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#### The noncausal/causal alternation in Muher (Ethiosemitic)

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# ABSTRACT

The paper is concerned with noncausal/causal verb pairs in Muher – a little-known South Ethiosemitic language of the so-called Gunnän Gurage in Ethiopia. Muher is a morphologically complex language, characterized by nonconcatenative verb morphology and the use of prefixes in combination with template changes to derive verbs. The study is based on a dataset of the Muher equivalents for the verb pairs in Haspelmath (1993). Muher uses several strategies to mark the noncausal/causal alternation, whereby directed pairs dominate. Within these pairs, a causal verb is more often derived than a noncausal verb. Non-directed pairs, i.e., equipollent, labile and suppletive verb pairs, are also attested, but are less frequent. Moreover, for five of the original items in the list, Muher has no pairs, i.e., one verb only occurs in the noncausal form while four verbs lack a noncausal counterpart. These four verbs, as well as most of the other verbs in the list with a human subject, make use of a morphosyntactic construction, the impersonal, to express an event in which the patientive object is foregrounded.

### **1** INTRODUCTION

Over the last few decades several typological works have been published showing that languages use various formal devices to mark the noncausal/causal alternation in semantically defined verb pairs (e.g., Haspelmath 1993; Nichols et al. 2004; Haspelmath et al. 2014; Grünthal & Nichols 2016; Creissels 2022). According to Haspelmath (1993: 90), the two verbs of such a pair denote the same verbal event which typically contains a patient participant, but the agent participant occurs only with the causal verb, while its noncausal counterpart lacks an overt instigator of the verbal event. The formal relationship of the two verbs in a pair is not limited to

valence-changing derivation, but also includes other types, like lexical suppletion, auxiliary change, conjugation change, etc. For further details, see the Introduction (this volume), where the guest editors provide a definition of the noncausal/causal alternation, present an overview of the typological literature, and give a detailed overview of the correspondence typologies.

Studies on the noncausal/causal alternation in Ethiosemitic languages are scarce. Even if grammars of Ethiosemitic languages may contain a detailed description of valence-changing derivations, other mechanisms for the noncausal/causal alternation have so far not attracted much attention. The only exception is Amharic, for which a 31-items list of noncausal/causal pairs including an analysis of their formal relationships is available (Wakasa 2014).

Based on the set of noncausal/causal meanings from Haspelmath (1993), this paper describes the alternations underlying noncausal/causal verb pairs in Muher (endonym: *m<sup>w</sup>ähäriŋŋa*, Glottocode muher1234, the ISO 639-3 code sgw subsumes it as part of Sebat Bet Gurage<sup>1</sup>). Muher is an Ethiosemitic language spoken by about 90,000 people (see footnote 2), most of them living in the Gurage Zone in central Ethiopia. Genetically, Ethiosemitic is a part of Western Semitic (see Huehnergard & Pat-El 2019: 7–9). The exact number of Ethiosemitic languages is still a matter of discussion, for a summary of the about thirty varieties, see Hudson (2013: 7–20). Despite several contestations, e.g., Goldenberg (1977) and Hudson (2007; 2013), the most comprehensive classification of Ethiosemitic based on morphological innovations still remains Hetzron (1972: 119; 1977: 15–24). According to him, Ethiosemitic, and Outer South Ethiosemitic (Figure 1).

<sup>&</sup>lt;sup>1</sup> Sebat Bet Gurage consists of the branches i–iv of the Gunnän Gurage sub-group in Figure 1.

NORTH ETHIOSEMITIC	SOUTH ETHIOSEMITIC			
	a. Trans	sversal		
†Geez,	Amharic	2,	Harari,	
Tigrinya,	Argobba	l	EASTERN GURAGE	
Tigre,			i. Zay	
Dahalik			ii. Silt'e, Wolane	
	b. Outer			
	†Gafat	GUNNÄN GU	JRAGE	
		i. Kistan	e, Dobbi, †Galila	
		ii. Muher		
		iii. Mesqa	n	
		iv. Chaha cluster (Chaha, Ezha, Gumer, Gura)		
		v. Inor cluster (Inor, Gyeta, Endegagn, Ennar,		
		†Mesn	ies)	

Figure 1 Main genetic groups within Ethiosemitic

With the exception of Gafat, Outer South Ethiosemitic languages are grouped together as Gunnän Gurage (Hetzron 1977: 3), which stands in opposition to the genetically rather distantly related Eastern Gurage (Meyer 2011a: 1221–1224). Within Gunnän Gurage, Kistane, Dobbi, Galila and Muher form a special (typological) unit known as Northern Gurage (Hetzron 1977: 23–24).

Muher, like most other Gunnän Gurage languages, typically serves as medium for oral communication and has only sporadically been used for writing. The majority of the Gurage, including the Muher, are bi- or multilingual, i.e., they speak more than one Gurage variety beside Amharic (see Meyer 2011a: 1232–1224). This has a strong impact on language use of Gurage speakers resulting in various language change and language shift processes.

Muher is a fairly well described language. Beside an extensive wordlist with about 2000 entries (Leslau 1979a: 831–960), glossed and annotated text collections (Leslau 1981: 53–199; Hetzron 1977: 167–184), two sketch grammars (Leslau 1981: 6–50; Meyer 2019), and a comprehensive descriptive grammar (Aregawi 2018), there are a

number of specialized grammatical studies on the language (for an overview, see Meyer 2011a).

The data presented in this paper mainly stem from my own fieldwork on Muher with additions from Leslau (1979a). Since 1998, I have been conducting fieldwork on the *ädi-bet* variety of Muher which is spoken by about 800 people in the multilingual speech community living in Tattessa, a small village 6 km to the east of Wolkite, the administrative center of the Gurage Zone.<sup>2</sup> Originally, the *ädi-bet* variety is spoken in the village of Mäqorqor, from where it expanded to several enclaves in the Gurage Zone (Meyer 2010: 161–162). Today, the Muher of Tattessa can be considered heritage speakers of *ädi-bet* as most of them use Amharic as dominant language, in addition to other Gurage languages, in particular Ezha.

## **2** GRAMMATICAL BACKGROUND

As is typical for a Semitic language, the verb morphology of Muher is nonlinear. An inflected verb consists of three components: a verbal root (i.e. a sequence of consonants or vocalic radicals) encoding the general semantics of the verb, inflectional templates for grammatical aspect and mood, and partly also polarity, as well as subject affixes (see Meyer 2014; 2016a for further details). Figure 2 shows the three stages of the formation of the simplex stem for the root  $\sqrt{k'_1-b_2-r_3}$  'plant; bury'<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> An official number of Muher speakers does not exist because the last population and housing census of Ethiopia from 2007 provides only a general figure in which, with the exception of Silt'e (which comprises also Wolane), all Gurage varieties are lumped together. There are about 1.48 million L1 Gurage speakers living in Ethiopia (Office of the Population Census Commission 2008a: 91), of which 1.06 million are living in the Gurage Zone (Office of the Population Census Commission 2008b: 166). Muher is mainly spoken in the Muher and Aklil District in which 87,800 people are living (Office of the Population Census Commission 2008b: 7). Assuming that most of them speak Muher as L1, the total number of Muher speakers can be estimated between 80,000 and 90,000. Only few of them speak the *ädi-bet* variety, which is mainly found in and around the village of Mäqorqor, and some villages near Wolkite, like Tattessa, in which according to my estimation approximately 800 *ädi-bet* speakers are living.

