

Existential predication in Hamar

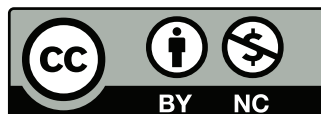
Sara Petrollino

*Leiden University Centre for Linguistics, P.O. Box 9515, 2300 RA Leiden
s.petrollino@hum.leidenuniv.nl*

Abstract

This paper analyzes predicative constructions expressing location, existence and possession in Hamar, a South Omotic language spoken in South-West Ethiopia. The semantic domain location-existence-possession is conveyed in Hamar by one and the same lexeme, but in different constructions. The distinction between location and existence in particular is expressed by variation in the syntax and information structure, reflecting the different conceptualization and perspectivization of the abstract relation between a figure and a ground. The semantic and syntactic properties of these constructions are analyzed and compared to the findings of Creissels' typology of "inverse locational predication" (2013) and Koch's constructional typology (2012). The analysis of existential predication in Hamar confirms that there is a contrast between the languages of the Sudanic belt and those of North Eastern Sub-Saharan Africa (Creissels 2018a; 2019), and it suggests that Hamar, like other Afro-Asiatic languages (Koch 2012:585), belongs to languages which do not express informational salience, nor propositional salience. A closer look however reveals that Hamar existential constructions display special morpho-syntactic features: the different conceptualization of the figure-ground relationship is encoded not only by means of word order alternations, but also by means of gender marking on the figure and the ground, and different aspectual marking on the predicator.

Keywords: Omotic, existence, information structure, gender



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

About author

Sara Petrollino is a university lecturer at Leiden University, where she teaches field methods for linguistics, anthropological linguistics and culture in Africa. She is currently carrying out research on color categorization systems in the languages of East African pastoralists and on other grammatical aspects of the South Omotic languages Hamar, Kara and Aari.

Field of study: South Omotic languages, semantics and syntax of existential predication

1. Introduction

The semantic domain of location, existence and possession in Hamar is expressed in various constructions containing the predicator *dáa* ‘live, exist’. The expression of these semantic categories in existential sentences is investigated with special attention to the syntactic differences between constructions predicating existence and those predicating location. The aim of this paper is to place Hamar existential predication within the typological generalizations outlined by Creissels (2013) and Koch (2012). On one hand the analysis confirms some of the areal tendencies observed for African languages, in particular other Afro-Asiatic languages; on the other hand, it highlights language-specific strategies for the expression of location and existence which do not necessarily fit in the patterns attested cross-linguistically.

The paper is organized as follows. After a brief terminological and methodological note (§1.1 and §1.2), Hamar’s main morpho-syntactic features will be presented (§1.3 and §1.4); and the grammatical features relevant to locative, existential and possessive predication in Hamar will be highlighted (§2). The differences between Hamar nominal and existential predication are outlined in section 2.1, followed by an analysis of the form and function of the existential predicator *dáa* (§2.2); section 2.3 provides a perusal of the constructions expressing location, existence and possession in Hamar. In section 3, the Hamar data are compared to the findings of Creissels’s study (2013) on existential predication (§3.1) and they are further discussed within Koch’s constructional typology (2012) (§3.2). Section 4 summarizes the conclusions.

1.1 Terminological note

There is a lot of variation in the use and meaning of “existential predication” in the literature; for an overview see Creissels (2013: 1-2, footnote 1). Some authors use “existential predication” in a broad sense, referring to sentences predicating existence, location and possession. Not all authors, however, use this label for clauses predicating the semantic category of location, where “locative existential” or “locative presentative” may be used instead. Others distinguish between habitual presence (existence) and temporary presence (location). In Creissels’s typological study (2013, 2018a), existential constructions are “inverse locational predications” understood as an alternative strategy to plain locative sentences. This definition excludes sentences expressing the habitual relationship between an entity and its location (as in sentence c below), and sentences expressing “existential” meaning in the philosophical sense of the term. Both existential and plain locative sentences express an episodic spatial relationship between two objects: the sentence in (1a) is a plain locative construction which can be alternatively expressed by the existential construction in (1b) (Creissels 2013: 5).

- 1a) the dog is under the tree
- 1b) there is a dog under the tree
- 1c) there are lions in Africa

The expression “existential predication” in this paper refers to Hamar sentences predicating existence, location and possession, regardless of the semantic distinction between habitual vs. episodic presence of an entity in a location. Following this definition, the sentences in (1a-

c) in Hamar are all discussed under the label “existential predication”; their semantic reference, however, will be specified for each example. In this sense “existential predication” has a broader reference compared to Creissels’s use of the term. The role played by definiteness in the various constructions is introduced in section 1.4 and it is discussed in more detail in section 3. The labels “thematic location” and “rhematic location” are explained in section 3.2 along with Koch’s framework (2012).

The objects involved in the spatial relationship predicated by the sentences in (1a-c) are referred to as “figure” and “ground” after Talmy (1972): the figure is the NP denoting the located (or moving) entity; the ground is the entity on which the figure is located (Talmy 1972: 11). The labels “figure” and “ground” will be preferred over other terms found in the literature, such as located and locus (Koch 2012), or thing and location (Partee and Borschev 2007).

1.2 Methodology

The Hamar data presented in this paper has been collected by the author between 2010 and 2018 in South-West Ethiopia. Some of the elicited sentences were collected through monolingual Hamar conversations; however, most of the data used in this paper has been extracted from Hamar natural conversations and oral texts, such as recipes and folk tales. The locative constructions involving a “ball” as the figure were elicited with the aid of the visual stimuli developed at the Max Planck Institute for Psycholinguistics (Motion Verb Stimulus, alias Moverb, Levinson 2001). Speakers volunteered these sentences while describing the motion of the ball illustrated in the short animations. Other locative constructions were elicited with the help of the stimulus “Man and Tree and Space Games” (Levinson et al. 1992). A few English translation equivalents were asked to specifically address the issues concerning the meaning of the predicator *dāa*: when an example is a translation equivalent it will be indicated in squared brackets as [tr. equiv].

