Crawling toward enlightenment: The verb HBU in Moroccan Arabic

Jeffrey Heath

appeared in: Chris Schaner-Wolles, John Rennison & Friedrich Neubarth, eds., *Naturally! Linguistic studies in honour of Wolfgang Ulrich Dressler presented on the occasion of his 60th birthday*, pp. 183-193. Torino: Rosenberg & Sellier.

1. Introduction

Moroccan Arabic (MA) is a network of dialects that reflect a complex settlement history and various forms of language contact (with Late Latin, Berber, and modem Romance languages). This diversity makes Morocco an excellent dialectological laboratory, especially for the study of how native speakers solve problems involving the interaction of phonological and morphological factors.

I here examine the fate of the verb 'crawl', for which HBU can serve as an abstract citation form. Arabic verbs have both perfective and imperfective stems, the usual Moroccan forms for 'crawl' being perfective *ħba* and imper- fective *-ħbu*. Since all CCV verbs[1] have perfective CCa, while the imperfective vowel is unpredictable, the imperfective is more useful as a citation form. In most dialects, HBU is the only -CCu verb surviving from Classical Arabic, whereas -CCa is fairly common (e.g. *-nsa* 'forget') and -CCi is very common (e.g. *-bki* 'weep'). The preservation of the original imperfective vowel in HBU probably reflects its strong preference for the imperfective. An analogical re-structuring based on a formula like *bka* : *-bki* :: *ħba* : X, taking perfective CCa as the analogical wedge, would be unlikely for this verb.[2]

The shape CCu is also rare among nouns and adjectives, the only examples in widespread use being *dlu* 'bucket', *žru* 'puppy', and *ħlu* 'sweet', all of which derive fairly recently from *CVCw bisyllables (still preserved in oasis dialects) and all of which present awkward problems for derivational ablaut (plural, diminutive). So -CCu is an aberrant shape for verbs, and HBU has no useful models from substantival morphology to guide its ablaut patterning.

2. Data and map format

Forms of HBU were included in the elicitation list used in an ongoing Moroccan dialectology

[1] I use the term "weak" for V-final stems, and "hollow" for CVC stems.

[2] HBU is likewise the only survivin g -CCu verb in the dialect of Tunis (Singer 1984:360), though some other Maghrebi varieties preserve a few others.

project.[3] The following forms of HBU were elicited:

a) perfective (third person)
b) perfective (first and second persons)
c) imperfective
d) verbal noun (not always elicitable)

In this project, I use "maps" that have some of the geographical detail of traditional linguistic atlases, but which are organized into squares, circles, and triangles, which are partially skewed geographically to permit rapid eyeballing. Muslim (M) and Jewish (J) maps are distinguished, and the set of communities represented in the two cases is different. Large squares are used for the major cities, as follows (for the M maps):

top row:	Tangiers-Tetuan		
middle row:	Rabat-Meknes-Fes	Taza	Oujda
bottom:	Marrakesh		

Hyphens here indicate adjacency. In the corresponding **J** maps, Tangiers and Tetuan are not represented since Jews in northern Morocco traditionally spoke Judeo-Spanish rather than Judeo-Arabic as in-group language . Taza is also not represented in the J maps, since I have no J data from this city, which does not seem to have had a major Jewish community. The (formerly) smaller communi- ties are represented as circles if they occur in both M and J maps (Ouezzane, Sefrou, Casablanca, El Jadida, Safi, Ouarzazate), and as triangles if they occur only in M or only in J maps.

Each map displays the distribution of a single variant, and shows relative frequency within each commu nity using a seven-val ued grey scale. I have at least some data on HBU from every M community represented in the maps. The J communities for which some data on HBU are available are shown in black in Map 1.[4] Communities that show blanks in Map 1 will of course do so in all maps given below on specific forms, and should be disregarded.

