

Chapter 16

Between tone and stress in Hamar

Sara Petrollino

Laboratoire Dynamique Du Langage, Lyon and Leiden University

This paper provides a preliminary description of the word-prosodic system of Hamar, a South Omotic language spoken in South West Ethiopia. The prosodic system of Hamar shows properties of both stress accent and tone: accent is lexically contrastive in nouns, but not in verbs, where it has a grammatical function. Post-lexical tonal oppositions arise when lexical accent and grammatical accent interact in both nouns and verbs. The prosodic behaviour of Hamar nouns and verbs is in line with the pattern proposed by Smith (2011), whereby nouns are higher than verbs in a hierarchy of phonological privilege.

1 Introduction

Hamar is spoken in South-West Ethiopia by approximately 47,500 people (Simons & Fenning 2017) and it is commonly classified within the South Omotic branch of the Omotic family. The internal and external classification of Omotic is still unsettled and the affiliation of South Omotic languages to either the Afro-Asiatic or the Nilo-Saharan phylum is debated, see Zaborski (2004), Blažek (2008), Bender (2000; 2003), Hayward (2003), Fleming (1974), and Azeb (2012). The Hamar live in the lower Omo valley, in the Ethiopian administrative zone referred to as Southern Nations, Nationalities, and People's region (SNNPR). The neighbours of the Hamar are the Aari people to the north (Aari is a South Omotic language), the Arbore (Lowland East Cushitic) to the east, the Dhaasanac (Lowland East Cushitic) to the south, the Nyangatom (Eastern Sudanic, Nilotic) and the Kara (South Omotic) to the west. Hamar, together with Banna and Bashadfa, forms a linguistic unit which is usually referred to as the Hamar-Banna cluster. The three languages are mutually intelligible and show only minor variations in the lexicon and in the phonology. This paper presents a preliminary description of the

word-level prosodic system of the Hamar variety, and it is based on the analysis of circa 200 Hamar words uttered in isolation and in context. These have been extracted from a larger corpus of first-hand data collected in Hamar territories between 2013 and 2014 for the compilation of the Hamar grammar, see Petrollino (2016).¹ An overview of the main phonological features of Hamar is given in §2; the word-prosodic system is illustrated in §3, followed by concluding remarks in §4.

2 Phonological preliminaries

Hamar displays phonological features which are typical of the “Ethiopian Linguistic Area”, such as the implosive /d/, the ejective consonants and the replacement of /p/ with /f/ (or vice versa) (Ferguson 1970; 1976; Crass & Meyer 2008). Various assimilatory processes attested in neighbouring Omotic and Cushitic languages, such as translaryngeal harmony and sibilant harmony (Hayward 1988) occur also in Hamar. Sibilant harmony in Hamar is a root-structure condition but it extends also across morpheme boundaries; the sibilant consonants in a word do not need to be identical but must agree in place of articulation. The word-prosodic system of Hamar is not uncommon among Omotic and Cushitic languages, even though these language families show great variation in terms of prosodic systems (see Mous 2012 and Azeb 2012 for a Cushitic and Omotic overview). According to Azeb (2012: 438) the languages located in the southern and eastern parts of the Omotic area are characterised by “pitch-accent” systems, while highly tonal systems are usually found in the northern and western parts (Bench, for instance, is an Omotic language with five level tones and a rising tone, see Rapold 2006).

This section offers an overview of the phonemic inventories, including vowel realization §2.1, and the syllable structure §2.2 of Hamar. Hamar examples are written in a surface-phonemic transcription. The following modifications to the International Phonetic Alphabet have been adopted: /j/ for the palato-alveolar affricate [ɟ]; /c/ for the voiceless palato-alveolar [tʃ]; /c'/ for the palato-alveolar ejective affricate [tʃ̰]; /y/ for the glide [j]; /h/ for the breathy-voiced glottal approximant [ɦ]; /sh/ for the palato-alveolar [ʃ]. Long vowels and geminated consonants are indicated by doubling the vowel or the consonant symbol. Word initial

