## The Morphological Status of Verbal Prefix Vowels in Hamitosemitic

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[The historical prefix vowels of the 'prefix conjugation' in Semitic are due to a coalescence of the original vowel of the pronominal morpheme and of the following auxiliary verb reduced to a vowel. There was also the influence of initial laryngeal as well as /w/ and /y/ stem consonants and later assimilations to the stem vowels. There could be three different prefix-conjugated auxiliaries. The situation in 'Afar-Saho in which both the original morphological function of the prefix vowels and the vocalic endings have been preserved is very archaic. The -u- morphemes of the prefixes of Arabic passive and of the II, III and IV class of derived verbs are of the same origin going back to the auxiliary 'to be.]

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As is well known, in the Semitic languages the vowels of the prefixes of the prefix conjugated 'tenses' are different in different persons in Akkadian, they are uniform viz. either -a-, -i-, -E- or -e-(with some exceptions due to dialect interference and/or retention e.g. in Arabic, see Schub 1974) in other Old Semitic languages while -u- marks passive forms and derived forms of II/D, III/L and IV/S classes. But in Cushitic and in Berber prefix vowels mark tense/aspect, e.g.

	Imperf./Present	Perf./Past	Subjunct.	Imperative	
Saho:	y-a-fkun-e	y-u-fkun-e	y-a-fkan-o	u-fkun	'turn'
	y-a-rHud-e	y-u-rHud-e	y-a-rHad-o	u-rHud	'to slaughter'
	y-a-bl-e	y-u-bl-e	y-a-bl-o	u-bul	'to see'
	y-a-kk-e	y-e-kk-e	y-a-kk-o	tik	'to be(come)'
	y-aa-rhig-e	y-ee-rheg-e	y-aa-rhag-o	i-rhig	'to know'
	y-a-'rhiy-e	y-i-'rhiy-e	y-a-'rhaw-o	i-'rhiy	'to deviate'
	y-a-ktub-e	y-u-ktub-e	y-a-ktab-o	u-ktub	'to write' (Arabic)

In Saho and in 'Afar -a- of the prefixes indicates the 'Imperfect' or 'Present' while other vowels, i.e. 'non-a' indicate the 'Perfect' or the 'Past'. Cf. Tuareg ya-li: yu-ley, ya-gdeh: yu-gde, ya-mer: yu-mer, y-a-wn: y-i-wen; Kabyle ya-ha: yu-ha, ya-ll: yu-ll, ya-zzel: yu-zzel, y-a-Gw-i: y-u-G-I etc.

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There have been three explanations of the situation in Semitic: phonological, morphonological and morphological. I have no time to present the whole history of research and I will concentrate on the recent publications on the subject. Hasselbach (2004, 32) supports Testen's (1994; cf. Testen 2000 etc.) idea that "the original forms of the prefixes must have been vowelless" but "when these consonantal person markers were prefixed to a verbal base beginning with a consonant, different intrusive vowels developed depending on the character of the prefix consonant, and not, as suggested by Testen, depending on the quality of the theme vowel of the verbal base. When the prefix consisted of a sonorant, the vowel was /i/, \*yC > \*yiC and \*nC > \*niC, while a non-sonorant plus consonant developed into /a/, i.e., \*tV > \*taC and \*'C > \*'aC." Further, Hasselbach says that "...when we derive the prefixes of the G prefix conjugation from originally vowelless consonants, the vowels developing due to the initial consonant clusters do indeed have the quality suggested by Hetzron and, for the most part, reflect sound changes that are also otherwise known within the individual languages."