<sup>&</sup>lt;sup>3</sup> The symbol √ stands for a lexical root which typically consists of three consonants whose order is indicated by subscript numbers. In templates, any consonant and vocalic radical is represented by

with a 3SG.M subject. First, the lexical root interdigitates with the templates to form the verb bases, stage (i). Then these bases obligatorily combine with a subject marker to form an inflected verb, stage (ii). With regard to the negative perfective and jussive, the inflected verbs already represent main clause verbs, whereas the verbs in the affirmative perfective and the imperfective are unmarked for their syntactic function. They still have to combine either with a clausal status marker, stage (iii), or a subordinating element (for clausal status marking see Meyer 2014: 242–252).<sup>4</sup>

(i)	Root		$\sqrt{k'_1-b}$	<sub>2</sub> -r <sub>3</sub> 'plant; bury'	lant; bury'	
	Templates	Pef Affirmative	RFECTIVE NEGATIVE	IMPERFECTIVE <sup>5</sup>	JUSSIVE <sup>6</sup>	
		$C_1 \ddot{a} C C_2 \ddot{a} C_3$ -	$an$ -C <sub>1</sub> $\ddot{a}C_2\ddot{a}C_3$ -	$-C_1 \ddot{a} C_2 C_3$ -	$-C_1C_2C_3$ -	
	Base	k'ıäbb2är3-	an-k'ıäb2är3-	-k' <sub>1</sub> äb <sub>2</sub> r <sub>3</sub> -	-C <sub>1</sub> C <sub>2</sub> C <sub>3</sub> - - <i>k</i> ' <sub>1</sub> <i>b</i> <sub>2</sub> <i>r</i> <sub>3</sub> -	
	Û	<u> </u>				
(ii)	Зsg.м subject	-ä		j-	jä-	
	Inflected verb	k'äbbärä	ank'äbärä	jik'äbr	jä2b <del>i</del> r	
	Û					
(iii)	Clausal status marker	-т		{-u, -i, -tt}		

the symbol C followed by a subscript number to indicate their position in the root. The sequences  $CC_1$  and  $CC_2$  stand for geminated consonants.

- <sup>4</sup> Note that the citation form of Semitic verbs is the 3sg.M affirmative perfective, which in Muher ends with the clausal status marker *-m*. When verbs are cited in the ongoing text, they occur in this form and are translated by the English infinitive. In numbered language examples, however, their English translation represents their actual contextual meaning.
- <sup>5</sup> The imperfective is used in nonpast and past contexts, in the latter followed by the past auxiliary *bannä* in main clauses (for further details on Muher, see Meyer 2019: 248; and in a wider Ethiosemitic context, see Meyer 2016a: 199–217; 2016b: 199–203). Here only the inflection of the nonpast imperfective is shown.
- $^6~$  Note that a few intransitive/unaccusative verbs form their jussive by the template -C<sub>1</sub>C<sub>2</sub>äC<sub>3</sub>- (Meyer 2016a: 173–174).

Dom, Sebastian, Leora Bar-el, Ponsiano Kanijo & Malin Petzell (eds.) 2022. The noncausal-causal alternation in African languages. Linguistique et Langues Africaines (special issue) 8(2).

Main clause verb	k'äbbäräm	ank'äbärä	ji?äbru <sup>7</sup>	jä2b <del>i</del> r
	'he planted;	'he did not	'he plants, will plant;	'let him
	buried'	plant; bury'	he buries, will bury'	plant; bury'

Figure 2 Basic inflection of the root  $\sqrt{k'_1-b_2-r_3}$  'plant; bury' (type A) in the simplex stem

The basic conjugations found in each Ethiosemitic language are perfective, imperfective and jussive/imperative. A few languages have additional templates for the converb and the verbal noun (or nominal infinitive). Muher does not have a dedicated converb template, but forms pseudo-converbs from inflected verbs. The verbal noun is derived from the jussive template. In addition to the negative prefix, several Gurage languages also distinguish between affirmative and negative perfective by distinct templates (Meyer 2014: 236). In Muher, these templates differ in the second root consonant, which is geminate in the affirmative perfective and singleton in the negative.

In addition to the templates, various lexical verb classes, called VERB TYPE, have to be distinguished, as they determine the vocalization and gemination patterns of the templates. The basic or unmarked root is that of type A. Other major verb classes are type B characterized by gemination of the second root consonant in all conjugations and/or palatalization of the initial root consonant or the vowel following it (yielding  $*\ddot{a} > e, \; *a > \ddot{a}$ ), and type C marked by the vowel *a* following the initial root consonant (for the main verb types in Ethiosemitic see Meyer 2016a: 169).

As a result, the simplex and derived stems of a verbal root in Muher are not represented by a single inflected verb form but by the combination of the templates for the three basic conjugations (perfective, imperfective and jussive). In other words, the four templates in Figure 2 represent together the simplex stem of the root  $\sqrt{k'_1-b_2-r_3}$  'bury', whereas the three templates in Figure 3 represent the derived mediopassive stem of this root.

<sup>&</sup>lt;sup>7</sup> In postvocalic position, the singleton ejective k' regularly debuccalizes to the glottal stop ? (Meyer 2019: 230).

Verbs cross-reference definite primary objects by a dedicated suffix set (1a), which is relatively complex in Muher (and other Gunnän Gurage languages) due to a large number of allomorphs (Meyer 2019: 240). Indefinite objects are never indexed, as shown in (1b).

- (1) a. birtſ'ikk'owe säbbärmyim
  birtſ'ikk'o-we säbbär-m<sup>w</sup>-i-m
  glass-DEF break\PFV-SBJ.3PL.M-OBJ.3SG.M-CSM
  'They broke the glass.'
  - b. birtf'ikk'o säbbärmum
    birtf'ikk'o säbbär-m<sup>w</sup>-m
    glass break\PFV-SBJ.3PL.M-CSM
    'They broke a glass.'

Verbal derivation is coded by prefixation, reduplication of a root consonant, vowel *a*- insertion after the first or second root consonant, or a combination of these (see Meyer 2019: 241–242; for a broader Ethiopian context see Meyer & Wolff 2019: 309–310). Reduplication and *a*-insertion express pluractionality, while the derivational prefixes usually bring about a change in the verb valence. The three productive derivational prefixes are  $t(\ddot{a})$ - mediopassive, *a*- direct causative, and *at*- indirect causative.

(2)	SIMPLEX (TR)	DERIVED STEMS			
	a. <i>k'äbbäräm</i>	b. at-k'äbbäräm	(CAUS.IDR)	'let plant/bury'	
	'plant; bury'	c. tä-?äbbäräm	(MP)	'be buried'	
(3)	SIMPLEX (INTR)	DERIVED VERBS			
	a. <i>k'ärräbäm</i>	b. a-?ärräbäm	(CAUS.DR)	'bring near'	
	'be near'	c. at-k <sup>j</sup> ärräbäm	(CAUS.IDR)	'let bring near'	

With a few quadriliteral roots, Muher marks mediopassive/causative pairs by the nonproductive prefixes *in-* intransitive and *an-* transitive, e.g., *in-t'ilätt'äläm* 'dangle' vs. *an-t'ilätt'äläm* 'hang up'.

(i)	Root	$\sqrt{k'_1-b_2-r_3}$ 'bury'		
	Mediopassive	PERFECTIVE	IMPERFECTIVE	JUSSIVE
	templates	tä-C <sub>1</sub> äCC <sub>2</sub> äC <sub>3</sub> -	- <i>t</i> -C <sub>1</sub> äCC <sub>2</sub> äC <sub>3</sub> -	- <i>t</i> -C <sub>1</sub> äC <sub>2</sub> äC <sub>3</sub> -
	Base	tä-k'äbbär-	-t-k'äbbär-	-t-k'äbär-
	Û			
	Зsg.м subject/vn	-ä	<i>j</i> -	wä- <sup>8</sup>
(ii)	Inflected verb	tä?äbbärä	jɨtk'äbbär	wätk'äbär
	Û			
(iii)	Clausal status marker	-т	{-u, -i, -tt}	
	Main clause verb	tä?äbbäräm	jɨtk'äbbäru	wätk'äbär
	Main Clause VerD	'he is/was buried'	'he is being/will be buried'	'to bury/burying'

Derived stems do not combine with the set of templates for simplex roots, but combine with their own set of templates, as shown for the mediopassive of 'bury' in Figure 3.

Figure 3 Basic inflection of the root  $\lor$  k'<sub>1</sub>-b<sub>2</sub>-r<sub>3</sub> 'bury' in the mediopassive stem

In contrast to simplex the root  $\sqrt{k'_1-b_2-r_3}$  in Figure 2, the mediopassive form only has the sense of 'bury', but not of 'plant'. Furthermore, a separate template for the negative perfective is lacking, and the vocalization/gemination of the templates for the imperfective and jussive conjugations differ from the simplex in Figure 2.

Like simplex stems, derived stems are formed through the interdigitation of stemspecific conjugational templates and the lexical root (stage (i) in Figure 2 and Figure 3). Thus, the derived stems are not simply a modification of the corresponding simplex stem. However, they are morphologically more complex or augmented than the corresponding simplex stems due to the presence of the derivational prefixes, *a*-insertion or reduplication.