¹For the phonological analysis, speakers were asked to repeat three tokens of each word in isolation and in carrier phrases. Some of the speakers were used to utter words in sequence as if they were individual, separate utterances, and words in isolation were always compared to words uttered in carrier phrases in order to exclude list intonation.

glottal stop is not written in surface-phonemic transcription. An asterisk * is used for ungrammatical forms and unattested stages, whereas the diacritics *́* and *̀* indicate high and falling pitch, respectively. The absence of a diacritic on vowels indicate accent-less vowels and syllables, which are usually realized with a low pitch. On consecutive (long) vowels, however, the high pitch is written only on the first vowel, i.e. /*́vv*/ is realized as [*́vv*] and not as [*́v̀v*].

2.1 Phonemic inventories

The phonemic inventory of Hamar has 26 consonant phonemes (Table 1), seven vowel qualities (Table 2) and five diphthongs (/ai/, /au/, /ei/, /oi/, /ia/). The voiceless bilabial, alveolar and velar stops are aspirated in word initial position, but aspiration is not phonemic. The velar implosive /g/ is marginal as it occurs only in the lexeme *gíá* ‘hit’ where it contrasts with the velar stop /g/ in the lexeme *giá* ‘tell’. Ejective consonants cannot be geminated. The glides /w/, /y/, /ɰ/, /h/ form a natural class in that they undergo the same morpho-phonological rule and get deleted in specific contexts. Consonant gemination is distinctive (1) and it can arise grammatically (2):

- (1) a. *kumá* ‘drink milk’
 b. *kummá* ‘eat’
- (2) a. *raatá* ‘sleep’
 b. *rattá* ‘make sb. sleep’ (causative derived form)²
 c. *afála* ‘blanket’
 d. *afállá* ‘blankets’ (blanket:PL)

Vowel quantity is also distinctive as illustrated in (3). Vowel length is further discussed in §3.1.

- (3) a. *éna* ‘past’
 b. *éena* ‘people’
 c. *gobá* ‘run’
 d. *goobá* ‘decorate’

Vowel realization can be affected by accent. Word-final unaccented vowels can be devoiced or partially devoiced depending on the rate of speech and on whether they occur in utterance-final position:

²The vowel shortening in *rattá* occurs to avoid CVVC.CV word structure, see section §2.2

Table 1: Consonant phonemes

	Bilabial	Alveolar	Palato-alveolar	Velar	Uvular	Glottal
Stops	p ^a b	t d	c j	k g	q	
Implosives	ɓ	ɗ		(ɠ)		
Ejectives		t'	c'			
Fricatives		s z	ʃ	x		
Nasals	m	n	ɲ			
Liquids		l, r				
Glides	w		y			h,ʔ

^aThe bilabial stop /p/ can be realized as [p] or [ɸ] (a common feature found in the languages of Ethiopia): a word like /payá/ ‘good’ can be realized as [payá] or [ɸayá], thus both p and f will be used in surface-phonemic transcriptions.

Table 2: Vowel phonemes

	Front	Central	Back
high	i ii		u uu
mid-high	e ee		o oo
mid-low	ɛ εε		ɔ ɔɔ
low		a	

- (4) *róqo* ‘tamardind tree’ [róqo] or [róqɔ]

Word-final accented vowels can be phonetically breathy:

- (5) *meté* ‘head’ [meté] or [meté^h]

The mid-low vowels are phonemic as illustrated in the minimal pair below:

- (6) a. *ɛdá* ‘luck’
b. *edá* ‘separate’

Mid-low vowels, however, can also be in complementary distribution with the mid-high vowels /e/ and /o/: except for some idiosyncratic exceptions illustrated in (10) and (11), accented mid vowels followed by the low vowel /a/ are usually realized as mid-low, see (7a) and (8a); unaccented mid vowels are not affected by

the following low vowel /a/ and they are realized as mid-high, see (7b) and (8b) below:

- (7) a. *dʒya* ‘bone marrow’
 b. *doyá* ‘show’
- (8) a. *yéɛla* ‘roof’
 b. *yedá* ‘hold’

The relationship between mid vowels and accent cannot always be used as a cue to determine the location of stress in a given word since there are several exceptions to the pattern illustrated in the examples above. First of all, the realization of mid vowels can vary across speakers and within the same speaker’s speech: in (9a) and (9b) below, for instance, there is free variation and none of the two realizations is preferred over the other.