Here I have to emphasize that Hasselbach's examples are rather unconvincing. Hasselbach (2004, 34) concludes: "This results in the original prefixes \*yi-, \*ta-, \*a-, \*ni-, as suggested by Hetzron, a distribution that is preserved only in Akkadian. For early West Semitic we have to assume the first stage of a vowel redistribution which resulted in what is known as Barth's law (Barth 1894, see also Hayes 1994, Testen 1992a, Hasselbach 2004) where the prefix vowel is dependent on the theme vowel of the verbal base, i.e., \*yaqtul, \*yaqtil and \*yiqtal. Further leveling then took place in the individual West Semitic languages. Hetzron's reconstruction reflects the first stage after the development of secondary vowels, which developed according to purely phonological conditions, independent of the theme vowel of the prefix conjugation." Hasselbach does not care about an explanation of how the allegedly intrusive vowels could acquire at least morphonological, actually morphological status. Moreover, it is very unlikely that bare consonantal morphemes (single consonants without a following vowel) could function as detachable morphemes to be used as subject prefixes. One thing is certain: the consonants of the prefixes of the first and of the second persons go back directly to personal pronouns while the prefixes of the third persons go back to demonstratives (masc. \*wu and fem. \*ta) which have not acquired a full status of personal pronouns yet. Since only masc. yV- has been recorded, this means that very early one of the variants must have had -i- so that \*wi- > yi- and then by analogy \*wa- > ya- and \*wu- > yu-. This means that -i- could not be an "intrusive vowel". The homonymy of the second person prefixes and of the prefix of the third person feminine is a secondary phenomenon. The historical prefix vowels which have clear morphological functions in Semitic must have had a double origin: they are due to a coalescence of the original vowel of the pronominal morpheme, viz. -a for masculine and -i for feminine and of the following morpheme of an auxiliary verb reduced to single vowel, most probably h-w-a(y) 'to be'. Hetzron (1973/74) accepted the hypothesis that the -u- goes back to this verb which occurs not only in Semitic but also e.g. in Cushitic Beja. I have promoted the hypothesis being a consequence of Reinisch's (wrongly attributed to Prätorius) hypothesis explaining the origin of the Old Cushitic suffix conjugation in which the suffixes go back to a prefix conjugated auxiliary. In my opinion (Zaborski 2005a) also the prefixes of the Cushitic, Semitic and Berber prefix conjugation have their origin as original auxiliaries reduced to vowels conjugated with prefixes of pronominal origin.

The situation in Old Cushitic clearly shows that these auxiliaries were originally free and could stand either before or after the main verb. Thus the situation in Old Cushitic is more archaic than what we have in Semitic and in Berber. Semitists must get accustomed to the use of data from other archaic branches of Hamitosemitic/Afroasiatic. 'Afar-Saho which are in several respects the most archaic Cushitic languages (see Zaborski 2005c) and are comparable with Old Semitic in spite of their late recording as well as Beja (which is more archaic than 'Afar-Saho in some points) show that vowels of the prefixes were either full morphemes or parts of discontinuous morphemes (in different conjugations in the sense of Latin grammar)

indicating mainly 'tense' or 'aspect' . My hypothesis which I repeat here in a slightly updated form is that the situation in Old Cushitic is more archaic than in Old Semitic where prefix vowels alone do not indicate tense or aspect although they are a part of discontinuous morphemes indicating the opposition active : passive as well as causative : non-causative, fientive : stative etc. The original situation in Proto-Semitic dialect cluster has been considerably blurred by both phonological and morphological reasons. The influence of first laryngeal stem consonants (visible also in traces in 'Afar-Saho) as well as of the /y/ and /w/ as first consonants as well as the restructuring of the syllabic structure and vowel reduction due to the shift of stress have considerably contributed to the destabilization of the original system and there must have been also cases of prefix and stem vowel(s) (originally there must have been a vowel between the first and the second consonant in triconsonantal verbal roots, viz. yA/U/I – CVCVC-V) assimilation and dissimilation.

There is no need to repeat the well known explanations of the origin of the dominant vowel -i- in the verbal prefixes of Hebrew, the origin of Ge'ez -E- which is ambiguous (it may go back either to -i- or -u-) etc. But morphological and morphonological factors have been even more important (cf. Kuryłowicz 1972, 46-50). The gradual elimination of the Old Preterite iprus/yaqtul (used also as Jussive/Cohortative) and of the Subjunctive iprus-a/yaqtul-a which most probably originally had different prefix and stem vowels at least in some groups of verbs (i.e., in some conjugations; the original general situation was probably rather complex like in today's Berber and not relatively simple as in Akkadian or Classical Arabic) weakened and then neutralized the morphological status of prefix vowels as exponents of tense/aspect. In effect, in Semitic the prefix vowels have retained their morphological function mainly outside the tense/aspect system, e.g. -u- survived in the prefixes mainly as part of discontinuous morphemes of passive (yuqtal-(V)) as well as in the II/D, III/L and IV/S classes of the derived verbs. E.g. in Arabic the expansion of VII/N and VIII/T derived verbs and the following elimination (with few exceptions) of the passive yuqtal-V must have contributed also to a simplification so that the resulting system with prefix a- in Classical Arabic I class and with -i- or reduced vowels in other dialects of Arabic is more uniform.