Regarding the function of the productive derivational prefixes, the mediopassive  $t(\ddot{a})$ - typically reduces the valence of a transitive verb by deleting its agent participant, as in (2c)  $t\ddot{a}?\ddot{a}bb\ddot{a}r\ddot{a}m$  'be buried' from the transitive verb  $k'\ddot{a}bb\ddot{a}r\ddot{a}m$  'bury' (2a). The direct causative *a*- increases the valence of an intransitive verb by adding an agent, as in (3b) *a?\"arr\"abam* 'bring near' related to the simplex  $k'\"{a}rr\"abam$  'be near' (3a). The

<sup>&</sup>lt;sup>8</sup> A verb is not attested in the jussive/imperative. Therefore, the verbal noun, which is also based on the jussive template, is given here.

indirect causative *at*- can be applied to intransitive and transitive verb roots and introduces the new role of a causer or facilitator of the verbal event, as shown in (2b) *atk'äbbäräm* 'let bury' and (3c) *atk<sup>j</sup>ärräbäm* 'let bring near'. However, in contrast to other Ethiosemitic languages, particularly Amharic, it is not possible to predict which verb roots allow for the mediopassive and the two causative derivations, i.e., derivation is rather a lexical feature connected with the verb root.

### **3** The noncausal/causal verb correspondences in Muher

In this section, I first give a statistical overview of the noncausal/causal verb alternation in Muher based on the 31-items wordlist in Haspelmath (1993), and then discuss a number of topics related to them.

## 3.1 List of noncausal/causal verbs in Muher

The Muher equivalents of the 31 noncausal/causal verb pairs in Haspelmath (1993: 97) and their correspondence types are shown in Table 1. Haspelmath (1993: 90–92) distinguishes five strategies for the formal relationship of the two verbs in noncausal/causal pairs, namely causativization (C), in which a causal verb is derived from a noncausal simplex verb, anticausativization (A), which is the reverse, i.e., a noncausal verb is derived from a causal simplex verb, equipollence (E), in which both verbs are derived, suppletion (S) for pairs with two formally unrelated lexical verbs, and lability (L) when a single verb has a causal and a noncausal meaning. The anticausative and causative correspondences are directed in the sense that the morphologically more marked verb is derived from the simplex verb. The remaining three types – equipollence, suppletion, and lability – are nondirected, a distinction between simplex and derived verb cannot be made.

Ітем	MEANING		NONCAUSAL	CAUSAL	Түре	COMMENT
1	boil <sup>9</sup>		fännam	afännam	С	CAUS.DR
2	*freeze>1	be cool/cool	g <del>i</del> zäggäzäm	agzäggäzäm	С	CAUS.DR
3	dry		ťärrä?äm	at'ärrä?äm	С	CAUS.DR
4	wake up		tänässam*	k'isäkk'äsäm	S	
			'rise'			
5	go out		wätt'am	$\widehat{aatt'am^{10}}$	С	CAUS.DR
6	sink		b <sup>w</sup> ännam	ab <sup>w</sup> ännam	С	CAUS.DR
7	learn/teach		tämaräm	atmäräm <sup>11</sup>	Е	MP/CAUS.IDR
8	melt		k'ällät'äm	a?ällät'äm	С	CAUS.DR
9	stop		k' <sup>w</sup> ämäm	a? <sup>w</sup> ämäm	С	CAUS.DR
10	turn (arou	ınd)	zəaräm	azəaräm	С	CAUS.DR
11	dissolve		t'ämmam	b <del>i</del> t'äbbät'äm	S	
12	burn		näddädäm	тä <del>jj</del> äт	S	
13	destroy		färräsäm	afärräsäm	С	CAUS.DR
14	fill		männam	männam	L	
15	finish		e?äm	fäddzäm	S	
16	begin			k'ärräsäm	—	
17	1	disperse	a. <i>täbrattf'äm</i>	brattf'äm	А	MP
17	spread >	widen	b. <i>bättätäm</i>	abättätäm	С	CAUS.DR

Table 1. Noncausal/causal pairs in Muher

<sup>&</sup>lt;sup>9</sup> Although this verb pair is attested (see for instance Leslau 1979a: 877), *fännam* 'boil (INTR)' tends to be replaced by the verb *insirässäräm* 'boil with a bubbling sound' and *afännam* 'boil (TR)' by *ffäkkä<sup>j</sup>äm* 'boil, cook in hot water'. My Muher consultants often avoid *fännam/afännam* 'boil' due to the similarity with the verb *f<sup>w</sup>ännam* 'have sexual intercourse'. A similar phenomenon can be observed with the Muher ditransitive verb *bäddam* 'take something from someone', which tends to be replaced by the Amharic loan verb *wässädäm* 'take' because Muher *bäddam* closely resembles Amharic *bädda* 'have sexual intercourse' (see also Leslau 1959: 107).

<sup>&</sup>lt;sup>10</sup> The verb  $\widehat{att'am}$  'go out; descend', see also (24), represents underlying \**a-wätt'a-m* CAUS.DRgo\_out\PFV.3SG.M-CSM, in which the sequence /awä/ is pronounced as a diphthong  $[\widehat{aa}]$  (Meyer 2019: 231; Leslau 1979b: xvii).

<sup>&</sup>lt;sup>11</sup> Another causal form is *astämmäräm*, most probably a loan from Amharic *astämarä*.

Ітем	MEANING	NONCAUSAL	CAUSAL	Туре	COMMENT
18	roll	inkiballäläm	ankiballäläm	Е	INTR/TR
19	develop	täla?äm	atlä?äm	Е	MP/CAUS.IDR
20	get lost/lose	k'ärräm	a?ärräm	С	CAUS.DR
21	rise/raise	tänässam	nässam	А	MP
22	improve	alläfäm			
23	rock	ink'ijäkk'ä <sup>j</sup> äm	ank'ijäkk'ä <sup>j</sup> äm	Е	INTR/TR
24	connect		gätt'ämäm		
25	change	— ∫äggä <sup>j</sup> äm			
26	gather	täsbässäbäm* sibässäbäm		А	MP
		ʻgather (only human)'			
27	open	täkäffätäm*	käffätäm	А	МР
		'hardly open'			
28	break	täsäbbäräm	säbbäräm	А	MP
29	close	tatt∫'äm*	attʃ'äm	А	MP
		'hardly close'			
30	split	täfäkk'am* fäkk'am A		А	MP
		'split easily'			
31	die/kill	m <sup>w</sup> ätäm	k'ätt'ä <sup>j</sup> äm	S	

\*Mediopassive with a specialized semantics vis-à-vis the causal verb

A modification of Haspelmath's (1993) original list is found with the verb 'freeze' (no. 2). Its direct translation into Muher would be a periphrastic expression similar to 'become ice' and 'prepare/make ice'. Therefore, this verb was replaced with the pair 'be cool/cool'.

Muher has no dedicated verb 'sink' (no. 6). This sense is expressed by the polysemous verb  $b^{w}$ *ännam* whose lexical meaning can be generally described as 'disappear from view by penetrating into something, like a field, a hole, water, etc.' Furthermore, some derived noncausal mediopassive verbs in Table 1 have a more specialized semantics than the corresponding causal verb (no. 26, 27, 29, 30). These instances have been counted as formal noncausal/causal pairs, even if the noncausal sense is

typically expressed by the impersonal (see §5). In addition, the mediopassive verb *tänässam* appears twice in Table 1: as suppletive noncausal counterpart to *k'isäkk'äsäm* 'wake up' (no. 4), where it can also be replaced by the impersonal of *k'isäkk'äsäm*, and as derived noncausal counterpart to the verb *nässam* 'raise' (no. 21). The two instances of *tänässam* have been counted as distinct pairs.

The noncausal verb *alläfäm* 'improve' (no. 22) lacks a causal counterpart and will thus not be considered further. Similarly, the causal verbs 'begin' (no. 16), 'connect' (no. 24), and 'change' (no. 25) have no derived noncausal counterpart, and thus are not counted. However, in contrast to *alläfäm* 'improve', these verbs can form the impersonal with an unspecific subject (see §5). Consequently, the number of pairs in Haspelmath's (1993) list is reduced from 31 to 27 noncausal/causal verb pairs. One of these English pairs, no. 17, has two translational equivalents in Muher: *brattf'äm* in the sense of 'disperse something' or *abättätäm* meaning 'enlarge/widen'. As suggested by Haspelmath (1993: 100), each correspondence in the double pair no. 17 has been counted with 0.5 for the overall calculation in Table 2.