A few words (less than ten items) have an idiosyncratic pronunciation and allow accented mid-high vowels followed by the low vowel /a/ (10), or vice versa, unaccented mid-low vowels (11):

- (9) a. *kéda* ‘then’ [kédá], [kéda]
 b. *oshála* ‘after two days’ [ʔofála], [ʔɔfála]
- (10) a. *cóobar* ‘down there’ [tʃó:bar]
 b. *zéega* ‘bird of prey sp.’ [zé:ga]
- (11) *ɛdá* ‘luck’ [ʔɛdá]

Mid-low vowels have a high functional load since they arise grammatically. The realization of masculine gender, for instance, can be signalled by the presence of mid-low vowels:

- (12) a. *segeré* ‘dik-dik’ (non inflected form)³
 b. *segerê* ‘male dik-dik’ (dik-dik:M)
- (13) a. *zóbo* ‘lion’ (non inflected form)
 b. *zɔbɔ* ‘male lion’ (lion:M)

³Hamar nouns can be marked for gender depending on the syntactic context and on the semantic functions. This means that nouns can be marked for gender, as in (12b) and (13b) but they can also be used in the uninflected form, which is non-specific for gender. This is called “general form” and it corresponds to the citation form of nouns, see Petrollino (2016) for further details.

In the examples above, the masculine suffix *-â* merges with the final vowel of the noun and triggers lowering of root-internal mid-high vowels. More examples of nouns marked for masculine gender can be found in section §3.2.

2.2 Syllable structure

Hamar nouns and verbs are mainly disyllabic. Trisyllabic words are more rare. There are four possible syllable types: CV, CVV⁴, CVC and CVVC. The latter is found only in monosyllabic nouns, and in order to avoid CVVC.CV word types, the long vowel of CVVC nouns is shortened when inflectional and derivational suffixes are attached, see example (2b) above and (14) and (15) below.

- (14) *áan* ‘arm’ **aan-ta* > *antâ* ‘arm:M’
 (15) *yíir* ‘upper arm’ **yíir-na* > *yírna* ‘upper arm:PL’

Onsetless syllables and consonant clusters in onset or in coda position are not permitted. Recall that glottal stop in word-initial position is not written, thus the noun for ‘arm’ in (14) has a CVVC structure. Geminate consonants are ambisyllabic segments filling the coda of a syllable and the onset of the following syllable:

- (16) *qul.lá* ‘goats’ (goat:PL)

Closed syllables tend to end in a sonorant consonant. Obstruent segments in coda position are rare and are found in monosyllabic words or in word final syllables. If consonant clusters arise where an obstruent occurs as the first segment of the cluster, metathesis and assimilation rules apply, see the examples below in which the plural marker *-na* is suffixed to consonant-final nouns:

- (17) *atáb* ‘tongue’ **atáb-na* > *atám̐ba* ‘tongue:PL’
 (18) *c’agáj* ‘green’ **c’agáj-na* > *c’agáj̐na* ‘green:PL’

3 Word prosody

This section outlines the prosodic properties of Hamar nouns and verbs. Accented syllables in both nouns and verbs are obligatory and culminative (19).

⁴Long vowels are restricted to the first syllable of a word, but the behaviour of accent (discussed in the next section) does not allow a trochaic analysis. Further investigation into vowel distribution is needed in order to better understand foot structure.

These properties, together with the fact that the syllable, rather than the mora, is the TBU (20), correspond to the definitional characteristics of stress accent (Hyman 2006: 231). However, the Hamar word-prosodic type can be analysed also as a tone system after Hyman's broad definition (2001), whereby "an indication of pitch enters into the lexical realisation of at least some morphemes" (Hyman 2001: 1367). Accent in Hamar has both lexical and grammatical functions; grammatical functions are observable in particular in some verbal inflections and in masculine nouns. The interaction between lexical and grammatical accent is discussed in §3.3.