3. Pharyngealization of *b* and imperfective vowel *a*

In all J dialects checked and in the great majority of M dialects, the consonants throughout the paradigm are *ħb*, a voiceless pharyngeal fricative followed by a voiced labial stop. The

---

[3] Fieldwork on Jewish dialects. carried out in Israel, was supported by NSF in 1983-85. Fieldwork in Morocco on Muslim dialects was carried out primaril y during a Fulbright fellowship in 1986. l am indebted to Moshe Bar-Asher, Yosi Shitric (Joseph Chetrit), and Yehuda Lancri for assistance in the Israeli fieldwork.

[4] J data are less complete because it was often not possible to complete the entire four-hour interview session with informants in Israel, and the HBU forms were in the second half of the elicitation list.

imperfective stem is consistently *-ħbu* in these dialects (cf. Classical *-ħbuu*).

However, in the M oasis dialects found in the south and southwest (less often in Tafilalt in the southeast), the *b* is pharyngealized "*ḅ*"). These oases are slightly farther south than the southemmost J communities examined.

Map 2 shows M dialects where *ḅ* appears to be present throughout the paradigm, and specifically is heard as pharyngealized before *a* and *i* ~ *ey* . Some M speakers in the oases have plain *b* before *a* (and u), but pharyngealized *ḅ* before *i* ~ *ĕy* (Map 3).[5]

a instead of *u* as imperfective vowel occurs in the M dialects shown in Map 4. This form (usually *ħḅa*, occasionally *ħba*) is robust in the southern and southwestern oases (but not Tafilalt in the southeast), and is not recorded else- where. It is not attested in J dialects.

While ungeminated phonemic *ḅ* is essentially absent from the phonological system of most MA dialects, it is no stranger to oasis dialects and to Hassaniya Arabic (Mauritania, Mali). These dialects merge original short *u and *i into schwa *ə*. If the short *u was adjacent to a labial C, the "dark" quality of the rounding is transferred to the labial, which is pharyngealized but can also induce phonetic rounding of what is now the adjoining *ə*.

Original long *uu does not normally lose its rounding in oasis dialects (or Hassaniya). Instead, it appears in most MA dialects as a full (arguably still "long") *u*. However, unrounding with consequent feature transfer to a labial C has occurred with HBU in these dialects, so that imperfective *-ħbu normally shows up as *-ħḅa*. Since this entails a morphological shift from the marginal *-CCu imperfective to the more common *-CCa, this is best seen as a half- phonological, half-morphological development.[6] The pharyngealized labial stop then generalized into the perfective paradigm: 3MaSg *ħḅa*, 1Sg *-ħḅĕy-t*, etc.

4. First and second person perfective forms

Typical third person perfective forms are 3MaSg *ħba* 'he crawled', 3FeSg *ħba-t* 'she crawled', and 3Pl *ħba-w* 'they crawled'. After C-final verbs, the 3FeSg suffix is *-at* ~ *-ət* and the 3Pl suffix is *-u*. The 3rd person suffixes are therefore either V-initial or zero. In M dialects, the 1st and 2nd person perfective forms are C-initial (*-t*, *-ti*, *-tu* ~ *-tiw*, *-na*). When such a suffix is added to any weak verb other than HBU, the stem-final V shifts from *a* to *i* (in oasis

---

[5] The vowel *i* occurs in first and second person perfective forms like lSg *ħbi-t* 'I crawled'. Saharan dialects still have the original diphthong *ey* in these forms, e.g. lSg *ħbĕy-t*. In Rissani (Tafilalt area), the attestation of *ḅ* before *i* is in 2FeSg imperfective *-ħḅi*. presumably synchronic underlying /-ħbu-y/, so here one could probably account for the pharyngealization by phonological rule. "Pharyngealization" of labials is often accompanied by a labial release.

[6] It is conceivable that feature transfer originally happened in the first and second person sector of the perfective paradigm, where a proto-form like **ħbăw-t* 'I crawled' (Classical *ħabaw-tu*) might have evolved into the attested oasis form *ħḅĕy-t*. However, the relevant forms are uncommon in normal speech contexts (see footnote 7 below), and the imperfective is the probable locus of change. Perhaps the suffixed imperfective forms discussed in section 5, below, also encouraged the shift from *u to *a* in the imperfective.

dialects, *ěy*), reflecting Classical *ay.