	DIRECTED PAIRS		NONDIRECT	TOTAL		
	CAUSATIVE	ANTICAUSATIVE	SUPPLETIVE	EQUIPOLLENT	LABILE	
Number	10.5	6.5	5	4	1	27
Percent	39%	24%	19%	15%	3%	1000/
	63%		37%			100%

Table 2 Distribution of noncausal/causal correspondences in 23 Muher pairs

As can be seen from Table 2, all five strategies for the formation of noncausal/causal verb pairs are found in Muher. The majority of the verb pairs (17 pairs or 63%) are directed, with a preference for the causativization strategy (10.5 pairs), while the anticausativization strategy is less frequent (6.5 verb pairs). A summary of the directed pairs is given in Table 3 which shows that causativization and anticausativization are marked respectively by a single productive derivational strategy, namely the prefixation of  $t\ddot{a}$ - for the mediopassive and of a- for the direct causative. The productive indirect causativization by the prefix at-, as well as the nonproductive derivations by the prefixes *in*- (INTR) and *an*- (TR) are not employed in these verb pairs.

No.	CAUSAL SIMPLEX	NONCAUSAL	No.	NONCAUSAL SIMPLEX	CAUSAL
	(6.5 PAIRS)	DERIVATION		(10.5 PAIRS)	DERIVATION
17	spread (>disperse)	МР	1	boil	CAUS.DR
21	rise/raise	МР	2	be cool/cool	CAUS.DR
26	gather*	MP	3	dry	CAUS.DR
27	open*	MP	5	go out/put out	CAUS.DR
29	close*	MP	6	sink	CAUS.DR
30	split*	MP	8	melt	CAUS.DR
28	break	MP	9	stop	CAUS.DR
			10	turn	CAUS.DR
			13	destroy	CAUS.DR
			17	spread (>be wide)	CAUS.DR
			20	get lost/lose	CAUS.DR

Table 3 Anticausative and causative strategies

\*More specialized semantics vis-à-vis the causal simplex verb

The first half of Haspelmath's (1993: 97) noncausal/causal verb pairs in Table 1 is dominated by the causativization strategy, whereas the derived noncausal verbs are found in the second half. Haspelmath et al. (2014) attributes this phenomenon to the lexical semantics of the verbs. While events in the first part of Table 1, like 'dry', 'sink', 'melt', etc., usually occur without an agent, the verbs in the last part of the table usually require a human agent who fulfills the verbal action. The more frequent type – noncausal with the verbs in the first part of Table 1, but causal with the verbs at the end – is then expressed by the simplex stem, while the respective other verb is morphologically marked by derivation. The two Muher equivalents for English 'spread' (no. 17) seem to reflect this semantic division. If 'spread' is translated into Muher as 'disperse', the unmarked simplex verb is causal with a human agent as subject. The other member of the pair is then a derived noncausal verb in the mediopassive. By contrast, if 'spread' is translated in the sense of 'be wide/widen', the unmarked simplex verb is typically noncausal, without a human instigator. Consequently, its counterpart is a derived causative verb.

With regard to the non-directed pairs, the only labile verb is 'fill' (no. 14) (see §3.3.1), nine other pairs display either equipollent or suppletive alternations (see §§3.3.2 and 3.3.3).

# 3.2 Formation of directed pairs

In directed pairs, the noncausal simplex verbs in Table 3 derive their causal counterpart by the direct causative prefix a- plus the respective inflectional template (see §2). As a result, intransitive simplex verbs change into transitive verbs with an agentive subject, which is usually animate.

- (4) a. gif<sup>w</sup>ätwe t'ärrä?äm. gif<sup>w</sup>ät-we t'ärräk'-ä-m clothes-DEF dry\PFV-SBJ.3SG.M-CSM
   'The clothes have dried.'
  - b. rawda gif<sup>w</sup>ätwe at'ärrä?ättinnim.
    rawda gif<sup>w</sup>ät-we a-t'ärräk'-ätt-nn-m
    Rawda.F clothes-DEF CAUS.DR-dry\PFF-SBJ.3SG.F-OBJ.3SG.M-CSM
    'Rawda dried the clothes.'

In some instances, the direct causative prefix *a*- also attaches to transitive (causal) simplex verbs which then have a more specialized meaning, see, e.g., (18b) in §4, or they may convey an indirect causal sense, as with the transitive verb *läbbäsäm* 'dress' in (5), which is in other verbs expressed by prefixing *at*- (CAUS.IDR).

(5)	kädir	jäg <sup>w</sup> əbbehut	aläbbäsänn <del>i</del> m.	
	kädir	jä-g <sup>w</sup> äbbe-h <sup>w</sup> ta	a-läbbäs-ä-nn-m	
	Kadir.м	GAD-brother-poss.3sg.m	CAUS.DR-dress\pfv-sbj.3sg.m-obj.3sg.m-csm	
	a. 'Kadir dressed his brother.' (direct causative reading) b. 'Kadir provided clothes for his brother.' (indirect causative readin			

Simplex verbs with the root-initial vocalic radical *a*, e.g., *addäräm* 'spend the night' cannot form their causal counterpart by the direct causative prefix *a*-, but use the indirect causative prefix *at*- instead. The resulting derived verbs then have a direct or an indirect causative reading, i.e., *atäddäräm* (<\*at-addär-ä-m CAUS.IDR-

spend\_the\_night\PFV-3SG.M-CSM) 'give lodging for the night (direct causative); let pass the night (indirect causative)'.

The causal simplex verbs in Table 3 employ the mediopassive derivation with the prefix  $t\ddot{a}$ - (plus the respective mediopassive template) to form their noncausal counterpart. In the mediopassive derivation, unaffected agents are deleted, and the verb valence is reduced by one, as shown with the causal simplex verb in (6a) vis-à-vis its noncausal counterpart in the mediopassive derivation in (6b).

- (6) a. kädir sinwe säbbärännim.
  kädir sin-we säbbär-ä-nn-m
  Kadir.M cup-DEF break\PFV-SBJ.3SG.M-OBJ.3SG.M-CSM
  'Kadir broke the cup.'
  - b. sinwe täsäbbäräm.
    sin-we tä-säbbär-ä-m
    cup-DEF MP-break\PFV-SBJ.3SG.M-CSM
    'The cup broke/is broken.'

In (7), the subject *kädir* may have had a role in the instigation of the verbal event, but he is also affected by it and thus treated as a patient. The second noun, *ächut* 'his hand', is not a direct object (as it cannot be cross-referenced by the object suffixes on the verb, even if it is definite), but an adjunct to the verb that specifies the place of the broken body part.

(7)	käd <del>i</del> r	ä&hut	täsäbbäräm.	
	kädir	ä&-hut	tä-säbbär-ä-m	
	Kadir.M hand-poss.3sg.M		MP-break\pfv-sbj.3sg.m-csm	
	'Kadir has l	broken his hand (lit. is	broken with respect to his hand).'	

Basically, the mediopassive denotes events in which the subject encodes an affected agentive or patientive participant. In contrast to other Ethiosemitic languages outside Gunnän Gurage, the Muher mediopassive often developed a more specialized, less predictable meaning vis-à-vis the related simplex verb (see §4). Moreover, a noncausal sense is typically expressed by the impersonal construction in Muher (for which see §5).

### 3.3 Correspondences in nondirected pairs

#### 3.3.1 Lability

Labile verbs are rare in Muher. The only instance so far is the verb *männam* 'fill' (no. 14 in Table 1), which occurs in the same form in noncausal and causal contexts (8).

- (8) a. b<sup>w</sup>>tto biga männam.
  b<sup>w</sup>ätto bä-iga männa-ä-m
  river MIL-water fill\PFV-SBJ.3SG.M-CSM
  'The river is full with water.'
  - b. räwda sinwe bä?awa männattum.
    räwda sin-we bä-k'awa männa-ätt-u-m
    Rawda.F cup-DEF MIL-coffee fill\PFV-SBJ.3SG.F-OBJ.3SG.M-CSM
    'Rawda filled the cup with coffee.'

The major difference between (8a) and (8b) is the number of involved arguments: the noncausal intransitive verb *männam* in (8a) only has a subject, while the causal transitive verb *männam* has an additional object. Besides, the two subjects differ in animacy. The noncausal use coincides with inanimate patient-like subjects, while in causal events the subject is an agent. Note that in (8b) the use of the object suffix on the verb is obligatory because its referent, the primary object *sinwe* 'the cup', is definite (see §2).