3.1 Prosodic properties of nouns and verbs

There is only one prominent syllable per word in Hamar (19a, 19b), and accentless words are not attested (19c):

- (19) a. $\acute{\sigma}.\sigma$, $\sigma.\acute{\sigma}$
 b. $*\acute{\sigma}.\acute{\sigma}$
 c. $*\sigma.\sigma$

Prominent syllables are perceptually louder, longer and with a higher pitch than neighbouring syllables; instrumental measurements show increased values for F0, duration and intensity on accented syllables. Long vowels, which can be distinctive as shown in example (3) above, carry one and the same pitch: rising or falling pitches are not attested on long vowels (20).

- (20) a. *háada* [háádà] 'rope' *[háàda] *[hàáda]
 b. *zíini* [zíini] 'mosquito'
 c. *déer* [déér] 'red'
 d. *doobí* [dòòbí] 'rain'

The measurements given in Table 3 below show that phonemically long vowels are phonetically long, and long vowels are phonetically longer than short vowels in accented syllables. VL1 in Table 3 refers to the vowel length of the first syllable measured in seconds. The unaccented long vowel in *goobá* 'decorate' is longer than the short accented vowel in *góro* 'Colobus monkey'.⁵

The position of the accent is not sensitive to syllable weight: the heavy syllables CVV and CVC in the bisyllabic words in (21) do not always attract accent.

⁵The words were elicited in isolation and the speakers were asked to repeat three tokens of each word. The examples in Table 3 report the measurements of the first tokens.

Table 3: Vowel length measurements

Word	Meaning	VL1
<i>góro</i>	Colobus monkey	0.091
<i>gobá</i>	run	0.070
<i>góodo</i>	termite eater	0.151
<i>goobá</i>	decorate	0.130

- (21) a. *shaa.lá* ‘ceiling’
 b. *zíi.ga* ‘spinal cord’
 c. *síl.qa* ‘knuckle’
 d. *gur.dá* ‘village’

In trisyllabic nouns accent is found on the antepenultimate, penultimate and final syllable:

- (22) a. *gé.da.qa* ‘plant sp.’
 b. *gu.gá.na* ‘lightning’
 c. *gi.gi.rí* ‘molar teeth’

Accent in nouns is thus unpredictable and lexically distinctive:

- (23) a. *átti* ‘bird’ *attí* ‘fermented sorghum’
 b. *hámmo* ‘field:F’ *hammó* ‘which:F’
 c. *ásho* ‘slope’ *ashó* ‘plant sp.’
- (24) a. *ánqasi* ‘bee’ *anqási* ‘lamb’
 b. *shékini* ‘quartz’ *shekíni* ‘beads’
 c. *bagáde* ‘loin’ *bagadé* ‘cooked blood’

Suffixation of nominal markers, such as the plural marker *-na* or the feminine gender marker *-no*, does not affect accent placement even when suffixation results in longer words:

- (25) a. *meté* ‘head’ *meté-na* ‘head-PL’
 b. *kárc’a* ‘cheek’ *kárc’a-na* ‘cheek-PL’
 c. *góro* ‘monkey’ *góro-no* ‘monkey-F’
 d. *qulí* ‘goat’ *qullá* ‘goat:PL’

In the plural noun *qullá* in example (25d), the plural marker *-na* does not attach to the terminal vowel of the noun *qulí*, but it is suffixed directly to the root, assimilating to the preceding liquid segment (*qul-na).⁶ The position of the accent thus does not change in the case of assimilation, metathesis, or other phonological processes.