1.3 The language¹

Hamar is spoken in South-West Ethiopia by approximately 47,500 speakers (Simons and Fennig 2017). It is traditionally classified as a South Omotic language within the Omotic branch of the Afro-Asiatic family. The phonemic inventory of Hamar includes bilabial and alveolar implosives /b/ and /d/, and alveolar and palato-alveolar ejective consonants /t’/ and /c’/. Hamar has both stress and tone, marked respectively by the diacritic *́* and the circumflex accent *ˆ* on vowels.²

The majority of Hamar verbs are bisyllabic, but monosyllabic and trisyllabic verb stems

¹ The abbreviations used in this paper are the following: Ø, uninflected noun; ABS, abstract deverbal derivation; AD, adessive case; ALL, allative case; CNV1, general converb; COND, veridical conditional; COP, copula; DISJ, disjunctive; F, feminine; GEN, genitive; IN, inessive case; INS, instrumental, perlocative, temporal case; INT, interrogative suffix; IRR, irrealis marker; LOC, locative case; M, masculine; NEG, negative; OBL, oblique (feminine) case; PASS, passive; PF, perfect; PFV, perfective; PRES, present; REFL, reflexive; S, subject; SE, same event converb; 3, third person. Examples from other sources follow the Leipzig Glossing Rules.

² The following orthographic conventions are adopted: /j/ for [dʒ]; /c/ for [tʃ]; /c’/ for [tʃ’]; /y/ for [j]; /h/ for [ɦ]; /sh/ for [ʃ]. Doubling the vowel or the consonant symbol indicates vowel length and consonant gemination. Hamar has a “pitch-accent” system that displays properties of both stress and tone systems, see Petrollino 2018 for further details.

also occur. The basic form of the Hamar verb is the root plus *á*: this stem is used to form most verbal predicates and it is used as the citation form of the verb by Hamar speakers. The basic verb stem ending in *á* is used in the verbal predicates in (2a) and (2e); some verbal suffixes, however, attach directly to the root: for example, in (2b), (2c) and (2d) the verb root *qan-* is followed by the perfect suffix *-idí*.

(2a) *ínta qáski qaná~qaná*

1SG dog:Ø hit~hit

‘I (normally) hit dogs (0)’

(2b) *kidí qáski-dán qan-idí*

3 dog:Ø -ACC hit-PF

‘He hit a dog (0)’³

(2c) *qaské-dán ínta qan-idí*

dog:M-ACC 1SG hit-PF

‘I hit the dog (M)’

(2d) *[...] kánki-n-dán al-idí, [...] qaskê*

car-F.OBL-ACC chase-PF dog:M

‘he chased the car (F)...the dog (M)’

(2e) *naa kodí naasâ ko=qaná-de*

yesterday 3F child:M 3F=hit-PFV

‘yesterday she hit the boy (M)’

Hamar has a peculiar nominal classification system in which nouns are not assigned to one gender only, but can be freely assigned to masculine or feminine gender. The semantic and pragmatic interpretation depends on the syntactic context in which inflected and uninflected nouns occur. The gender system of Hamar is explained in the next section (§ 1.4).

Depending on tense and aspect, subject cross-reference on the verbal predicate can be marked by means of pronominal subject clitics: in this case, masculine subjects trigger 3rd person masculine agreement and feminine subjects prompt 3rd person feminine agreement. In (2a) the basic verb stem *qaná* is reduplicated and does not cross-reference the subject. This uninflected verbal predicate is referred to as “general declarative” and it is used to express common truths and general knowledge. The semantics of Hamar sentences with general declaratives

³ A 0 in the translation indicates that the noun is not inflected for gender. This can be seen also in the glosses, where Ø is used.

corresponds to nomic or law-like statements conveyed by generics (Dahl 1975, Carlson 1982). When perfective or imperfective aspect is marked on the verb, pronominal subject marking is obligatory, see (2e). This means that verbal predicates marked by perfective or imperfective aspect such as *ko=qaná-de* in (2e) must obligatorily cross-reference a gender-inflected subject, whereas in general declarative sentences the subject is unmarked.

Hamar has an SOV word order (2a) and an accusative alignment system with a marked accusative case (2b). At noun-phrase level the head-final order is inverted: except for the genitival modifier, which precedes its head, modifiers generally follow their heads.

1.4 Gender marking

Gender and number in Hamar are defined on the basis of the syntactic agreement on verbs and nominal modifiers. Nouns inflected for masculine or feminine gender show the same agreement as biological male or female beings. The examples in (3) show feminine (3a) and masculine (3b) gender agreement on the possessive pronoun and on the subject clitic on the verb. The examples in (4) show the same agreement pattern for non-animate nouns:

- (3a) *naanó wonnó niʔá=ko niʔ-é*
child:F.S 1PL:F come=3F come-PRES
'our daughter will come'

- (3b) *naasâ intê baqá-te ki=daqábe*
child:M 1SG:M fall=SE 3M=IRR
'my son almost fell'

- (4a) *ánno innó likka oidá=ko oid-é*
arm:F.S 1SG:F a.little.bit be.hot=3F be.hot-PRES
'my arm/hand is a little bit warm'

- (4b) *an-tâ intê burqad-idí-ne*
arm-M 1SG:M hurt-PF-COP
'this arm/hand hurts'

The nominal system of Hamar does not provide an inherent classification for nouns: regardless of animacy reference, a noun can be assigned to masculine or feminine gender. Hamar nouns can thus occur in an uninflected form (indicated with $\emptyset$ in the gloss and with 0 in the translation), or they can be inflected for masculine (M) or feminine (F) gender. Feminine gender further distinguishes between subject and oblique case:

5a) Uninflected form:	<i>naasí</i>	‘child:Ø’	<i>áan</i>	‘arm:Ø’
5b) Masculine:	<i>naasâ</i>	‘child:M’	<i>antâ</i>	‘arm:M’
5c) Feminine:	<i>naanó</i>	‘child:F.S’	<i>ánno</i>	‘arm:F.S’
	<i>naan</i>	‘child:F.OBL’	<i>ánin</i>	‘arm:F.OBL’ ⁴

Gender assignment for nouns is regulated by the expression of semantic values (such as evaluative meanings) and most importantly by the syntactic and pragmatic contexts in which nouns occur (see Petrollino 2016 for further details). Uninflected and unmarked nouns are non-definite and non-specific (2a, b), whereas nouns inflected for feminine gender are definite. This can be seen in example (2d) above (*kánki-n-dan*, ‘the car’). Masculine gender is used for specific and definite constituents, and it plays a crucial role in the pragmatic organization of discourse: fronted objects (*qaské-dan* in 2c above) or post-verbal constituents occurring as afterthoughts (*qaské* in 2d) are marked by masculine gender to signal a change in SOV order.

This system is particularly relevant for existential predication: the expression of definiteness through gender markers reflects the perspectivization of the figure-ground relationship and can determine the interpretation of a sentence as expressing a locative or existential meaning (§2.3, §3).

2. The expression of existence and location in Hamar

In this section the types of existential constructions attested in Hamar are presented and discussed. A first distinction is made between existential and copular clauses (§2.1); this distinction disappears in subordinate clauses where the existential predicator is used for both copular and existential meanings. Section 2.2 provides a close analysis of the meaning and function of the existential predicator *dáa*; the various constructions in which *dáa* occurs are analyzed in 2.3; these include predicative possession.