This normally applies to HBU as well, giving e.g. lSg *ħbi-t* (most M dialects) or *ħḍěy-t* (oasis dialects). However, I have attestations of an alternative form *ħbu-t* from Taounate, a relic Jebli (mountaineer) dialect on the southern fringe of the Berber-speaking Rif mountains, and from Azemmour, a town near El Jadida on the Atlantic coast. Only one speaker gave this form for each community (another Azemmour speaker gave *ħbi-t*), so the status of *ħbu-t* is not fully clear.[7]

In the **J** dialects, we have essentially the same forms as in most M dialects: 3MaSg *ħba*, 3FeSg *ħba-t*, and 3Pl *ħba-w* versus e.g. 1Sg *ħbi-t* (rarely *ħbu-t*).[8] However, since most J dialects merge l Sg and 3FeSg suffixes as *-(ə)t* after C-final stems, there is no convergence between the 3rd versus 1st/2nd person opposition and the non-C-initial versus C-initial suffix opposition. Therefore the stem-vowel difference between 3FeSg *ħba-t* and lSg *ħbi-t* (or *ħbu-t*) can only be analysed as a fully morphologized person split in the perfective paradigm, no longer influenced by phonological features of the suffix.

5. Suffixed imperfective forms

Object-marking or dative suffixes have no effect on the preceding imperfective forms. However, some subject categories involve a suffix (as well as a person prefix) in the imperfective. The suffix *-i* (desyllabified after a vowel to *-y*) is used in the imperfective when the subject is 2FeSg. This category (and hence this suffix) is absent from northern and Jebli M dialects and from the great majority of J dialects. The Pl suffix *-u* (desyllabified after a vowel to *-w*) is found with lPl, 2Pl, and 3Pl subjects in the imperfective in all dialects.

In dialects with imperfective *-ħḍa* or *-ħba*, the suffixal forms *-ħba-y* and *-ħba-w* are unproblematic. They are precisely parallel to the corresponding forms of other -CCa imperfectives like *-nsa* 'forget' *(-nsa-y*, *-nsa-w*).

We deal first with the 2FeSg forms. There are no useful J data, since this category is normally absent from these dialects. Map 5 shows that *-ħbu-y* is actually rather rare in M dialects, being recorded only in Marrakesh (2 of 7 speakers), and Rissani in the Tafilalt area

[7] The problem with eliciting 'I crawled', 'we crawled', or 'you crawled' is that HBU is normally associated with infants. even more than its English gloss. It is therefore typically used with third person rather than first or second person subject. Moreover, the perfective is uncommon in natural speech, being confined to contexts forcing a telic interpretation ('I crawled from here to there'), whereas an atelic reading (' ... is/was crawling') is more natural. Informants tended to balk at producing e.g. 'I crawled', because of its pragmatic oddity (among adults) and its phonological awkwardness, and some forms in my data may belong to "elicitation-ese."

[8] I recorded the lSg perfective from only a few J informants. I obtained *ħbu-t* in Sefrou, and *ħbi-t* in Debdou, Fes, Meknes, and Taroudant. Only one speaker from each community was checked on this form.

(1 of 2 speakers).

The infrequency of *-ħbu-y* probably reflects the phonological awkwardness of the *uy* sequence in word-final (hence syllable-final) position. There are three devices for avoiding this sequence: a) omit (or delete) the *-y* suffix; b) contract /uy/ to surface *i* ; and c) shift the stem-final *u* to *a*.

Eliciting this form ('you[FeSg] crawl') was rather difficult, and I take my own data with a sprinkling of Saharan salt. Not surprisingly, the distribution of the variants does not have the clear geographical patterning of most dialect iso- glosses in the larger study. For the M dialects, Map 6 shows the distribution of 2FeSg *-ħbi* (or *-ħḍi* from imperfective *-ħbu*. Map 7 shows 2FeSg *-ħba-y* from imperfective *-ħbu* (omitting the oasis dialects that already have *a* in the unsuffixed imperfective stem). Map 8 shows 2FeSg *-ħbu*, identical to the 2MaSg form (*t-ħbu* 'you[Sg] crawl'), in dialects where other verbs do show an overt 2FeSg ending. One could argue here about whether the expected *-y* is suppressed, or whether underlying /-ħbu-y/ is reduced to *-ħbu* by an ad hoc phonological rule. The far northern M dialects also have *-ħbu*, but they are not represented in Map 8 since they do not distinguish 2FeSg from 2MaSg in other verbs.