#### 3.3.2 Equipollence

Formally, all pairs in Table 1 could be analyzed as equipollent because both the simplex verb and its derived counterpart are formed through stem-specific templates which interdigitate with a lexical root (similar to the conjugation class change in the typology of Nichols et al. 2004), and not simply by attaching derivational prefixes to a simplex stem (see §2). Nevertheless, simplex verbs can clearly be distinguished from their derived counterparts through the lack of such an additional derivational prefix. In the equipollent pairs discussed here, however, the two verbs of the pair are equally marked by a derivational prefix, i.e., the two verbs are equally morphologically augmented.

Equipollent correspondences can be classified into three types, of which only two are attested in the dataset in Table 1 based on Haspelmath's (1993) semantic list. The first type (no. 18 and 23 in Table 1) is characterized by nonproductive derivational prefixes, namely *in*- for intransitive verbs (noncausal) and *an*- for transitive verbs (causal), as with the verb 'roll' in (9).

- (9) a. *ifittawe* wohättawe garinnijä ankiballälmem.
   *ifita-we* wähätta-we gar-ŋŋijä an-kballäl-ma-i-m
   woman.PL-DEF ensete\_tuber.DEF house-DIR TR-roll\PFV-SBJ.3PL.F-OBJ.3SG.M-CSM
   'The women rolled the ensete tuber towards the house.'
  - b. innamwe bäg<sup>w</sup>odzä inkiballäläm.
    innam-we bä-g<sup>w</sup>ädzä in-kballäl-ä-m
    cow-DEF MIL-hole INTR-roll\PFV-SBJ.3SG.M-CSM<sup>12</sup>
    'The cow rolled into a pit.'

In the second type (no. 7 and 19 in Table 1), the two verbs of a pair are formed by the productive mediopassive and indirect causative derivations, marked by the prefixes *tä*- and *at*-, respectively, as with the verb 'develop' in (10).

(10)	a.	Rawda.F ha	innän-h <sup>j</sup> a ir-poss.3sg.f	<i>atlä?ättum.</i> at-läk'-ätt-u-m CAUS.IDR-develop\PFV-SBJ.3SG.F-OBJ.3SG.M-CSM	
		'Rawda let	her hair gro	ow.'	
	b.	kuntfifdähä	likk'e	täla?äm.	
		kunt∫if-dähä	likk'e	tä-lak'-ä-m	
		beard-poss.2s	SG.M very	MP-develop\PFV-SBJ.3SG.M-CSM	
		'Your beard grew a lot.'			

For three of the four equipollent verb pairs, i.e., 'learn/teach' (no. 7), 'roll' (no. 18), and 'rock' (no. 23),<sup>13</sup> an underived simplex stem is unattested. The fourth verb pair,

<sup>&</sup>lt;sup>12</sup> Nouns with non-human referents are uniformly marked with the 3sg.M subject marker in the singular, even if they are semantically feminine like *innam* 'cow'.

<sup>&</sup>lt;sup>13</sup> This verb exists in another stem derived by *a*-insertion, namely *k'ijakk'ä<sup>j</sup>äm* 'mix'.

'develop' (no. 19), has the simplex *la?äm* 'surpass' (11a), but its semantic relation to the derived stems, i.e., the indirect causative (11b) and the mediopassive (11c), is not straightforward.

In the indirect causative derivation, type A simplex verbs consistently change to type B verbs (for the verb types, see §2). Therefore, the vocalic radical *a* of the simplex verb  $la?\ddot{a}m$  (11a)<sup>14</sup> gets palatalized and changes to  $\ddot{a}$ , and the three basic conjugations use a single template realized as  $l\ddot{a}$ ? (with ? representing postvocalic *k*'), as in (11b).

a.	SIMPLEX		
	la?-ä-m	j <del>i</del> -lk'-u	jä-la?
	surpass\pfv-sbj.3sg.m-csm	SBJ.3SG.M-surpass\IPFV- CSM	sbj.3sg.m-surpass\juss
	'he surpassed'	'he surpasses'	'let him surpass'
b.	INDIRECT CAUSATIVE at-		
	at-lä?-ä-m	j-at-lä?-u	j-at-lä?
	CAUS.IDR-develop\PFV-	SBJ.3SG.M-CAUS.IDR-	SBJ.3SG.M-CAUS.IDR-
	SBJ.3SG.M-CSM	develop\IPFV-CSM	develop\juss
	'he developed'	'he develops'	'let him develop'
c.	MEDIOPASSIVE tä-		
	tä-la?-ä-m	j <del>i</del> -t-lä?-u	jä-t-la?
	мр-develop\pfv-sbj.3sg.м-	sbj.3sg.м-мр-develop\ipfv-	SBJ.3SG.M-MP-
	CSM	CSM	develop\juss
	'it was developed'	'it is being developed'	'let it be developed'
ł	р.	<ul> <li>la?-ä-m</li> <li>surpass\PFV-SBJ.3SG.M-CSM</li> <li>'he surpassed'</li> <li>D. INDIRECT CAUSATIVE at- at-lä?-ä-m</li> <li>CAUS.IDR-develop\PFV- SBJ.3SG.M-CSM</li> <li>'he developed'</li> <li>C. MEDIOPASSIVE tä- tä-la?-ä-m</li> <li>MP-develop\PFV-SBJ.3SG.M- CSM</li> </ul>	$la?-\ddot{a}-m$ $j\ddot{i}-lk'\cdot u$ surpass\PFV-SBJ.3SG.M-CSMSBJ.3SG.M-SURPASS\IPFV-CSM'he surpassed''he surpasses''he surpassed''he surpasses'D.INDIRECT CAUSATIVE $at$ - $at-l\ddot{a}?-\ddot{a}-m$ $j-at-l\ddot{a}?-u$ CAUS.IDR-develop\PFV-SBJ.3SG.M-CAUS.IDR- develop\IPFV-CSMSBJ.3SG.M-CSMdevelop\IPFV-CSM'he developed''he develops'CAUDIOPASSIVE tä- tä-la?-ä-m $ji-t-l\ddot{a}?-u$ MEDIOPASSIVE tä- tä-la?-ä-mSBJ.3SG.M-MP-develop\IPFV- CSMCSMCSM

<sup>&</sup>lt;sup>14</sup> The verb *la?äm* 'surpass' originates historically from the triliteral root  $\sqrt{l_1-A_2-k'_3}$  of type A with a glottal stop, a velar, a pharyngeal or a glottal fricative (generally referred to as gutturals) as second consonant, which changed to a vocalic radical (represented by the symbol A) that is mainly represented by the vowel *a* attached to the initial root consonant. Historically, the gutturals triggered vowel assimilation processes that still can be observed in the irregular imperfective base of these roots with type A simplex verbs, in which the vocalic radical is lacking, as in *jilk'u* 'he surpasses' in (16a).

The nonproductive derivational prefixes *in*- (INTR) and *an*- (TR) are limited to quadriliteral verbs which express some kind of movement,<sup>15</sup> while the mediopassive and indirect causative derivations with the prefixes  $t\ddot{a}$ - and *at*- occur with all other verbs.

The third type of equipollent correspondence, not attested in the dataset in Table 1, are complex predicates (also known as compound or composite verbs)<sup>16</sup> with the inflected verbs  $b\ddot{a}^{j}\ddot{a}m$  'say' and  $am\ddot{a}nn\ddot{a}m$  'make'<sup>17</sup> as light verb and an invariable ideophone as coverb, as in (12). Complex predicates with the light verb 'say' express noncausal events, whereas predicates with 'make' express causal events.

- (12) a. ka∬i bä<sup>j</sup>äm<sub>(noncausal)</sub> vs. ka∬i amäŋnäm<sub>(causal)</sub>
  'be/make very dry'
  - b. *tf'ififf bä<sup>j</sup>äm*(noncausal) vs. *tf'ififf amäŋnäm*(causal)
    'be/make completely full'
  - c. *t'ämb<sup>w</sup>a bä<sup>j</sup>äm*<sub>(noncausal)</sub> vs. *t'ämb<sup>w</sup>a amäŋŋäm*<sub>(causal)</sub> 'crack/let crack (with a sharp noise)'

The complex predicates in (12a–b) are semantically related to the lexical verbs 'dry' and 'fill' (no. 3 and 14 in Table 1), but have an additional intensive meaning component. Interestingly, the verb *amäŋŋäm* 'make' is only attested as light verb in complex predicates, as in (12), whereas elsewhere the verb  $k^{ij}$ ännam 'make' is used, e.g., (13).