2.1 Nominal predication

Existential predication is formally distinct from nominal predication, a feature that Hamar shares with many other languages of the world (Stassen 1997, 2013a). Copular clauses are formed by the invariable copula *-ne*⁵ which is used to encode equation and attribution (6a). The semantic domain of location and existence on the other hand is expressed with a predicator deriving from the verb ‘to live, exist’ (6b, c):

⁴ There are several morpho-phonological rules regulating the derivation of feminine subject forms and feminine oblique forms. When the grammatical morpheme is suffixed directly to the uninflected form, as in *kánki-n-dan*, the feminine oblique case *-n* is separated by a hyphen; in the other cases, the colon (:) is used.

⁵ The copula *-ne* is also used as a focus marker and it can be optionally suffixed to pragmatically marked sentences and constituents, see examples (18b) and (20c) below. It can be found, for example, after the existential predicator *dáa* or after the perfect form of a verb (*-idí-ne*), indicating that the scope of the focus is on the entire clause.

- (6a) *kidí éedi qám̃bi-ne*
3 person:Ø poor-COP
'He is a poor person'
- (6b) *kidí paránji-n pée-n-te ki=dáa-de*
3 European-F.OBL land-F.OBL-LOC 3M=exist=PFV
'He is in Europe' (lit. He is in the land of the Europeans)
- (6c) *barjó dáa*
fate:Ø exist
'Fate/nature/fortune exists'

In Stassen's terminology (1997, 2013a) Hamar is a split-language since it uses different strategies to encode nominal and existential predicates. The split is reflected also in negative copulative (7a) and existential sentences (7b):

- (7a) *kodí hámar tē*
3F Hamar:Ø NEG.COP
'She is not Hamar'
- (7b) *kidí hámar-in pée-n-te qolē*
3 Hamar-F.OBL land-F.OBL-LOC NEG.exist
'He is not in Hamar land'

In subordinate clauses, however, Hamar employs the same strategy for both nominal and existential predications. The existential predicator *dáa* is used in subordinate clauses in place of the copula. In the subordinate clauses below the existential predicator *dáa* is marked by the converb suffix *ise* and it is used to convey both attribution (8c, d) and location (8d):

- (8c) *kidí kēda bórle dá-ise [...]*
3 then young:Ø exist-CNV1
'when he was young...'

- (8d) *éedi wáni éna~éna dong dá-ise, adamá-n*
 person:Ø some:Ø past~past five exist-CNV1 hunt-F.OBL
mágo.park-in yi?á-da
 Mago.Park-F.OBL go-IPFV
 ‘A long time ago some guys, being five, were going to hunt in Mago Park’

- (8e) *báasha, éna, ooní-n yinnó-n-te dá-ise [...]*
 chicken:Ø past house-F.OBL REFL:F-F.OBL-LOC exist-CNV1
 ‘in the past, while Chicken was in his own house [...]

2.2 Form, function and meaning of *dáa*

The word *dáa* in Hamar functions as both noun and verb. *dáa* as a noun means ‘life’⁶, and when it functions as a verb it means ‘to live, to be alive, to exist, to be present’ (9a).

In (9a) the word *dáa* meaning ‘life’ is marked by the feminine oblique case *n* because it functions as the object of the verb *daidí*. In the previous sentence, *kínka daínta jammaridí* ‘they started a life together’, the word for ‘life’ is expressed by the deverbal noun *daínta*: this is obtained from the verb *dáa* and the suffix *ínta* which derives abstract nouns from verbs:

- (9a) *wáaki kínka gishá-ise, mashá-ise isá-ise, kínka*
 cattle:Ø together herd-CNV1 slaughter-CNV1 eat-CNV1 together

da-ínta jammar-idí, kínka dáa-n da-idí
 live-ABS begin-PF together life-F.OBL live-PF
 ‘After herding, slaughtering and eating the cattle together, (they) started a life together and lived (the life, F) together’

⁶ *dáa* has also another – apparently unrelated – meaning: clay pot.

- (9b) *éébe-n-dar* *paxá-ise,* *agá-rra,* *gibáre* *ko=ti-é*
cowhide-F.OBL-ALL grind-CNV1 DEM2:M-ABL wind:Ø 3F=take-PRES
- líkka* *afá~afadá,* *afá-6* *hayá-ise,* *ko=qaj-ína*
little spread~spread.PASS spread-NARR do-CNV1 3F=be.cold-COND
- kéda,* *máati-no* *dáa*
then yeast-F.S exist
- ‘after (the dough) is pounded to powder on the cowhide, it is spread a bit so that it takes some air. After spreading it, when it has cooled down, you have obtained the yeast’ (lit. yeast has come into existence).

Example (9b) shows the use of *dáa* with the meaning of ‘to come into existence, appear, arise’ after a state of “non-existence”. The example is extracted from a procedural text explaining the preparation of the traditional ale-gruel alcoholic drink. The passage refers to the “change of state” of the sorghum dough, which after being cooked and pounded to powder, becomes “yeast”. The change of state into yeast or the “come into existence” of yeast is expressed by the verb *dáa*.

The verb *dáa* functions as existential predicator in constructions expressing the semantic domain of location, existence, and possession. See examples (6b) and (6c) repeated here as (10a) and (10b). Possession is discussed more in detail in the next paragraph.

- (10a) *kidí* *paráñi-n* *pée-n-te* *ki=dáa-de*
3 European-F.OBL land-F.OBL-LOC 3=exist=PFV
‘He is in Europe’
- (10b) *barjó* *dáa*
fate:Ø exist
‘Fate/nature/fortune exists’

Example (10a) is an existential sentence predicating plain location. The predicator *ki=dáa-de* suggests moreover that the perfective marker *de* (and also the imperfective marker *-da* in 8d above) are probably derived from the existential predicator *dáa*.

Example (10b) is an existential sentence predicating existence. It is often used as a response to facts or events that fall outside human knowledge or intervention, for example when people talk about lack of rain. Often, I have heard this sentence in the jussive/hortative mood with a meaning similar to the English expression ‘leave it to nature’ or ‘let nature take its

course', for example when people discuss the chances of survival of a premature lamb. The translation given here does not do justice to the actual referential range of the term *barjó* (see Strecker 1988 for a detailed exploration of its meanings); however, since *barjó* does not necessarily refer to a living being, but rather to a state of well-being⁷, this example can be interpreted as meaning "existence" in the philosophical sense of the term (cf. Creissels's discussion on the label "existence" and its meanings, 2013: 6-8).