There is a partial parallelism between the treatment of Pl suffix *-w* and that of 2FeSg *-y*. This time we have decent J data, as well as M data from a wider geographical range (we continue to include only dialects with basic imperfective stem *-ħbu*, not *-ħba* or *-ħḍa*, so most M non-Tafilalt oasis dialects are excluded). As with *-y*, there was much informant hesitation in producing plural imperfectives, even though this time there was no pragmatic difficulty ('they crawl' referring to a group of infants is perfectly natural).

Many informants produced *-ħbu* or *-ħbu-w*, which are difficult to distinguish. I often felt that informants were trying to articulate *-ħbu-w*, but what came out sounded like *-ħbu*, sometimes with the final vowel artificially exaggerated. The transcriptional distinction between the two forms being unreliable, I group them together as *-ħbu(-w)* in Maps 9 (M) and IO (J). This is clearly the majority pattern.

The remaining possibilities are *-ħba-w*, shown in Maps 11 (M) and 12 (J), and *-ħbi-w*, shown in Maps 13 (M) and 14 (J). Both are attested (sporadically) over a wide area in M dialects (for which data are more extensive), and *-ħba-w* in particular has a certain density in the M cities and in Tafilalt. Both *-ħba-w* and *-ħbi-w* can be analysed as ad hoc vocalic mutations to dissimilate the stem vowel from the suffixal semivowel. Somewhat similar dissimilations occur in certain ablaut derivations. For example, the class of "color and defect" adjectives has, in many dialects, a basic plural pattern CuC(ə)C, but when the second C is *w*, as in *ʕw(ə)ṛ* 'blind', this *i* is replaced by *u*, hence *ʕiw(ə)ṛ* rather than *#ʕuw(ə)ṛ*.

It is possible that *-ħba-w* played some role in catalyzing the broader shift to *-ħba* (or *-ħḍa*) as imperfective stem form, but this shift is largely Saharan. I know of no cases where it has taken place in more northerly dialects even where *-ħba-w* is well-attested.

6. Verbal nouns

The verbal noun ("masdar") is a fairly productive ablaut derivation in Moroccan Arabic, but

there is a considerable range of formations, and some triliteral (i.e., short) verb stems with unusual shapes have no easily elicitable or cross-dialectally uniform verbal noun. For example, in most M and some **J** dialects there is a verb with imperfective *ddi* 'take away, convey' < Classical imperfective *-ʔaddii*. With the loss of the original stem-initial glottal stop, this verb now has a unique shape with initial geminate, and speakers produce ablaut derivatives for it only with great difficulty. Imperfective *-a:xŭd* 'take', another case involving loss of an initial glottal stop, is similarly problematic for the ablaut machinery.

As we have seen, in most MA dialects the stem for 'crawl' has an otherwise nonexistent imperfective *-ħbu*. There being no other stem of -CCu shape, 'crawl' is highly vulnerable to analogical influence from other stems of roughly similar shape in its ablaut behavior, and a wide variety of verbal noun formations are attested. These are listed in (1).

(1)	verbal noun	M or J	distribution
a.	*ħba-ya*	M	oases, Oujda
b.	*ħăḍi*	M	oases (Goulimine)
c.	*ħḍa*	M	oases (several)
	ħba	M	widespread but rare
	ħbi	M	Souk El Arba (Gharb)
	ħbu	M,J	very common (M and J)
d.	*ħəby-an*, *ħăby-an*, *ħby-an*	M,J	very common (M), Fes (J)
	ħŭby-an, *ħuby-an*	M	Oujda, Taounate (Rif)
e.	*ħbw-an*	M	one informant (Meknes)

(1a) represents resort to a minor verbal noun type seen in e.g. *kma-ya*, an occasional verbal noun for *-kmi* 'smoke'. The stems in question generally have a labial consonant or *w* as second C.