(13)	tähank" <sup>j</sup> äta	k'ämäle	jägizz	wəddzä	juwäet
	tähank' <sup>j</sup> äta	k'ämäle	jä-g <del>i</del> zz	wädc <del>z</del> ä	j-wä <sup>j</sup> -ät
	then	monkey	GAD-cattle	herd	ЗSG.M-spend_the_day\IPFV-PURP
	aſkŧr	ki'än	n <del>i</del> myim		
	ujkti	K <sup>°</sup> UI	nanqun		
	a∫kir	k' <sup>j</sup> änr	na-m <sup>w</sup> -i-m		

<sup>&</sup>lt;sup>15</sup> For the related derivational prefix *in*- and *an*- in Amharic, see Baye (1999: 58–59).

<sup>&</sup>lt;sup>16</sup> For an overview of complex predicates in Ethiosemitic, see Meyer (2009) and Mengistu (2010).

<sup>&</sup>lt;sup>17</sup> This verb is possibly a loan from Ezha or Chaha *amän(n)äm* 'make' (Leslau 1979b: 406).

laborer make\PFV-SBJ.3PL.M-OBJ.3SG-M-CSM

'Then they made the monkey a shepherd to look after [lit. to spend the day with] the herd of cows.'

3.3.3 Suppletion

The dataset (see Table 1) contains five suppletive pairs, namely 'wake up' (no. 4), 'dissolve' (no. 11), 'burn' (no. 12), 'finish' (no. 15), and 'die/kill' (no. 31). In these pairs, the noncausal verbs and their causal counterparts are not formally related, as in (14).

(14) a. assowä e?äm.

assäwä ek'-ä-m salt be\_finished\PFV-SBJ.3SG.M-CSM 'The salt is finished.'

b. *färätwe guggurim fäddzännim. färät-we guggurim fäddzä-ä-nn-m*food-DEF all finished \PFV-SBJ.3SG.M-OBJ.3SG.M-CSM
'He finished all the food.'

In all four pairs, the noncausal counterpart could be replaced by the impersonal form of the causal verb, see, e.g., (25) in §5.

# 4 ADDITIONAL DERIVED VERBS FOR THE PAIRS IN TABLE 1

Some of the transitive simplex verbs, particularly in the last third of Table 1, also derive another causal verb, as shown in Table 4.

Table 4 Additional derived causal verbs to the transitive simplex verb in Table 1

No.	GLOSS	CAUSAL SIMPLEX	DERIVED CAUSAL CORRESPONDENT	DERIVATION
25	change	∫äggä <sup>j</sup> äm	a-∫äggä <sup>j</sup> äm	CAUS.DR
16	begin	k'ärräsäm	at'-k'ärräsäm / a-?ärräsäm	CAUS.DR/IDR <sup>18</sup>
15	finish	fädðzäm	at-fäddzäm	CAUS.IDR

<sup>&</sup>lt;sup>18</sup> The indirect causative *at'-k'ärräsäm* 'let begin' and the direct causative *a-?ärräsäm* are free variants. Their occurrence depends on unknown factors; even the same speaker may use them interchangeably.

Dom, Sebastian, Leora Bar-el, Ponsiano Kanijo & Malin Petzell (eds.) 2022. *The noncausal-causal alternation in African languages. Linguistique et Langues Africaines* (special issue) 8(2).

No.	GLOSS	CAUSAL SIMPLEX	DERIVED CAUSAL CORRESPONDENT	DERIVATION
24	connect	gätt'ämäm	ad-gätt'ämäm	CAUS.IDR
26	gather	s <del>i</del> bässäbäm	as-s <del>i</del> bässäbäm	CAUS.IDR
27	open	käffätäm	at-käffätäm	CAUS.IDR
28	break	säbbäräm	as-säbbäräm	CAUS.IDR
30	split	fäkk'am	at-fäkk'am	CAUS.IDR
31	die/kill	k'ätt'ä <sup>j</sup> äm	at'-k'ätt'ä <sup>j</sup> äm	CAUS.IDR

Except 'change' (no. 25) and partly also 'begin' (no. 16), which occur in the direct causative derivation marked by the prefix *a*- (plus specific templates), all other additional causal verbs are in the indirect causative marked by the prefix *at*- (and its allomorphs) plus specific templates (see §2). The indirect causative derivation adds a new causer as subject, which instigates or facilitates the verbal action, as in (15c) and (16b). In contrast, the direct causative derivation increases the valence of an intransitive verb by adding a new agentive subject, which is actively involved in the verbal action, and transfers the subject of the simplex verb to the object position, as in (15a–b).

- (15) a. wəndɨmu sällämäm.
   wändɨmu sälläm-ä-m
   Wendimu.м be(come)\_Muslim\pfv-sbj.3sg.м-csм
   'Wendimu became Muslim.'
  - b. afirgeta jäwəndimu afirgeta jä-wändimu Quran\_teacher GAD-Wendimu.M

asällämmųim. a-sälläm-m<sup>w</sup>-i-m<sup>19</sup> CAUS.DR-be(come) Muslim\PFV-SBJ.3PL.M-OBJ.3SG.M-CSM

'The Quran teacher converted Wendimu to Islam (by making him say the shahada).'

c. *jäwɔndɨmu – junus baʃɨrgeta* jä-wändɨmu junus bä-afirgeta

<sup>&</sup>lt;sup>19</sup> The second- and third-person plural markers express politeness with singular referents.

GAD-Wendimu.M Yunus.M MIL-Quran\_teacher assällämännim. at-sälläm-ä-nn-m CAUS.IDR-be(come)\_Muslim\PFV-SBJ.3SG.M-OBJ.3SG.M-CSM 'As to Wendimu, Yunus instigated him being converted to Islam through the Quran teacher.'

(16) a. junus k'uran wɔ?ira k'ärräsäm. junus k'uran wä-k'ra k'ärräs-ä-m Yunus.M Quran vN-read\JUSS begin\PFV-SBJ.3SG.M-CSM 'Yunus began to read the Quran.'
b. sitti jäjunus k'uran wɔ?ira

υ.	SUU	jujunus	кшин	WJIHU
	sitti	jä-junus	k'uran	wä-k'ra
	Sitti.F	GAD-Yunus.M	Quran	vn-read\juss

at'k'ärräsättum. at-k'ärräs-ätt-u-m CAUS.IDR-begin\PFV-SBJ.3SG.F-OBJ.3SG.M-CSM 'Sitti instigated Yunus to start reading the Quran.'

Thus, the indirect causative increases the valence for one, so that a transitive verb becomes ditransitive by adding a causer subject, while the actual agent, which fulfils the verbal action, is usually not overtly expressed, or, if it occurs, it is transferred to the peripheral object position marked by the instrumental prefix  $b\ddot{a}$ - (15c), or it becomes a primary object, as in (16b).

In contrast to other Ethiosemitic languages, like Amharic (see Meyer 2011b: 1198) or Wolane (Meyer 2006: 74–78), the occurrence of the indirect causative in Muher is less productive and less predictable, as it can only be formed from a limited number of verbs.<sup>20</sup> Moreover, the meaning of the indirect causative derivation is sometimes

<sup>&</sup>lt;sup>20</sup> The reason for the limited occurrence of the indirect causative is not yet clear. It might be a more general feature of Gunnän Gurage, or due to some kind of grammatical restructuring in the Muher grammar of my consultants who only speak it as a heritage language.

included as an optional reading of the direct causative, as in (5) above, or with *a-?ärräsäm* 'make start; let start' (no. 16 in Table 4). Consequently, the indirect causative verb in (16b) could also be exchanged by the direct causative (17) without any observable change in meaning.

(17) sitti jäjunus k'uran wo?ira a?'ärräsättum.
sitti jä-junus k'uran wä-k'ra a-k'ärräs-ätt-u-m
Sitti.F GAD-Yunus.M Quran VN-read\JUSS CAUS.DR-begin\PFV-SBJ.3SG.F-OBJ.3SG.M-CSM
'Sitti instigated Yunus to start reading the Quran.'

