$_3$-bun$_1$	2A 2C	’aq$_3$-bu$_1$-run$_2$	1A	1s
3mp	ē$_1$-ká$_3$-tim$_2$-na$_1$ ē$_3$-dif$_2$-na$_1$	5C	(y)i$_1$-qa$_3$-bur$_2$-na$_1$ (y)i$_3$-qib$_2$-na$_1$	4B 4E	(y)iq$_1$-bu$_3$-run$_1$ (y)i$_1$-qi$_3$-bun$_2$		(y)iq$_1$-bu$_3$-run$_2$ (y)i$_1$-qi$_3$-bun$_2$	2B 2C	(y)iq$_2$-bu$_1$-rū$_3$-un$_1$ > (y)iq$_2$-bu$_1$-rūn$_3$	1B	3mp
3fp					(y)iq$_1$-bur$_3$-na$_1$ (y)i$_1$-qib$_3$-na$_{11}$		(y)iq$_1$-bur$_3$-na$_2$ (y)i$_1$-qib$_3$-na$_2$	2B 2C	(y)iq$_1$-bur$_3$-na$_2$-un$_1$ > (y)iq$_2$-bur$_1$-nā(n)$_3$ > (y)iq$_2$-bur$_1$-nā$_3$	1B	3fp
2mp	tē$_1$-ká$_3$-tim$_2$-na$_1$ té$_3$-dif$_2$-na$_1$	5C	ti$_1$-qa$_3$-bur$_2$-na$_1$ ti$_3$-qib$_2$-na$_1$	4B 4E	tiq$_1$-bu$_3$-run$_1$ ti$_1$-qi$_3$-bun$_1$		tiq$_1$-bu$_3$-run$_2$ ti$_1$-qi$_3$-bun$_2$	2B 2C	tiq$_2$-bu$_1$-rū$_3$-un$_1$ > tiq$_2$-bu$_1$-rūn$_3$	1B	2mp
2fp					tiq$_1$-bur$_3$-na$_1$ ti$_1$-qib$_3$-na$_1$		tiq$_1$-bur$_3$-na$_2$ ti$_1$-qib$_3$-na$_2$	2B 2C	tiq$_1$-bur$_3$-na$_2$-un$_1$ > tiq$_2$-bur$_1$-nā(n)$_3$ > tiq$_2$-bur$_1$-nā$_3$	1B	2fp
1p	nē$_2$-ka$_1$-tím$_3$ nē$_2$-dīf$_3$	5D	ni$_1$-qan$_2$-bur$_3$ nin$_2$-qīb$_3$	4A 4D	niq$_2$-burn$_3$ ni$_2$-qībn$_3$	3A	niq$_2$-bu$_3$-run$_1$ ni$_2$-qi$_3$-bun$_1$	2A 2C	niq$_3$-bu$_1$-run$_2$	1A	1p

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Bibliographical Abbreviations

ACLA	**MUNRO-HAY, S., Aksum : An african Civilisation of Late Antiquity**
ACSE	**Aspect in Common Semitic and Egyptian**
ANA	**MacDONALD, M.C.A. 'Anicient North Arabian'**
.ASA	**NEBES, N. and STEIN, P. 'Ancient South Arabian'**
BCL	**APPLEYARD, D. L., Beja as a Cushitic Language**
BdG	**REINISCH, L., Die Bedauye-Sprache in Nordost-Afrika**
BdW	**REINISCH, L., Wörterbuch der Bedauye-Sprache**
BiG	**REINISCH, L., Die Bilīn-Sprache in Nordost-A frika**
BSNOA	**ALMKVIST, H., Die Bischari-Sprache (Tū-Bedāwie) in Nordost-Afrika**
CDG	**LESLAU, W., Comparative Dictionary of Ge'ez (Classical Ethiopic)**
DGESA	**BEESTON, A. F. L., A Descriptive Grammar of Epigraphic South Arabian**
ESVS	**COHEN, D., La phrase nominale et l'évolution du système verbal en sémitique; études de syntaxe historique**
EtG	**DILLMANN, A., Ethiopic Grammar**
ICGSL	**MOSCATI, S., An Introduction to the Comparative Grammar of the Semitic Languages**
MhL	**JOHNSTONE, T.M., Mehri Lexicon**
MPSVS	**Towards a Morphology of the pre-Semitic Verbal System**
NSLE	**BENDER, M.L. (ed.), The Non-Semitic Languages of Ethiopia**
OCG	**LIPIŃSKI, E., Outline of a Comparative Grammar of the Semitic Languages**
SaW	**REINISCH, L., Die Saho-Sprache, Vol. 2. Wörterbuch der Saho-Sprache**
SoG	**REINISCH, L., Die Somali-Sprache**
TAF	**The Afroasiatic Fallacy**
TB	**ROPER, E.M., Tu Bedawie: Grammar, Texts, and Vocabulary**
TSM	**WATSON, J.C.E., The Structure of Mehri**
VSSA	**HETZRON, R., The Verbal System of Southern Agaw**