In some contexts, the two meanings of *dáa* as existential predicator or as verb with the full lexical meaning of 'to live, to be alive' overlap. This depends on the animate vs. non-animate reference of the figure, see (12) below and see also example (18a) further on. Example (11) is interpreted here as an existential sentence predicating the presence or availability of water.

- (11a) *noqó dá-u?*
water:Ø exist-INT
'is there water?' or 'is water available?'
- (11b) *ĩĩ dáa*
yes exist
'yes, there is (water)' (response to 6a)

With animate figures, *dáa* can function as both an existential predicator expressing the location or the presence of the figure, or as a verb with the full lexical meaning of 'living, being alive'. This suggests that the difference between habitual or episodic presence mentioned by other authors (see Creissels 2013) is not important for Hamar existential predication. In (12) and (14) below both interpretations are possible:

- (12a) *Múga dá-u?*
Muga exist/live-INT
'Is Muga there/ present/ around? or Is Muga alive / Does Muga "live"?'
- (12b) *ĩĩ dáa*
yes, exist/live
'yes, he is there/ yes, he is alive' (response to 12a)

The question in (12a) is a type of enquiry often heard when people come back to Hamar after being away for long time; this is the way people ask about the well-being of the elders of the village (Is Muga alive?). The same question, however, can be asked by somebody approach-

⁷ According to Strecker (1988), animals may have *barjó*, and plants, things, places, body parts may be *barjó*.

ing a homestead, in order to know about the actual presence of a person in a location (Is Muga around?, is Muga there?). If speakers want to be more specific, another expression is available to unambiguously ask about somebody's "existence" (in terms of life or death):

- (13a) *Muga sadá-xa dá-u?*
Muga chest-INS live-INT
'Is Muga still alive?' (lit. Does Muga live with his chest?) [tr. equiv]

- (13b) *geshô káa sadá-xa dá-u-mo?*
old.person:M DEM1:M chest-INS live-INT-DISJ
'Is this old man still alive, or what?'

The expression in (13a) and (13b) contains an instrumental constituent, *sadá-xa*, literally 'with the chest'⁸. The question in (13a) was elicited by asking for a translation equivalent to disambiguate the meaning of (12a), whereas the question in (13b) was uttered by a Hamar person when he was shown a picture of a man taken several years before.

The question below has been recorded in two different contexts: it was asked by somebody on the phone who had been waiting for his friend; it was also asked in another situation to a student who was temporarily living somewhere else to attend school:

- (14a) *yaa hamó-te ha=dáa?*
2SG where-LOC 2SG=exist.INT
'Where are you?' or 'Where are you living (at the moment)?'

- (14b) *túrmi-r i=dáa-de*
Turmi-IN 1SG=exist-PFV
'I am in Turmi' or 'I live in Turmi'

Both interpretations refer to atemporal presence or location in a place. This meaning is conveyed by the general declarative stance. If speakers want to be more specific and they want to disambiguate the meaning conveyed by the sentence in (14a), they use the following expression:

⁸ The instrumental case in Hamar has also a perlocative meaning, so the interpretation 'through the chest' is also possible.

- (15) *déllo* *há=sa* *hamó-te* *ko=dáa?*
homestead:F.S 2SG=GEN where-LOC 3F=exist.INT
Where is your homestead (F)? = Where do you (normally) live?

These examples suggest that Hamar existential sentences are not sensitive to the semantic distinction between accidental or habitual location of a figure on a ground.

As it was mentioned at the beginning of this section, *dáa* as a verb is irregular. In §1.3 it was shown that the basic stems of Hamar verbs end in *á*: this applies to any verb, regardless of the syllabic structure of the verb root. *dáa* is the only irregular verb not ending in *-á*. Other monosyllabic verbs, such as *diá* ‘to die’, *t’aá* ‘to vomit/to milk’, *saá* ‘to sweep’, and *c’aá* ‘to clap’ all end in *á* and follow the derivational pattern of regular bisyllabic verbs. Hamar verbs, moreover, can always be distinguished from their nominal counterparts because nouns end in different vowels, as in *piá* ‘to defecate’ vs. *píi* ‘faeces’, or *aafá* ‘to see’ vs. *áafi* ‘eye’.

The existential sentences in (11a, b), (12a, b), (13a, b) are instantiations of the general declarative form of the verb *dáa*. Normally, the general declarative form is expressed by a reduplicated verb stem ending in *á*, as illustrated in (2a) above and (16b) below. However, reduplicating the existential stem **dáa~dáa* is deemed ungrammatical by Hamar speakers.⁹ In the examples below the interrogative (16a) and the affirmative counterpart (16b) of the general declarative are shown vis-à-vis the general declarative of an interrogative (17a) and affirmative (17b) existential:

- (16a) *kodí* *aapó-n* *desá-u?*
3F mouth-F.OBL know-INT
‘Does she know the language?’
- (16b) *ĩĩ,* *kodí* *desá~desá*
yes 3F know~know
‘yes, she knows (it)’ (response to 16a)

The interrogative suffix *u* attached to the basic verb stem ending in *á* is used to form the interrogative counterpart of the general declarative stance:

- (17a) *búno* *dá-u?*
coffee:Ø exist-INT
‘Is there coffee?’ or ‘is coffee available?’

⁹ This is probably due to the phonological resemblance with *dáa-da*, which is the imperfective form of the existential predicator.

(17b) *búno* *dáa*

coffee:Ø exist

‘There is coffee’ or ‘coffee is available’ (response to 17a)

This section has discussed the form and the function of *dáa*. The Hamar existential verb *dáa* is irregular, in line with cross-linguistic tendencies observed for existential verbs (Creissels 2013: 17). The fact that *dáa* functions as an existential predicator and as a full lexical verb with animate figures suggests that the semantic difference between habitual or temporary presence and location is not important in Hamar. In some languages this distinction is formally expressed by different constructions and/or different lexical verbs (cf. the examples of German in Creissels 2013, after Czinglar 2002).

In the next section the characteristics and the meanings of the various types of Hamar existential sentences will be illustrated and discussed.