In other instances, the direct causative acquired a more specialized meaning than its simplex, as is the case with direct causative a-fäggä<sup>j</sup>äm –simplex fäggä<sup>j</sup>äm 'change' (no. 25 in Table 4) – which has the unpredictable meaning 'exchange (item X for item Y)', as in (18):

(18)	a.	junus	jäβollätt∫ähut		g <sup>w</sup> əttfe	ï ∫äggäennim.
		junus	jä-b <sup>∞</sup> ällätt∫ä-h <sup>∞</sup> t		g <sup>w</sup> ätt∫ä	∫äggä <sup>j</sup> -ä-nn-m
		Yunus.M	GAD-wedding-POS	s.3sg.m	date	change\pfv-sbj.3sg.m-obj.3sg.m-csm
		'Yunus o	changed the dat	e of his	s wedd	ing.'
	b.	sämir	innamhut	bäβi?ι	ıwä	aſäggäennɨm.
		sämir	innam-h <sup>w</sup> t	bä-bi?ı	ıwä	a-Jäggä <sup>j</sup> -ä-nn-m

Samir.M cow-poss.3sg.M MIL-mule CAUS.DR-change\PFV-SBJ.3sg.M-OBJ.3sg.M-CSM 'Samir exchanged his cow for a mule.'

Table 5 shows two derived mediopassive verbs which occur in addition to the basic noncausal/causal verb pair.

Table 5 Additional derived noncausal counterpart

No.	GLOSS	<b>B</b> ASIC PAIR			DERIVATION
		NONCAUSAL	CAUSAL		
1	boil	fännam	afännam	<i>täfännam</i> > 'boil over'	MP
11	dissolve	t'ämmam b <del>i</del> t'äbbät'äm		<i>täbt'äbbät'äm</i> >'be turbid'	MP

The additional mediopassive verbs denote a slightly modified verbal situation compared to the simplex from which they are derived. Thus, *tä-bt'äbbät'äm*, the

mediopassive of *bit'äbbät'äm* 'dissolve' (no. 11 in Table 5), does not simply express the passive reading 'be dissolved', as the basic noncausal verb *t'ämmam* in (19b), but conveys in addition the sense of being not properly dissolved so that the liquid is now lumpy, clotted or turbid (19c–d).

- (19) a.bässobit'äbbät'xumsättfähum.bässobit'äbbät'-h<sup>w</sup>-msättfä-h<sup>w</sup>-mroasted\_barley\_flourdissolve\PFV-SBJ.1SG-CVBdrink\PFV-SBJ.1SG-CSM'I dissolved roasted barley flour (in water) and drank it.'
  - b. assowä iga t'ämmam.
    assäwä iga t'ämma-ä-m
    salt water be\_dissolved\PFV-SBJ.3SG.M-CSM
    'The salt is dissolved in water.'
  - c. k'awawä täbt'äbbät'äm.
    k'awa-wä tä-bt'äbbät'-ä-m
    coffee-DEF MP-dissolve\PFV-SBJ.3SG.M-CSM
    'The coffee (powder) is (still) mixed (with the coffee drink) [i.e. the ground coffee has not yet settled].'
  - d. b<sup>w</sup>otto täbt'äbbät'äm.
    b<sup>w</sup>ätto tä-bt'äbbät'-ä-m
    river MP-dissolve\PFV-SBJ.3SG.M-CSM
    'The river is turbid.'

Note that a specialized meaning is also found with derived mediopassive verbs as one component of the basic noncausal/causal pairs no. 26, 27, 29, and 30 in Table 1. While the mediopassive of 'gather' (no. 26), *täsbässäbäm*, is limited to human subjects, the mediopassive of the remaining three verbs has an additional manner component in which the verbal event occurs, i.e., *täkäffätäm* 'hardly open' (no. 27), *tattf'äm* 'hardly close' (no. 29), and *täfäkk'am* 'split easily' (no. 30). However, not all Muher consultants agreed to the more specialized reading of these mediopassive verbs, but rather consider them a noncausal construction without a known instigator of the verbal event.

# **5 IMPERSONAL**

Verbal derivation (see §3.2) formally marks the grammatical relationship in noncausal/causal verb pairs by changing the valence and voice of one of its members. In addition, Muher frequently makes use of a morphosyntactic construction, the impersonal, which does not affect the argument structure of a verb but which systematically bleaches out the subject and consequently foregrounds the object and its patient role. The impersonal passive is almost regularly formed from any verb with a potential human subject (for an overview, see Biruk 2013). It occurs with simplex verbs, e.g., *arrätf'äm* 'cut' and *färrähäm* 'be patient' in (20), as well as with derived verbs, like the direct causative *abässam* 'bring (i.e., make come)' in (21) and the mediopassive *täkäbbäräm* 'be honored' in (22).

(20)	f <sup>w</sup> ämf <sup>w</sup> ä	arrätſ'ɨm	∫ŧja	juwajtt,	
	f <sup>w</sup> ämf <sup>w</sup> ä	arrät'- <sup>wj</sup> -m	∫ijä	j-bä <sup>j</sup> a- <sup>wj</sup> -i-tt	
	ensete_sprout	cut\pfv-ips-cvb	flower	IPS-eat\IPFV	-IPS-OBJ.3SG.M-CSM
	färrähum		bäsäβ		jisälett.
	färräh- <sup>wj</sup> -m		bä-säb		j-säla- <sup>wj</sup> -i-tt
	be_patient\PFV	-IPS-CVB	MIL-hui	man	IPS-arrive\IPFV-IPS-OBJ.3SG.M-DCM
	'After one h	as cut the ense	te sproi	ut [which i	is growing in bundles from the
	root of an o	ld plant], one e	eats (its	) flower [i	.e. the ripe ensete plant], and
	after one ha	s been patient,	one rea	aches at [b	peing a respected] human.'
	(proverb)				

(21)	k'awa	bäg <sup>w</sup> arra	läkk'ämum	jaβäʃett.		
	k'awa	bä-g <sup>w</sup> arra	läkk'äm- <sup>wj</sup> -m	j-a-bäsa- <sup>wj</sup> -i-tt		
	coffee	MIL-garden	pick\pfv- <b>ips-</b> CVB	IPS-CAUS.DR-come\IPFV-IPS-OBJ.3SG.M-CSM		
	'One brings the coffee (beans) after having picked them up in the garden.					

(22)	ahunna∫	bätſ'äŋŋi	sällem
	ahunna-∫	bä-tʃ'äŋŋä- <sup>wj</sup> -i	sälla- <sup>wj</sup> -i-m
	now-FOC	MIL-beget\pfv-ips-obj.3sg.m[rel]	arrive\pfv-ips-obj.3sg.m-cvb

> täkäbb<sup>w</sup>orim. tä-käbbär-wj-i-m MP-honor\PFV-IPS-OBJ.3SG.M-CSM

'But now, one is honored because [the generation] which one begat has arrived.' [i.e., aged parents start to benefit from their children after they have grown up and can protect or support them]

The impersonal is not a separate conjugation, but an inflectional category, a kind of fourth person, with a dedicated subject marker on the verb, namely the suffixed nonsegmental vocoid -<sup>wj</sup> which triggers the labialization of labial, velar and glottal root consonants in a verb base, and the palatalization of alveolar, velar and glottal consonants base-finally (see Rose 2000: 110–111; Meyer 2019: 232). The impersonal subject suffix attaches to regular conjugational verb bases, but not to the verbal noun. In the perfective, the impersonal subject suffix is in complementary distribution with the personal subject affixes (22), but in the imperfective and jussive conjugation, the impersonal suffix co-occurs with the regular third person prefix  $j(\ddot{a})$ -, as on the clausefinal verbs in (20) and (21). Impersonal verbs only marked by the vocoid (and the third person subject prefixes) are limited to same-subject converbs, as in arrätfim 'one having cut' in (20) or läkk'ämum 'one having picked' in (21). Usually, the impersonal subject marker co-occurs with an object suffix, by default the 3sg.M, as on the transitive verbs juwajtt 'one eats' and jaßäfett 'one brings' in (20) and (21), as well as on the intransitive verbs *jisälett* 'one arrives/reaches' and *täkäbb<sup>w</sup>orim* 'one is honored' in (20) and (22). With transitive verbs, the default 3sg.M object suffix may be replaced by another suffix referring to the actual person in the patient role, e.g., the 3sG.F in (23).

(23) jägärädwe jä-gäräd-we GAD-girl-DEF

oatt∫'äm a-wätt'a-<sup>wj</sup>-m CAUS.DR-take\_out\PFV-IPS-CVB MIL-upper\_door\_beam

bəan<del>ji</del>ßat bä-wan<del>i</del>ibat

ťäkk'ojam.

t'äkk'ä<sup>i\_jw</sup>-ja-m hide\pfV-IPS-OBJ.3SG.F-CSM

'The girl was taken out (lit. one took the girl out) and hidden (lit. one hid her) on the upper door beam.'