Different from nouns, accent is not lexical in verbs. Hamar verb roots are accent-less but they always occur with verbal suffixes which bear the culminative accent on the verbal word. This means that the accent is always found on the verbal suffix and never on the verb root. The singular addressee of the imperative mood for instance is formed by suffixing *-á* to the verb root. This form is also used as the citation form of the verb. Prominence is therefore found on the right-most edge of the citation form of any verb:

- (26) a. CV.CV̌ *pug-á* ‘blow!’ (blow-IMP.2SG)
 b. CVC.CV̌ *ashk-á* ‘do!’ (do-IMP.2SG)
 c. CV.CVC.CV̌ *ukuns-á* ‘rest!’ (rest-IMP.2SG)

The final accented *-á* of the citation form of the verb can be substituted with other verbal suffixes of different syllabic structure:

- (27) a. *pug-é* ‘blow!’ (blow-IMP.2PL)
 b. *ashk-íma* ‘without doing’ (do-NEG.SUB)
 c. *ukuns-énka* ‘while resting’ (rest-CNV)
 d. *bul-idí* ‘opened’ (open-PF)
 e. *gob-áise* ‘running’ (run-SUB)

Verbal suffixes cannot be combined: a single verb word cannot contain more than one verbal suffix. Adding pronominal subject clitics to the verb word does not affect accent placement, cf. (27a) with (28a) and (27c) with (28b):

- (28) a. *ko=pug-é* ‘let her blow!’ (3F=blow-JUSS)
 b. *kon=ukuns-énka* ‘while she rested’ (3F=rest-CNV)

Some verbal tenses are distinguished only by accent placement: cf. the negative past in (29) with the negative present in (30).

⁶This phonological rule occurs when the terminal vowels of nouns are not stable. Terminal vowels in Hamar (and in other Omotic languages) can be “unstable” in the sense that they can be dropped and ignored with the suffixation of some morphemes. Stable and unstable terminal vowels determine different types of nominal declensions in Hamar (see Petrollino 2016: 73-77; Hayward 1987 and Azeb 2012 for terminal vowels in Omotic languages).

- (29) a. *qan-átine* 'I did not hit' (hit-PAST.NEG.1SG)
 b. *qan-átane* 'You did not hit' (hit-PAST.NEG.2SG)
- (30) a. *qan-atíne* 'I do not hit' (hit-PRES.NEG.1SG)
 b. *qan-atáne* 'You do not hit' (hit-PRES.NEG.2SG)

The inflectional verb suffix used in the third person of the negative present is realized with a final falling pitch *-ê*: this contrasts with the final accent of the imperative mood which is realized with a high pitch:

- (31) a. *pug-é* 'blow!' (blow-IMP.2PL)
 b. *pug-ê* 'he/she does not blow' (blow-PRES.NEG.3)
- (32) a. *qan-é* 'hit!' (hit-IMP.2PL)
 b. *qan-ê* 'he/she does not hit' (hit-PRES.NEG.3)
- (33) a. *ukuns-é* 'rest!' (rest-IMP.2PL)
 b. *ukuns-ê* 'he/she does not rest' (rest-PRES.NEG.3)

The negative suffix *-ê* is found also in the negative copula which contrasts with the locative case (34); a similar opposition is found in the negative existential predicator which contrasts with its interrogative counterpart (35):

- (34) a. *tê* 'is not'
 b. *te* 'inside'
- (35) a. *qolê* 'there is not'
 b. *qóle* 'where is?'

There are a few verb-noun pairs which can be distinguished only prosodically. This contrast is illustrated in (36) and (37): the citation form of the verb has always final accent, whereas in the segmentally identical noun accent falls on the first syllable. These examples are important to understand the interaction between grammatical and lexical accent in Hamar, and will be re-proposed later on in §3.3:

- (36) a. *qaná* 'hit!'
 b. *bulá* 'jump!'
- (37) a. *qána* 'stream'
 b. *búla* 'egg'

The examples illustrated so far show that accent is unpredictable and lexical in nouns as shown in (21), (23), (24). The accentual system of Hamar verbs, on the other hand, is more predictable as accent is found always on function morphemes. The examples in (27), (29) and (30) show the functional load of accent on verbs. Imperative and negative verbs, moreover, display an opposition between high and falling pitch on the last syllable (31).