(Ib) is a typical Saharan triliteral weak verbal noun, perhaps structurally representable as /*ħăḍy*/ with phonetic vocalization of the final semivowel (this would license the short *ă*, which should not appear in an open syllable). It was recorded from the most purely Saharan informant interviewed in Goulimine.

The forms in (1c) are all of the CCV type, retaining the syllabic shape of the inflected stem. The most common form is *ħbu*, showing the vocalism of the grammatically basic imperfective stem. The M distribution is shown in Map 15 (M).[9] The J attestations are in Map 16, and represent 13 of the 14 verbal noun tokens elicited from J speakers (one of the two Fes speakers questioned gave *ħby-an;* all other blanks in Map 16 indicate lack of data). *ħbu* is far and away the dominant J form, but many informants were unable to give any verbal noun for this stem (as was true of a number of M informants).

[9] I elicited at least one verbal noun token from all M communities in the map template except for Branes, the Jebli dialect north of Taza represented by the rightmost of three horizontally aligned triangles in the upper right of the M maps.

There are no attestations of verbal nouns *ħba*, *ħḍa*, or *ħbi* in my limited J data. The only attestation of *ħbi* in the fuller M data was from 1 of the 2 informants from Souk El Arba, in the Gharb area.[10] The verbal noun *ħḍa* was recorded only in the southern and southwestern oases (1 speaker from Goulimine, 1 from Tata, 2 from Zagara). The closely related *ħba* has a wider distribution but is nowhere common; it was recorded for the other Tata speaker checked, from 1 of 4 speakers in Erfoud (Tafilalt in the southeast), from 1 of 5 in Oujda in the northeast, and from 1 of 4 in Chaouen in the north. Map 17 combines *ħḍa* and *ħba*.

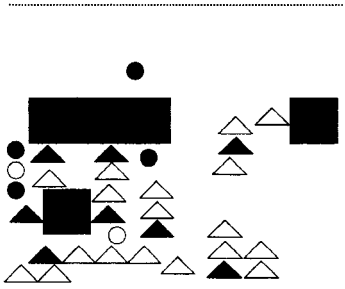
The monosyllabic (1c) verbal nouns *ħbu*, *ħba*, *ħḍa*, and *ħbi* are rather more common and widespread in both M and J communities than we would expect on the basis of parallel forms from other CCV (weak triliteral) verbs. This is especially true among M dialects, where verbs with -CCi and -CCa imperfectives regularly have monosyllabic verbal nouns only in the far north (Tangiers, Tetuan). In the vast area between these far northern cities and the Saharan dialects to the far south, the productive verbal noun for -CCi and -CCa imperfectives is C(ə)Cy-an. In J dialects, monosyllabic verbal nouns from -CCi and -CCa imperfectives are considerably more widespread than in M dialects, and are somewhat more common than C(g)Cy-an. Nevertheless, the extent of the preference for monosyllabic *ħbu* as verbal noun (13 of 14 J informants overall) seems extreme.

The forms in (1c,d) indicate that HBU does form a verbal noun with suffix *-an* in some M dialects, but the fact that (1d) and (1e) combined (Map 18) have a more restricted distribution than other CCy-an verbal nouns suggests that speakers have had some difficulty applying this suffixal pattern to HBU. This may reflect a certain conceptual uncertainty among native speakers concerning the precise mechanisms of derivational ablaut. Going from *-bki* 'weep' to *b(ə)ky-an* 'weeping' seems simple enough, since the imaps naturally onto a C position as *y*. However, going from *-nsa* 'forget' to *n(ə)sy-an* 'forgeting' is more problematic. Does *a* map onto the C position as *y?* Is a **-CCa** stem treated (fictionally) as though **-CCi** when serving as input to ablaut processes? Or does the *a* fail to map, whereupon a nonlexical *y* is inserted into the third C position in *n(ə)sy-an* ? These alternative analyses affect the way native speakers interpret even the *b(ə)ky-an* pattern, and make it difficult to decide how to produce a verbal noun from HBU: For the single M speaker from Meknes who gave *ħ(ə)bw-an* (1 e), the vowel-to-semivowel mapping was favored, its application here converting *u* into its homorganic semivowel *w*. However, the pattern *ħ(ə)by-an* (Id) turned up more frequently (27 M informants, 1 **J** informant), suggesting either a "fictive *i*" or default *-y* analysis. This shows how the close dialectological study of an infreq uently occurring ablaut form of a phonologically aberrant stem can shed light on how native speakers try to make sense of more automatic and productive derivational relationships.