2.3 Types of existential predication

The three existential constructions predicating possession, location and existence can be seen in the example below, extracted from the folk definition of *ási kólosho* ‘cavity, dental caries’. The speaker used the existential constructions predicating existence (18c), location (18a) and possession (18b) in the same passage:

(18a) *ási* *kólosho* : *qayô* *ási* *íi-n-te* *ki=dáa-de*,

tooth:Ø cavity:Ø worm:M tooth:Ø stomach-F.OBL-LOC 3=exist-PFV

‘Tooth cavity: the worm (M) is (or lives) inside the tooth,

(18b) *éedi* *wúl-sa* *dáa-ne!*

person:Ø all-GEN exist-COP

everybody has it! (lit. it exists of all people)

(18c) *ási* *koqád-idi-ánna*, *hámar-in* *pée-n-te* *deeshá*

tooth:Ø burn.PASS-PF-OPT hamar-F.OBL land-F.OBL-LOC medicine:Ø

dáa

exist

if the tooth hurts, a medicine (0) is available in Hamar land (lit. there is a medicine in Hamar land)’

Hamar predicative possession in (18b) and (19) has the form of an existential sentence in which the possessed noun phrase functions as the subject of the existential verb *dáa*, and the possessor noun phrase is marked by the genitive case *sa*. The copula *ne* in (18b) above is optional as already mentioned in §2.1.

- (19) *i=sa waakí dáa*
1SG=GEN cattle:Ø exist
'I have cattle (0) or I have a cow (lit. cattle exist of me)'

According to WALS (Dryer and Haspelmath; Stassen 2013b), predicative possession expressed by means of an existential sentence with a genitive-marked possessor is rare cross-linguistically. This strategy is also extremely rare in Africa (Creissels 2018b), where it is attested only in the South Omotic languages Hamar, Dime (Mulugeta 2008: 149), Aari (Hayward 1990: 457) and Kara (own field notes); in the Kx'a language !Xun (Creissels 2018b) and, according to Stassen (2013b, after Reinisch 1893), in the Cushitic language Beja.¹⁰

The category existence (18c), (20a, b, c) is expressed in a predicative construction consisting of an uninflected noun followed by the predicator *dáa*. As already mentioned in §2.2 above, existential sentences of this type display the general declarative form of *dáa*, which translates law-like and nomic statements (Dahl 1975, Carlson 1982). This is also reflected in the use of generic bare plurals in the English translation (Carlson 1977) to render the uninflected form of the noun. The general declarative is also used in predicative possession.

- (20a) *barjó dáa*
fate:Ø exist
'Fate/nature/fortune (0) exists'

- (20b) *faránji-n péé-n-te hái fac' dá-u?*
European-F.OBL land-F.OBL-LOC sun:Ø many exist-INT
'Are there many suns (0) in Europe?'

- (20c) *éedi áapi kayá fac' dáa-ne*
person:Ø eye:Ø missing:Ø many exist-COP
'There are many blind people (0)' [tr. equiv]

¹⁰ The grammatical descriptions of Beja authored by Vanhove (2017) and Wedekind and Abuzeinab Musa (2007), however, do not confirm this information.

In existential sentences predicating the existence or presence of a figure on a ground, the ground is not obligatory and can be omitted, cf. (20a) and (20c). In all the examples in (20) the copula can be optionally used depending on the pragmatic context. Constructions like those in (20) but with a different word order are also attested. In (21b) for example, the figure and the ground are inverted, cf. (21a) which follows a prototypical figure-ground-predicate order. These examples will be discussed in detail in the next sections:

- (21a) *éedi ooni-n-te dáa*
person:Ø house-F.OBL-LOC exist
‘There is somebody (0) in the house (F)’

- (21b) *ɔɔné-te éedi dáa-ne*
house:M-LOC person:Ø exist-COP
‘There is somebody (0) in the house (M)’

Plain location is expressed in predicative constructions like that in (18a). As previously mentioned, the predicator in constructions expressing location must be inflected for perfective aspect by means of the verbal suffix *de*, and it must show subject agreement by means of pronominal subject clitics (18a), (22a, b, c)¹¹. One of the consequences is that the figure in these constructions is always inflected for gender, and it is thus interpreted as definite (see §1.4).

- (22a) *kɔsɔ noqó-n-te ki=dáa-de*
ball:M water-F.OBL-LOC 3=exist-PFV
‘The ball (M) is in the water’

- (22b) *anzáno gabá-n-te ko=dáa-de*
girl:F.S market-F.OBL-LOC 3F=exist-PFV
‘The girl (F) is in the market’

- (22c) *haqattâ yáan-sa mizaqá-bar ki=dáa-de*
tree:M sheep:F.OBL-GEN right-AD 3=exist-PFV
‘The tree (M) is at the right of the female sheep (F)’

¹¹ Also progressive aspect in Hamar is expressed with a complex predicate resembling locative constructions. The locative case *-te* is suffixed to the verb stem and the predicator marked by the perfective aspect is used: *wuc’á-te ki=dáa-de* ‘he is drinking’.

In existential constructions expressing plain location, the ground is obligatory and it must occur between the figure and the predicate. Alternative word order configurations are also not allowed, so sentences like the ones in (23) are ungrammatical:

(23a) **kɔsɔ ki=dáa-de*
ball:M 3=exist-PFV

(23b) **noqó-n-te kɔsɔ ki=dáa-de*
water-F.OBL-LOC ball:M 3=exist-PFV

The examples discussed so far show that two main existential constructions are available in Hamar to express the spatial relationship between a figure and a ground, see (24a), (24b) below. (24b) can also be expressed as (24c), as illustrated by example (21b) above.

(24a) *kɔsɔ noqó-n-te ki=dáa-de*
ball:M water-F.OBL-LOC 3=exist-PFV
'The ball (M) is in the water'

(24b) *kóso noqó-n-te dáa*
ball:Ø water-F.OBL-LOC exist
'There is a ball (0) in the water'

(24c) *nɔqó-te kóso dáa-ne*
water:M-LOC ball:Ø exist-COP
'There is a ball (0) in the water (M)'

The discussion will now continue on the semantic categories existence and location. In the next section, the Hamar data will be compared to the typological studies of existential predication proposed by Creissels (2013) and Koch (2012), and the syntactic differences between the various constructions attested and their meanings will be further highlighted.

3. Hamar existential predication in a typological perspective

The semantic domain of location-existence-possession has been explored from different perspectives. One way of studying these categories is to look at the actual verbal lexical item that is used in order to encode existence, location or possession (Lyons 1967, Clark 1978, Creissels

2013, *inter alia*). A language like English, for instance, uses the predicator *be* for existence (there is a book) and location (the book is on the table), but the predicator *have* for possession (the boy has a book). From a lexical point of view, English treats existence and location in the same way, but this pattern varies across languages (see Koch 2012 for a detailed overview). Brazilian Portuguese for instance uses the verb *ter* for possession and existence (25a, b), whereas location is expressed by means of a separate lexical verb: *estar* (25c).