3.2 Masculine nouns

It was illustrated earlier that feminine gender and plural number suffixes do not affect the position of the accent, see examples under (25) above. Different from the feminine and the plural suffixes, the masculine suffix *-â* affects the prosody of the word as well as the realization of the vowels: nouns marked by masculine gender are realized with a falling pitch on the final vowel as shown in (38); the masculine gender marker *-â*, moreover, triggers height harmony, lowering the mid-high vowels /e/ and /o/ (39). The lowering of the mid-high vowels in (39) is the same morpho-phonological rule which was introduced in §2.1 for examples (12b) and (13b).

- | | | | | | | |
|------|----|---------------------|-----------|----------------|-------------|----------|
| (38) | a. | <i>bankár</i> | ‘arrow’ | <i>bankarâ</i> | ‘arrow:M’ | |
| | b. | <i>jagá</i> | ‘sparrow’ | <i>jagâ</i> | ‘sparrow:M’ | [dʒaˈgâ] |
| | c. | <i>qása</i> [ˈqása] | ‘louse’ | <i>qasâ</i> | ‘louse:M’ | [qaˈsâ] |
| | d. | <i>hápa</i> [ˈhápa] | ‘sheep’ | <i>hapâ</i> | ‘sheep:M’ | [haˈpâ] |
-
- | | | | | | |
|------|----|-------------|---------|-------------|-----------|
| (39) | a. | <i>ási</i> | ‘tooth’ | <i>asê</i> | ‘tooth:M’ |
| | b. | <i>ooní</i> | ‘house’ | <i>ɔɔnê</i> | ‘house:M’ |
| | c. | <i>meté</i> | ‘head’ | <i>metê</i> | ‘head:M’ |

The final falling pitch of masculine nouns is clearly audible when nouns are uttered in isolation or before a pause. The difference can however be lost in connected and allegro speech, so the falling pitch of masculine nouns is sometimes realized as a final high pitch. Tokens of the same masculine noun in connected speech can be uttered with both a final falling pitch or a final high pitch, so the final falling pitch on masculine nouns cannot be analysed as a final high tone followed by a low boundary tone before a pause.

On the prosodic level there are two possible outcomes for nouns marked by masculine gender. If the uninflected noun has lexical accent on the final syllable, the derived masculine noun is realized with a final falling tone as in (38a, 38b), (39b, 39c). In nouns with lexical accent on the first syllable, prominence shifts to

the final syllable, and a falling tone is realized on the final vowel of nouns such as those in (38c, 38d) and (39a) above. This outcome is summarized below:

- (40) a. CV.'CŶ > CV.'CŶ
 b. 'CŶ.CV > CV.'CŶ

Example (40a) shows a high vs. falling opposition on the last syllable, whereas (40b) shows a low vs. falling opposition on the last syllable. In masculine nouns which follow the pattern in (40), grammatical accent is culminative and obligatory; however, not all nouns follow this pattern, and exceptions to culminativity can be attested when the grammatical accent interacts with the lexical accent of nouns. These interactions are described in the following section.

3.3 Interaction between lexical and grammatical accent

Nouns with lexical accent on the first syllable, like those schematised in (40b) can show variation in the prosodic realization of the masculine form. When inflected, nouns like *qása* in (38c) or *hápa* in (38d) can retain their lexical accent on the first syllable together with the grammatical accent of the masculine suffix. In other words, the outcome for CŶ.CV nouns can be CV.CŶ or CŶ.CŶ after suffixation of the masculine gender marker. The variation is highly irregular and it is attested across speakers and within the same speaker's speech. Nouns like those in (41) do not constitute a special class of nouns; they rather belong to the most common nominal declension which represents the majority of Hamar nouns, see Petrollino (2016: 74).