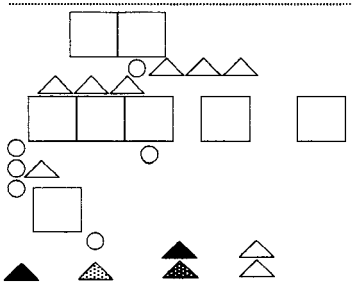
[10] This town appears as the leftmost of the three closely juxtaposed triangles in a horizontal row a little above center on the far left of the M maps. The other informant from Souk El Arba gave *ħby-an.*

References

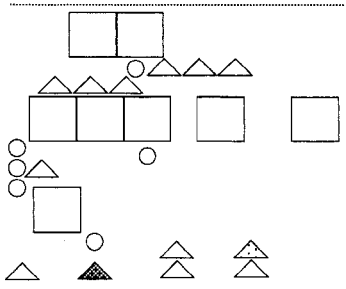
Singer, Hans-Rudolf. 1984. *Grammatik der arabischen Mundart der Medina von Tunis*. Berlin/New York: de Gruyter.



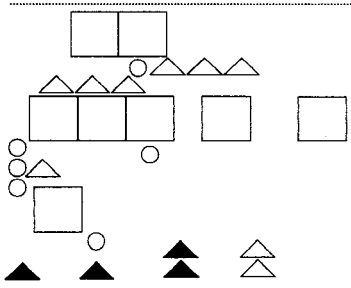
Map 1. Data Sites for HBU (J)



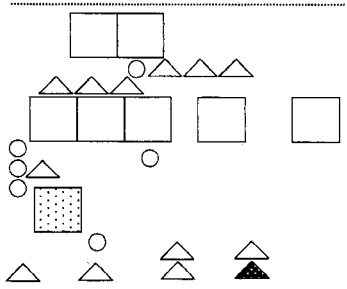
Map 2. *ḥ* Always Pharyngealized (M)



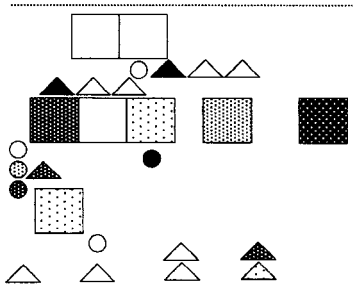
Map 3. *ḥ* Pharyngealized Before *i* (M)



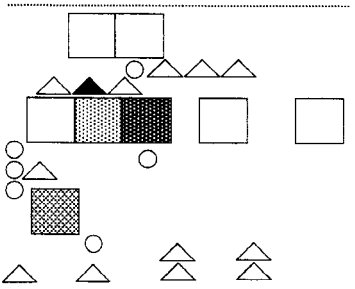
Map 4. Imperfective -*ħba* (M)



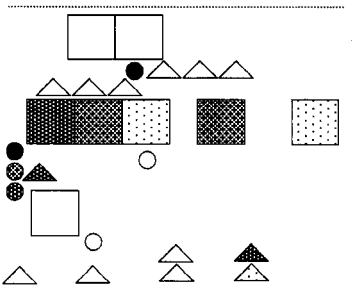
Map 5. 2FeSg Imperfective -*ħbu-y* (M)



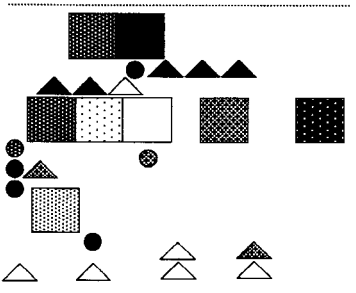
Map 6. 2FeSg Imperf. -*ħbi* from -*ħbu* (M)