The weakening and the final disappearance of final short vowels before a pause (a phonetic condition) and their reinterpretation in non-final position (e.g. -a-ka > -ak, e.g. li yaqtul-a-ka > li yaqtul-ak 'that he kill you') was not the only reason of the disappearance of i' $r\bar{a}b$  in Arabic. The fact that prefix vowels and/or stem vowels were the main markers of tense/aspect as well as mood and voice were decisive. Also the fact that in some syntactic positions Preterite yaqtul and Subjunctive yaqtula were interchangeable contributed to the fall of the final short vowel endings in verbs. But, I repeat, originally the tense/aspect must have been marked mainly by prefix vowels (to which the auxiliary had been reduced) and by the vowel after the second root consonant and the endings -u, -a and zero had only subordinate morphological functions. It is possible that -u and -a were original case endings of the verbal nouns used in periphrastic constructions with the prefix-conjugated auxiliaries. By the way: the endings -u and -a have survived in 'Afar and Saho while the ending -e which occurs there both in the Perfect/Past and Imperfect/Present is rather an innovation although this problem requires further research!

There is a question whether the -u- of the Semitic passive yuqtal-V can be genetically identical with the -u- of the prefixes of the II/ D, II/ L and IV/S classes. Here we have to remember that many verbs of the IV/S class are not causative and even not transitive (Zaborski 2007a presented already in 2002, cf. Macelaru 2004). Usually Semitists (e.g. Kienast 2001, 258-260) say that they are genetically different. It is, however, possible, although not hundred per cent certain that all the yu- prefixes can be explained as original auxiliary hawā 'to be' conjugated with pronominal prefixes. It is highly probable that the forms yu-qātil (with the active participle qātil!) and its variant yuqattil were originally periphrastic constructions with 'to be' as auxiliary followed by the active participle. It is important that in Semitic there is not only passive yuqtal-(V) but also intransitive yiqtal-(V) which has also resultative meaning. This seems to

correspond to the fact that in 'Afar-Saho both -i- and -u- (in a part of verbs there is -e- which is most probably secondary like /E/ in Ge'ez) are morphemes of the Perfect/Past and, as is well known, there is a connection between passive and perfect, e.g. 'he is killed': 'he is dead': 'he has been killed'.

In Semitic prefix -i- and -u- used to survive in secondary fientive stative and/or passive functions (Kuryłowicz 1972, 46). The -u- in the prefixed auxiliary of Cushitic as morpheme of the Perfect/Past explains why in the Cushitic suffix conjugation (a Cushitic innovation!) the same prefix conjugated auxiliary with -u is used for Jussive and Subjunctive – this is a very common case of the development of the use of the original Perfect > Past > Subjunctive/Optative/Cohortative/Jussive. To some limited extent this can be due also to the influence of the -u ending of the subjunctive in the prefix conjugation which has survived in 'Afar (like the -a ending surviving in the Negative Imperfect/Present). I do not accept Macelaru's (2007, 369-373; cf. Speiser 1936, Kienast 1957, Rundgren 1963, Bloch 1967, Schub 1974, Steiner 1980, Izre'el 1991) hypothesis that the -u- of the prefixes of the D, L and S classes could be a morpheme of plural, identical with the morpheme of nominal plural not only because the nominal plural morpheme is long -ū.

Obviously this morphological reconstruction of the origin of different prefix vowels can be challenged as it postulates the existence of two or even three different auxiliaries. Languages with two basic auxiliaries are quite common and languages with three basic auxiliaries are not unusual as well. Actually a possibility that -u- and -i- which are used for passive and intransitive could have a common origin (rather variants of the same morpheme than due to a phonological split) cannot be excluded but requires further research. But it is remarkable that that verb hai 'to be' in Beja has -i- in the Past and -é- (< \*-a?) in the Present, viz. a-h-í 'I was': i-h-é 'I am' (Roper 1928, 78, where the Optative retains final -a, viz. báá-h-i-a which must be identified with Semitic -a of the Subjunctive known from Old Akkadian, Classical Arabic etc. and surviving also in 'Afar Negative Present); cf. Hebrew Imperfect y-i-hy-e and Preterit y-e-h-i.