(25) Brazilian Portuguese (Koch 2012: 536; 542, after Wilson 1983: 9)

(25a) *o rapaz tem um livr-o*
DEF.M boy have.PRS.3SG INDEF.M book-M
'The boy has a book'

(25b) *tem um livr-o sobre a mes-a*
have.PRS.3SG INDEF.M book-M upon DEF.F table-F
'There is a book on the table'

(25c) *o livr-o est-á sobre a mes-a*
DEF.M book-M be-PRS.3SG upon DEF.F table-F
'The book is on the table'

The structural differences attested in existential constructions have been studied also from the syntactic point of view, and scholars have tried to classify languages depending on the difference in the syntactic organization of existential constructions and depending on the various pragmatic statuses assigned to the figure: for example, in the English and Brazilian Portuguese sentences, the figure (the book) has different definiteness properties, being indefinite in the existential construction and definite in the plain locative sentence.

The Hamar data will now be compared to Creissels's (2013) lexical typology and Koch's (2012) constructional typology of existential predication. Both authors build their typological studies on the assumption that the superficial characteristics of existential constructions are secondary effects triggered by the different conceptualization of the semantic space existence-location-possession. According to Koch (2012), the difference among the constructions is a reflex of the information structural status of the figure and the ground. Creissels (2013: 8) makes explicit reference to the notion of *Perspectival Structure*, as used by Partee and Borschev (2007) for Russian. As it will be shown in the next section, the difference between plain locational and existential predication boils down to a different perspectivization, or conceptualization of a situation involving the location or the existence of a figure. Partee and Borschev (2007) suggest that the way in which this situation is conceptualized and cognitively organized determines the way in which language is used to talk about it. They propose an analysis in terms of *Perspectival Structure* according to which plain locational sentences (thematic location in Koch's typology, or example 24a) correspond to a the unmarked perspectivization that chooses the figure

as the perspectival center, whereas in existential sentences (rhematic location in Koch's terms, or 24b and c) the ground is the perspectival center: "An analogy can be made with a video camera and 'what the camera is tracking'. A Predicational sentence (thematic location) keeps the camera fixed on the protagonist as she moves around (THING as Center); an Existential sentence is analogous to the way a security camera is fixed on a scene and records whatever is in that location (LOC as Center)" (Partee and Borschev 2007: 156).

Languages encode these different conceptualizations by means of different constructions. Hamar uses the same predicator *dáa* in different constructions. A closer look at apparently similar constructions reveals the different conceptualization of the event.

3.1 'Inverse locational predication'

In his typology of existential predication, Creissels (2013) looks at languages which have grammaticalized the existential perspectivization of the spatial relationship between a figure and a ground. In other words, the only sentences that qualify as existential predication in his study are those that constitute an alternative way of encoding the prototypical figure-ground relationships expressed by the sentence "the book is on the table". As mentioned in §1.1, sentences like "There are many lions in Africa" are not included in his typological study because they do not qualify as "inverse locational predication", i.e. they do not express episodic presence of a movable figure in a location, but rather habitual presence (ibid.: 5; 14).

The majority of the languages in Creissels's sample (more than half) have not grammaticalized an existential construction in which the ground is the perspectival center; Hamar, as illustrated in §2.3, belongs to this group because it uses the same predicator *dáa* in both constructions. In languages devoid of a separate existential construction, the selection of the ground as the perspectival center is encoded by definiteness marking on the figure as well as information structure marking. When the figure is selected as perspectival center (i.e. in plain locative sentences) it is usually topical and definite; it is non-topical and indefinite when the ground is the perspectival center (i.e. in existential sentences) (Creissels 2013: 19). Languages with less rigid word order signal the de-topicalization of the figure with, for example, word order alterations, and Creissels notes correlations with OV and VO languages. In OV languages in which plain locational sentences follow a rigid figure-ground-predicator order, the different perspectivization is expressed by de-topicalizing the figure and by moving it before the predicator (ground-figure-predicator). This correlation has been attested in Ts'amakko, a neighboring Afro-Asiatic language spoken to the west of Hamar (Creissels 2013: 21) and it can be observed in the Basque example below:

(26) Basque (Creissels 2013, personal documentation)

- (26a) *Parke-a ibai-ondo-an dago*
park-SG river-side-SG.LOC be.PRS.3SG
'The park is next to the river'

- (26b) *ibai-ondo-an* *parke* *eder* *bat* *dago*
river-side-SG.LOC park lovely one be.PRS.3SG
'There is a lovely park next to the river'

Hamar partially follows this pattern, as can be seen in (27) below. The standard word order in the locative sentence in (27a) is altered to signal the de-topicalization of the figure, which is moved before the predicator and is non-definite (*éedi*, 'person'). The topicalization of the ground in (27b) is moreover indicated by the assignment of masculine gender. The two sentences also differ in aspect marking, as existential sentences like the one in (27b) always display the general declarative, whereas the existential predicator in locative sentences like (27a) is always marked by the perfective aspect:

- (27a) *kɔsɔ* *noqó-n-te* *ki=dáa-de*
ball:M water-F.OBL-LOC 3=exist-PFV
'The ball (M) is in the water'

- (27b) *ɔɔné-te* *éedi* *dáa-ne*
house:M-LOC person:Ø exist-COP
'There is somebody (0) in the house (M)'

It is not clear whether Hamar would be considered a language of the same group as Basque in Creissels's typology, because the Hamar constructions in (27) are morphologically distinct from each other, whereas languages like Basque or Ts'amakko differ only in word order and definiteness restrictions on the figure. Hamar has the option of further manipulating the information structure by means of gender marking on the ground. "Inverse locational predication" thus can be also expressed in a sentence involving a figure-ground-predicator order but with different definiteness restrictions, cf. (27b) and (28) below:

- (28a) *kóso* *noqó-n-te* *dáa*
ball:Ø water-F.OBL-LOC exist
'There is a ball (0) in the water'

- (28b) *álfa* *pée-n-te* *dáa*
knife:Ø ground-F.OBL-LOC exist
'There is a knife (0) on the ground'

The Hamar data show that Hamar has not grammaticalized (in Creissels's terms) an existential predicative construction completely separated from plain locational predication. The lexical verb used in both types of constructions is the predicator *dáa*, but the different perspectivization is expressed by a combination of word order alteration aspectual marking and information structure marking. This is in line with the typological tendencies observed in languages devoid of a separate existential construction, however information packaging in Hamar is a consequence of gender marking on the constituents and aspectual marking of the predicator.