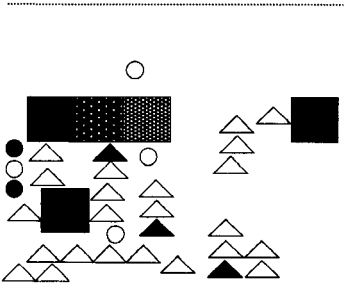
Map 7. 2FeSg Imperf. *-ħba-y* from *-ħbu* (M)



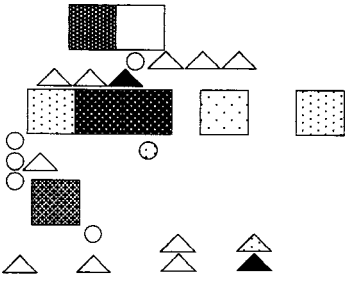
Map 8. 2FeSg Imperfective *-ħbu* (M)



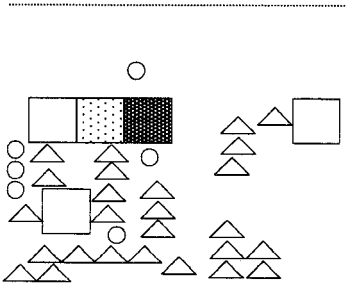
Map 9. Plural Imperfective *-ħbu(-w)* (M)



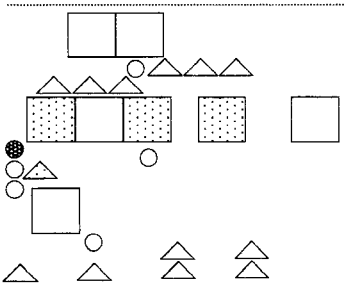
Map 10. Plural Imperfective *-ħbu(-w)* (J)



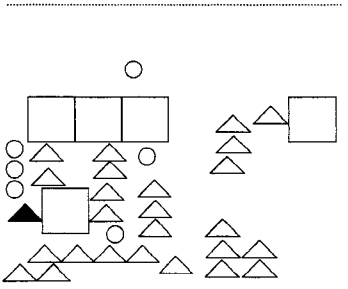
Map 11. Plural Imperfective *-ħba-w* (M)



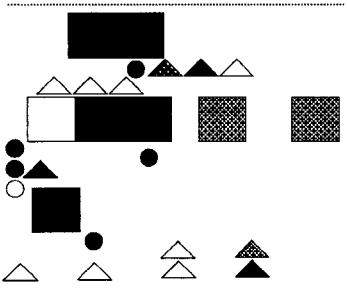
Map 12. Plural Imperfective *-ħba(-w)* (J)



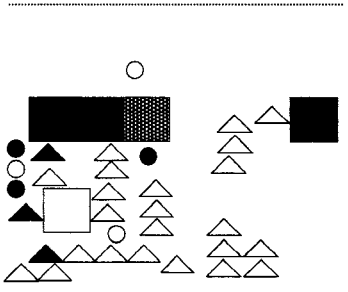
Map 13. Plural Imperfective *-ħbi-w* (M)



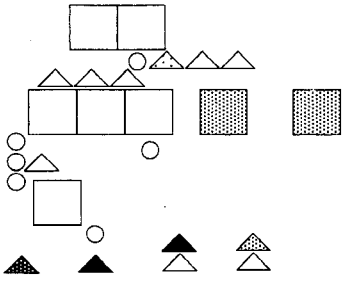
Map ***14***. Plural Imperfective *-ħbi-w* (J)



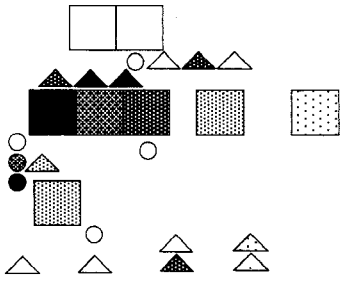
Map 15. Verbal Noun *ħbu* (M)



Map 16. Verbal Noun *ħbu* (J)



Map 17. Verbal Noun *ħba* (M)



Map 18. Verbal Noun *ħby-an, ħbw-an* (M)