Saho -o of the Subjunctive may be a simple regular correspondent of -u which was the ending of the Cushitic jussive/conjunctive surviving e.g. in 'Afar na-duur-u way-na 'we are (intending) to return' and the so-called 'Purposive" na-duur-u-(h) 'that we return' but there is also 'Afar na-duur-o? 'may we return?' in which -o may go back to \*-u due to the raising intonation indicating question. In Saho -o can go back to -u since in the stem final syllable there is usually -a- which could lower the -u, e.g. Perf. i-'ikkin-e: Imperf. a-'ikkin-e: Subj. a-'akkan-o 'to try', i-'tit-e: a-'tit-e: a-'tat-o 'to become sour, to curdle', also in Arabic loans like i-gizzir-e: a-gizzir-e: a-gazzar-o 'to slaughter'. Theoretically Saho -o might also go back to \*-a+u but the problem would require further research.

The different vowels of the Akkadian prefixes of the G class are partially archaic and partially an innovation. In Akkadian 1<sup>st</sup> person plural ni- has a simple and rather convincing explanation in the fact that the first person plural of the independent pronoun is nīnu < nēnu < \*naHnu (von Soden 1995, 51 and 13; see also p. 122 where the variant ne- of Mari Old Babylonian is mentioned) and the prefix vowel of the prefix conjugation has been changed under the strong analogical pressure of the pronoun. A dissimilating influence of laryngeal R1 in the verbal forms could be only secondary. It is true that -e- of the Babylonian and Assyrian prefixes of the second persons is connected with secondary 'vowel harmony' (von Soden 1995, 15) but I wonder whether this -e- could be due exclusively (!) to vowel assimilation and/or I/II Alef and I y roots (von Soden 1995, 123) especially when in so many verbs there is -a- in the second persons! There must have been also a morphological reason that we have to look for. Could it be so that in some verbs prefix -e- could be due in the second persons to the lowering of original \* -i- and in other verbs due to the raising of -a-? I think that also for Akkadian three prefix vowels should be reconstructed for all persons in different 'tense', voice and mood forms and different semantic classes of verbs (cf. three different vocalic morphemes of verbal prefixes in Ugaritic – see Tropper 2000, 447-452)

following the example of the survival of the system in Saho and 'Afar. Barth and Co. law probably started working gradually since the original system was very complicate and there must have been a tendency towards simplification.

The hypothesis postulating original three prefix-conjugated auxiliaries reduced to vowels seems to be possible although it requires further research. A rival hypothesis explaining the Imperfect with -a-of transitive verbs as original nominal sentence with subject pronouns (without later reinforcing an-) is less probable for several reasons, e.g. it would be difficult to explain the first person plural. But there must have been an analogical pressure of the suffixes of the West Semitic Perfect and of the independent pronouns on the natural morphological interpretation of the prefixes with -a-. Moreover there must have been secondary semantic shifts/assimilations and purely phonetic vowel assimilations which worked in different way in different languages and in different stages which have been reflected only to some degree and not without contradictions in different variants of Barth's law.

The long vowels of Beja (e.g. Past i-dif: Past Perfect ī-dif 'to go'. Past i-ktim: Past Perfect ī-ktím: Present Intensive ē-ktīm) require further research and a (pre)historical explanation. It is also noteworthy that in Beja intensive Past forms with -ā- there are different vowels (but not -u- like in Semitic!) in the prefixes: a-kātim, te-kātim-a, ni-kātim "I arrived at different places etc." (Roper 1928, 69). There are different vowels also in some irregular verbs (e.g. á-de, t-í-de-a, t-í-d-ī, í/é-d-e, t-é-d-e, n-é-d-e. t-í-d-ī-na, í-d-ī-n 'I said, you said etc.' (Roper 1928, 78-79).

There can be a relation between the loss of the t- prefix in Jibbali and Socotri and in Beja singular of triconsonantal and some biconsonantal (Roper 1928, 77) verbs in the Present of the 'strong' verbs (cf. Testen 1992b) and Voigt 2004) but this is another problem to be discussed elsewhere.

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