The Hamar data supports Creissels's important finding for the areal typology of Sub-Saharan Africa (Creissels 2013, 2018a). Languages of the Sudanic belt are different from the rest of African languages in that most of them have not grammaticalized a dedicated existential construction and cannot indicate the different perspectivization by means of definiteness or focus marking, or by means of word order alterations. This means that existential sentences can be interpreted as both existential and locational sentences:

- (29) Mandinka (Creissels 2018a, personal documentation)
wùlôo bé yíróo kótò
dog.D is tree.D under
'the dog is under the tree' or 'there is a dog under the tree'

Languages like Mandinka are, according to Creissels, extremely rare or not attested at all in the world (ibid. 2018a); outside of the Sudanic belt this strategy has been attested only in Beja (Cushitic) and in two Kx'a languages (Creissels 2019: 10). In this respect, Hamar confirms the contrast between languages of the North Eastern part of Sub-Saharan Africa and those of the Sudanic belt.

3.2 The thematic-rhematic constructional split

The constructional approach proposed by Koch (2012) is useful for a typology of existence and location since it can make constructions (including valency properties of the existential construction and informational values assigned to the figure) and idiomatic expressions comparable across languages (Koch 2012: 542; 550). Koch (ibid.) redefines the semantic space of existence and location as follows. The semantic category of existence is subdivided into generic existence (there are many unhappy people) and bounded existence (there are many lions in Africa). Location is subdivided into thematic location (the book is on the table) and rhematic location (there is a book on the table). The semantic difference between bounded existence and rhematic location is that rhematic location does not assert the existence of a book, but the location of a book (Koch 2012: 539). In a sentence predicating bounded existence the ground is optional, whereas in locative sentences the ground cannot be omitted. Even though across languages the difference between rhematic location and bounded existence is not always formally visible (as in English), there are languages, like Brazilian Portuguese (15) or Somali (30), which express this semantic distinction by means of different lexical verbs and constructions. Brazilian Portuguese for example uses two completely distinct constructions and lexical verbs,

with different valency properties for thematic location (*estar*) and for rhematic location (*ter*) (Koch 2012: 542). The predicator *jiri* in Somali is used for generic and bounded existence (30a, b), whereas the predicator *aalli* is used for thematic and rhematic location (30c, d). Compare (30b) with (30c) below:

(30) Somali (Koch 2012: 540; 542)

Generic existence:

- (30a) *dad badan oo madluumiin-a' baa jira'*
people many REL unhappy.PL-be FOC exist.PRS.HAB
'There are many unhappy people'

Bounded existence:

- (30b) *libaax-yo badan baa jira' afrika*
lion-PL many FOC exist.PRS.HAB Africa
'There are many lions in Africa'

Rhematic location:

- (30c) *miis-ka buug baa dul yaalla*
table-DEF book FOC upon be.3SG.M.PRES
'There is a book on the table'

Thematic location:

- (30d) *buug-gu miis-kuu dul yaallaa*
book-DEF.NOM table-DEF.FOC.3SG upon be.3SG.M.PRES
'The book is on the table'

The valency of the Somali constructions does not change; however, rhematic and thematic location are lexically identical and opposed to the domain of existence. Languages like Somali belong to the “generic location type” (ibid.: 565-570), drawing an opposition between location to existence and expressing the different conceptualization of the event by means of word order and focus assignment: in Somali rhematic location (30c), the thematic ground precedes the rhematic figure, which is focused and indefinite; in thematic location (30d), the thematic figure is definite and it precedes the ground which is in the rhematic position just before the final verb. The constructions attested in Brazilian Portuguese, on the other hand, show not only a different lexical predicator, but also constructions with different valency. This is referred to as thematic-rhematic constructional split in Koch’s typology. According to this grid, languages can be classified depending on whether they choose informational salience, propositional salience, or neither. Languages that express informational salience like Brazilian Portuguese oppose thematic location to the rhematic rest (rhematic location and existence). Languages like Somali belong to the generic location type, which means that they oppose generic location and existence.

A further group, to which Hamar seems to belong, consists of languages in which the conceptual solution for the domain of (both) existence and location disregards the salience and the propositional criteria. While Somali uses different lexical verbs for location and existence, languages like Hamar use inverted informational hierarchy, leaving the valency of the constructions unchanged. In Koch's sample, other Afro-Asiatic languages such as Beja belong to this group, Somali being an exception. Following Koch's typology, four different constructions can be identified in Hamar:

Generic existence:

(31a) *barjó dáa*

fate:Ø exist

'Fate/nature/fortune (0) exists'

(31b) *éedi áapi kayá fac' dáa-ne*

person:Ø eye:Ø missing:Ø many exist-COP

'There are many blind people (0)' [tr. equiv]

Bounded existence:

(32a) *hámar-in pée-n-te éedi pandât kála~kála dáa*

hamar-F.OBL land-F.OBL-LOC person:Ø gap.teeth:Ø one~one exist

'There are some people (0) with teeth gap in Hamar'

(32b) *hámar-in pée-n-te deeshá dáa*

hamar-F.OBL land-F.OBL-LOC medicine:Ø exist

'a medicine (0) is available in Hamar land (lit. there is a medicine in Hamar land)'

Rhematic location:

(33a) *kóso noqó-n-te dáa*

ball:Ø water-F.OBL-LOC exist

'There is a ball (0) in the water'

(33b) *ɔɔné-te éedi dáa-ne*

house:M-LOC person:Ø exist-COP

'There is somebody (0) in the house'

Thematic location:

- (34) *kəsə* *noqó-n-te* *ki=dáa-de*
 ball:M water-F.OBL-LOC 3=exist-PFV
 ‘The ball (M) is in the water’

In Hamar thematic location (34), the topicality of the figure is signaled by masculine gender on the figure *kəsə* “ball”. This triggers 3rd person agreement on the predicator *ki=dáa-de* which is additionally marked by perfective aspect. The ground *noqó-n-te* ‘in the water’ is in the rhematic position just before the verb, Hamar having a SOV constituent order. Existential sentences predicating thematic location have a fixed word order and an obligatory ground, as already shown in (23a) and (23b).

Rhematic location (that is, when the ground is selected as the perspectival center) can be encoded in two constructions. The first option is to de-topicalize the figure by removing gender (and definiteness) marking so that *kóso* “ball” or *éedi* “person” in (33) are interpreted as rhematic. The second strategy consists of altering constituent order: the topicalization of the ground is signaled by fronting the locative constituent *ɔ́nɛ-te* and by using masculine gender (33b). The difference between the two constructions is that (33b) is pragmatically marked, as illustrated by the copula *ne*.

In generic and bounded existence, the figure is always rhematic, thus the nouns *barjó*, *éedi* and *deeshá* are not marked for gender in (31) and (32); most importantly, the figure always occurs in the rhematic position before the predicator. The ground in existential sentences predicating bounded existence is always marked by feminine gender, and it always precedes the figure.