- (41) a. *qasâ* 'louse:M' [qà'sâ] or [qá'sâ]
 b. *hapâ* 'sheep:M' [hà'nâ] or [há'nâ]
 c. *bulâ* 'egg:M' [bù'lâ] or [bú'lâ]

The realization of the lexical accent on the first syllable of masculine nouns can be fundamental to distinguish nominal stems from nominalized stems. The masculine suffix *-â*, in fact, can be suffixed also to verb roots to form relativized nouns with masculine agreement. Since verb roots are always accent-less, masculine relativized verbs always result as CV.CŶ words:

- (42) a. *qaná* 'hit!' *qaná* 'the one (M) who hits' [qà'nâ]
 b. *bulá* 'jump!' *bulâ* 'the one (M) who jumps' [bù'lâ]

Nominalized verbs with masculine agreement pattern like nouns with lexical accent on the final syllable, see Table 4 below: uninflected nouns in the first

column are paired with the respective masculine form in the second column; verbs are paired with their masculine nominalized form. Both nouns and verbs display a H vs. HL opposition on the final syllable:

Table 4: Tonal opposition 1

	CṾ.'CṾ	CṾ.'CṾ
nouns	<i>jagá</i> 'sparrow' <i>mirjá</i> 'kudu'	<i>jagâ</i> 'sparrow:M' <i>mirjâ</i> 'kudu:M'
verbs	<i>pugá</i> 'blow!' <i>qaná</i> 'hit!'	<i>pugâ</i> 'the one (M) who blows' <i>qanâ</i> 'the one (M) who hits'

When the masculine marker *-â* is suffixed to nouns and verbs which are segmentally identical, such as those in (36) and (37) above, a H or a L tone on the first syllable of the noun/verb root plays a crucial distinctive role: the nominalized verb always has a L.HL melody, whereas the segmentally identical masculine noun is realized as H.HL. Contrast is maintained between segmentally identical nouns and verbs through the accent (tone) system, so these noun/verb pairs show a H vs L tonal opposition on the first syllable as illustrated in Table 5.

Table 5: Tonal opposition 2

CṾ.'CṾ	CṾ.'CṾ
<i>qaná</i> 'stream:M' [qánâ]	<i>qanâ</i> 'the one (M) who hits' [qànâ]
<i>bulâ</i> 'egg:M' [búlâ]	<i>bulâ</i> 'the one (M) who jumps' [bùlâ]

4 Conclusions

The Hamar prosodic system represents an “intermediate” type in Hyman’s word-prosodic typology (Hyman 2006; 2009), in the sense that it displays properties of both stress and tone. On nouns and verbs accent is culminative and obligatory, showing stress-like properties. Accent is lexically contrastive in any word position in nouns, whereas it is grammatical in verbs. Tone-like properties can be observed in the verbal domain, where a H vs. HL opposition is found on the last syllable of the imperative and negative form of the verb (31), but also when

the grammatical accent of the masculine gender marker interacts with the lexical accent of verb roots and nouns. In this case, paradigmatic tonal contrasts arise on the first syllable (Table 5) and the last syllable (Table 4) of both nouns and verbs. This preliminary analysis shows also the category-specific phonological effects which distinguish Hamar nouns from verbs: as illustrated in §3.1, Hamar nouns allow more contrastive prosodic choices than verbs; this phenomenon is described by Smith (2011) in terms of greater “phonological privilege” of nominal categories over verbs. Phonological processes can be sensitive to parts of speech, and according to Smith’s typological study parts of speech tend to conform to the following hierarchy of phonological privilege: nouns > adjectives > verbs; the majority of category-specific phonological effects involves mainly suprasegmental and prosodic phenomena, rather than segmental phenomena (Smith 2011: 2448). Nouns’ phonological privilege in Hamar is also supported by the fact that vowel harmony, which gives rise to mid-low vowels, takes place only in nouns and not in verbs.

Abbreviations

1	first person	IMP	imperative
2	second person	NEG	negative
3	third person	SUB	subordinative
M	masculine	CNV	converb
F	feminine	PF	perfective
PL	plural	JUSS	jussive
SG	singular	PAST	past tense
		PRES	present tense

Acknowledgments

I am grateful to the LABEX ASLAN (ANR-10-LABX-0081), Université de Lyon, for the financial support (ANR-11-IDEX-0007, “Investissements d’Avenir” program operated by the French National Research Agency). I wish to thank the anonymous reviewers for the thoughtful comments on the original paper.