The semantic difference between bounded existence expressed in (32) and rhematic location in (33) is that in bounded existence the validity of the statement of existence of *barjó*, *éedi* or *deeshá* is optionally specified within a ground, whereas in rhematic location the existence of the new referent *kóso* or *éedi* is not asserted, but taken for granted (Koch 2012: 539).

4. Conclusions

Hamar existential predication is characterized by a shared predicator; however, there is no complete syntactic and pragmatic identity between constructions encoding existence, thematic location and rhematic location. In the absence of a dedicated grammaticalized existential construction, a closer look suggests that the different perspectivization of the figure-ground relationship is conveyed by means of specific morpho-syntactic strategies; these eventually affect the information structure status of the figure and the ground. The analysis of the Hamar data raises the question of whether Hamar can be considered a language with a morphologically distinct “inverse locational predication” in Creissels’ terms. Moreover, the constructions identified as thematic location in Koch’s terms stands out from the rest of the (rhematic) constructions in that the latter are all generic sentences characterized by the general declarative form of the predicator and the uninflected, non-definite figure. Apart from the unaltered valency of the constructions and the shared lexical predicator, Hamar could also be seen as a language that chooses informational salience for the expression of location and existence.

References

Carlson, G. 1977.

A unified analysis of the English bare plural. Linguistics and Philosophy 1 (3):413-457.

Carlson, G. 1982.

Generic terms and generic sentences. Journal of Philosophical Logic 11(2):145-181.

Clark, E. 1978.

Locational: existential, locative, and possession constructions. In: *Universals of Human Language*. Vol. IV: *Syntax*, Joseph H. Greenberg (ed.), pp. 85-126. Stanford: Stanford University Press.

Creissels, D. 2013 (revised 2014).

Existential predication in typological perspective. Paper presented at the 46th Annual Meeting of the Societas linguistica Europaea, 18-21 September 2013, Split. Online version: <http://www.deniscreissels.fr/public/Creissels-Exist.Pred.pdf>.

Creissels, D. 2018a.

Current issues in African morphosyntax. In: *The languages and linguistics of Africa*, Tom Güldemann (ed.), pp. 709-881. Berlin: De Gruyter.

Creissels, D. 2018b.

Predicative possession in Bantu languages. Online version: <http://www.deniscreissels.fr/public/Creissels-Pred.Poss.Bantu.pdf>.

Creissels, D. 2019.

Existential predication in the languages of the Sudanic belt. Afrikanistik online, vol. 2019. Available online at <https://www.afrikanistik-aegyptologie-online.de/archiv/2019/4860/fulltext#ftn.N10082>.

Cztinglar, C. 2002.

Decomposing existence: evidence from Germanic. In: *Issues in Formal German(ic) Typology*, A. Werner and J. Zwart (eds.), pp. 85-126. Amsterdam: Benjamins.

Dahl, O. 1975.

On generics. In *Formal Semantics of Natural Language*, E. L. Keenan (ed.), pp. 99-111. Cambridge: Cambridge University Press.

Dryer, M. and Haspelmath, M. (eds.), 2013.

The World Atlas of Language Structures Online. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at: <http://wals.info>

Hayward, R. 1990.

Notes on the Aari language. In: *Omoti Language Studies*, R. J. Hayward (ed.), pp. 525-493. London: School of Oriental and African Studies, University of London.

Koch, P. 2012.

Location, existence, and possession: A constructional-typological exploration. Linguistics 50:533-603.

Levinson, S., Brown, P., Danziger, E., De León, L., Haviland, J. B., Pederson, E., and Senft, G. 1992.

Man and Tree and Space Games. In: *Space stimuli kit 1.2*, S. C. Levinson (ed.), pp. 7-14. Nijmegen: Max Planck Institute for Psycholinguistics.

Levinson, S. 2001.

Motion verb stimulus, version 2. In: *Manual for the field season 2001*, S. C. Levinson and N. Enfield (eds.). Nijmegen: Max Planck Institute for Psycholinguistics. Available online at <https://doi.org/10.17617/2.874650>.

Lyons, J. 1967.

A note on possessive, existential and locative sentences. Foundations of Language 3:390-396.

Mulugeta Seyoum. 2008.

A grammar of Dime. Utrecht: LOT.

Partee, B. and Borschev, V. 2007.

Existential sentences, BE, and the genitive of negation in Russian. In: *Existence: Semantics and Syntax*, I. Comorovski and K. von Heusinger (eds.), pp. 147-190. Dordrecht: Springer.

Petrollino, S. 2016.

A grammar of Hamar: a South Omotic language of Ethiopia. Cushitic and Omotic Studies 6. Köln: Rüdiger Köppe.

Petrollino, S. 2018.

Between tone and stress in Hamar. In: *Theory and description in African Linguistics: Selected papers from the 47th Annual Conference on African Linguistics*, E. Clem, P. Jenks and H. Sande (eds.), pp. 287-302. Berlin: Language Science Press. Available online at <http://langsci-press.org/catalog/book/192>.

Reinisch, L. 1893.

Die Bedaue-Sprache in Nord-Ost Afrika. Wien: Tempsky.

Simons, F. and Fennig, D. 2017.

Ethnologue: Languages of the World. 20th edition. Dallas, Tex.: SIL International. Available online at www.ethnologue.com.

Stassen, L. 1997.

Intransitive Predication. Oxford: Clarendon Press.

Stassen, L. 2013a.

Nominal and Locational Predication. In: *The World Atlas of Language Structures Online*, Dryer M. and M. Haspelmath (eds.). Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at <http://wals.info/chapter/119>.

Stassen, L. 2013b.

Predicative possession. In: *The World Atlas of Language Structures Online*, Dryer M. and M. Haspelmath (eds.). Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at <http://wals.info/chapter/117>.

Strecker, I. 1988.

Some notes on the uses of 'barjo' in Hamar. In: *Cushitic-Omoti: papers from the international symposium on Cushitic and Omotic languages, Cologne, January 6-9*, M. Bechhaus-Gerst and F. Serzisko (eds.), pp. 59-74. Hamburg: Buske Verlag.

Talmy, L. 1972.

Semantic structures in English and Atsugewi. PhD dissertation, UC Berkeley, Department of Linguistics.

Vanhove, M. 2017.

Le Bedja. Leuven, Paris: Peeters.

Wedekind, K., C., and Abuzeinab Musa, C. 2007.

A learner's grammar of Beja (East Sudan). Study Books of African Languages 17. Köln: Rüdiger Köppe.

Wilson, B. 1983.

An examination of cross-linguistic constraints on the lexicalization of predication of ownership, possession, location and existence. University of Hawaii Working Papers in Linguistics 15(2):1-18.