References

Azeb, Amha. 2012. Omotic. In Zygmunt Frajzyngier & Erin Shay (eds.), *The Afro-Asiatic Languages*, 423–504. Cambridge: Cambridge University Press.

- Bender, Lionel M. 2000. *Comparative morphology of the Omotic languages*. Munich: Lincom Europa.
- Bender, Lionel M. 2003. *Omotic lexicon and phonology*. Carbondale: Southern Illinois University.
- Blažek, Václav. 2008. A lexicostatistical comparison of Omotic languages. In John D. Bengtson (ed.), *In hot pursuit of language in prehistory. Essays in the four fields of anthropology. In honor of Harold Fleming*, 57–148. Amsterdam: John Benjamins.
- Crass, Joachim & Ronny Meyer. 2008. Ethiopia. In Bernd Heine & Derek Nurse (eds.), *A linguistic geography of Africa*, 228–250. Cambridge: Cambridge University Press.
- Ferguson, Charles A. 1970. The Ethiopian language area. *Journal of Ethiopian Studies* 8:2. 67–80.
- Ferguson, Charles A. 1976. The Ethiopian language area. In M. Lionel Bender (ed.), *The Non-Semitic languages of Ethiopia*. African Studies Center, Michigan State University: East Lansing.
- Fleming, Harold C. 1974. Omotic as an Afroasiatic family. In William R. Leben (ed.), *Proceedings of the 5th annual conference on African linguistics*. University of California (UCLA): African Studies Center & Department of Linguistics.
- Hayward, Richard J. 1987. Terminal vowels in Ometo nominals. In Herrmann Jung-raithmayr & Walter W. Müller (eds.), *Proceedings of the Fourth International Hamito-Semitic Congress*. Amsterdam: John Benjamins.
- Hayward, Richard J. 1988. Remarks on Omotic Sibilants. In Bechhaus-Gerst Marianne & Fritz Serzisko (eds.), *Cushitic-Omotic. Papers from the International Symposium on Cushitic and Omotic Languages, Cologne, January 6-9, 1986*. Hamburg: Helmut Buske.
- Hayward, Richard J. 2003. Omotic: The “empty quarter” of Afroasiatic linguistics. In Jacqueline Lecarme (ed.), *Research in Afroasiatic Grammar II: Selected papers from the fifth conference on Afroasiatic languages, Paris, 2000*, 241–263. Amsterdam: John Benjamins.
- Hyman, Larry M. 2006. Word-prosodic typology. *Phonology* 23. 225–257.
- Hyman, Larry M. 2009. How (not) to do phonological typology: The case of pitch-accent. *Language Sciences* 31. 213–38.
- Hyman, Larry M. 2001. Tone systems. In Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals: An international handbook*, 1367–1380. Berlin & New York: de Gruyter.

- Mous, Maarten. 2012. Cushitic. In Zygmunt Frajzyngier & Erin Shay (eds.), *The Afroasiatic languages*, 342–422. Cambridge: Cambridge University Press.
- Petrollino, Sara. 2016. *A grammar of Hamar, a South Omotic language of Ethiopia*. Köln: Köppe Rüdiger Verlag.
- Rapold, Christian J. 2006. *Towards a grammar of Benchnon (PhD thesis)*. Leiden University dissertation.
- Simons, Gary F. & Charles D. Fenning. 2017. *Ethnologue: Languages of the world*. 20th edn. Dallas: SIL International. <http://www.ethnologue.com>.
- Smith, Jennifer L. 2011. Category-specific effects. In Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume & Keren Rice (eds.), *The Blackwell companion to phonology*, 2439–2463. Malden, MA: Wiley-Blackwell.
- Zaborski, Andrej. 2004. West Cushitic. A genetic reality. *Lingua Posnaniensis* 46. 173–186.