The impersonal semantically backgrounds the agentive subject with an obligatory human referent, which is unspecified and not relevant for the verbal event, while the patientive object is foregrounded. With intransitive verbs, such an unspecified subject has the generic reading 'people'.

The impersonal encodes the same function as the mediopassive and noncausal verbs with a human subject, and as such this construction is frequently used instead of the latter two. For the verb pairs in Table 1, the impersonal forms shown in Table 6 are attested. The impersonal verbs in brackets can only be used with assumed human referents and have a metaphorical sense.

ITEM	MEANING	NONCAUSAL	CAUSAL	IMPERSONAL
1	boil	fännam	afännam	[unclear]
2	be cool/cool	gizäggäzäm	agzäggäzäm	
3	dry	ťärrä?äm	at'ärrä?äm	
				at'ärrä? <sup>w</sup> im
4	wake up	tänässam	k'isäkk'äsäm	tänä∬em
				k" <sup>w</sup> ʊʃäkk" <sup>w</sup> äʃim
5	go out	wätt'am	əatt'am	wättf'em
				oattf'em
6	sink	b <sup>w</sup> ännam	ab <sup>w</sup> ännam	(b <sup>w</sup> ännem 'people disappeard')
				awännem
7	learn/teach	tämaräm	atmäräm	tam <sup>w</sup> arim
				atm <sup>w</sup> ärim
8	melt	k'ällät'äm	a?ällät'äm	[unclear]
9	stop	k' <sup>w</sup> ämäm	a? <sup>w</sup> ämäm	k' <sup>w</sup> äm <sup>w</sup> im
				a? <sup>w</sup> äm <sup>w</sup> im

Table 6 Additional impersonal forms to basic verb pairs in Table 1

Dom, Sebastian, Leora Bar-el, Ponsiano Kanijo & Malin Petzell (eds.) 2022. The noncausal-causal alternation in African languages. Linguistique et Langues Africaines (special issue) 8(2).

ITEM	MEANING	NONCAUSAL	CAUSAL	Impersonal
10	turn (around)	zəaräm	azəaräm	zəarim
				azəarim
11	dissolve	t'ämmam	bit'äbbät'äm	
				b <sup>w</sup> utf'äbb <sup>w</sup> ätf'im
12	burn	näddädäm	тä <del>ӈ</del> äт	( <i>nädckäckim</i> 'people are angry')
				mäggojm
13	destroy	färräsäm	afärräsäm	
				af <sup>∞</sup> ärrä∫im
14	fill	männam	männam	m <sup>w</sup> ännem
15	finish	e?äm	fäddzäm	( <i>e?<sup>w</sup>im</i> 'people are done')
				f™äd∂zim
16	begin		k'ärräsäm	k' <sup>w</sup> ärräſim
17a	disperse	täbrattf'äm	bratt∫'äm	(täwrattfim 'people scattered')
				b <sup>w</sup> urattf'im
17b	widen	bättätäm	abättätäm	
				awättfätfim
18	roll	inkiballäläm	ank <del>i</del> balläläm	
				ank <sup>w</sup> uwallälim
19	develop	täla?äm	atlä?äm	(täla? <sup>w</sup> im 'people grew up')
				atlä? <sup>w</sup> im
20	get lost/lose	k'ärräm	a?ärräm	<i>k<sup>w</sup>ärrim</i>
				[no data]
21	rise/raise	tänässam	nässam	tänä∬em
				nä∬em
22	improve	alläfäm		
23	rock	ink'ijäkk'ä <sup>j</sup> äm	ank'ijäkk'ä <sup>j</sup> äm	
24	connect		gätt'ämäm	gätt'äm <sup>w</sup> im
25	change		∫äggä <sup>j</sup> äm	∫äggojm
26	gather	täsbässäbäm	sɨbässäbäm	(täswässäwim 'people gathered')
				suwässäwim
27	open	täkäffätäm	käffätäm	
				käff™ät∫im

Dom, Sebastian, Leora Bar-el, Ponsiano Kanijo & Malin Petzell (eds.) 2022. *The noncausal-causal alternation in African languages. Linguistique et Langues Africaines* (special issue) 8(2).

ITEM	MEANING	NONCAUSAL	CAUSAL	IMPERSONAL
28	break	täsäbbäräm	säbbäräm	
				säbb <sup>w</sup> ärim
29	close	tatt∫'äm	attʃ'äm	
				attʃ'im
30	split	täfäkk'am	fäkk'am	
				fäkk' <sup>w</sup> em
31	die/kill	m <sup>w</sup> ätäm	k'ätt'ä <sup>j</sup> äm	m <sup>w</sup> ätfim
				k'ätt'ojm

Regarding the verb pairs for 'boil' (no. 1) and 'melt' (no. 8) no impersonal could be elicited because my consultants do not use them in their speech (for 'boil' see also fn. 9). Table 6 also shows that the three verbs without a noncausal counterpart, namely 'begin' (no. 16), 'connect' (no. 24), and 'change' (no. 25), employ the impersonal to describe events with a foregrounded patientive object, i.e., functionally they represent a morphosyntactic alternative to the noncausal derivation. Similarly, the verbs whose noncausal mediopassive derivation acquired a rather specialized meaning, i.e., 'gather' (no. 26), 'open' (no. 27), 'close' (no. 29), and 'split' (no. 30), usually employ the impersonal of the transitive verb, rather than their derived mediopassive counterpart, to express events with a foregrounded patientive object.

Generally, a noncausal verb differs from the verb in the impersonal with regard to the conceptualization of the situation. The impersonal typically conveys a reading with a foregrounded patient that is affected by an implied but unspecified human instigator (24b, d), while the noncausal verb lacks such an opaque instigator (24c, d).

(24)	a.	rawda	tikäça	att'äßättum.	
		rawda	tikä-h <sup>j</sup> a	att'äb-ätt-u-m	
		Rawda.F	child-poss.3sg.f	wash\pfv-sbj.3sg.f-obj.3sg.m-csm	
		'Rawda	da washed her child.'		

b.	jä-rawda	tikä	att'äwim.
	jä-rawda	tikä	attäb- <sup>wj</sup> -i-m
	GAD-Rawda.F	child	wash\pfv-ips-obj.3sg.m-csm
	'Rawda's child	is washed	(i.e., one washed Rawda's child).'

c.	jä-ra	iwda	t <del>i</del> kä	tatt'äßäm.	
	jä-rav	wda	tikä	t(ä)-att'äb-ä-	m
	GAD-I	Rawda.F	child	MP <b>-wash</b> \PFV	-SBJ.3SG.F-CSM
	'Rav	vda's chil	d is wa	shed / wash	ned himself.'
d.	sin	att'äwim	•		/ *tatt'äβäm.
	sin	attäb- <sup>wj</sup> -i-i	m		t(ä)-att'äb-ä-m
	cup	wash\pfv-	IPS-OBJ.3	SG.M-CSM	MP-wash\pfv-sbj.3sg.f-csm

'(The) cups have been washed.'

With the impersonal in (24b), it is evident that the child did not wash himself but that someone washed him. In (24c), in contrast, the mediopassive verb has an ambiguous reading. It is usually implied that the child washed himself (reflexive reading), but also another person could have washed him (passive reading). With a non-human entity as patientive object, as in (24d), only the impersonal can be used to foreground it (passive-like reading), whereas the mediopassive would yield an unacceptable expression (at least for some speakers).<sup>21</sup>

The same phenomenon can also be observed with the suppletive pairs 'wake up' (no. 4) 'dissolve' (no. 11), 'burn' (no. 11), 'finish' (no. 15), and 'die/kill' (no. 31). When the reading of the noncausal verb, e.g., *e?äm* 'be finished' (14a) or  $m^w \ddot{a}t\ddot{a}m$  'die' (26), is contrasted with the impersonal of its causal counterpart, i.e.,  $f^w \partial dg im$  'one finished' (25) from  $f\ddot{a}dg\ddot{a}m$  'finish' and  $k'\ddot{a}tt'ojm$  'one killed' from  $k\ddot{a}tt'\ddot{a}^j\ddot{a}m$  'kill' (26), then the impersonal clearly supposes that there is a person who finished the food or the salt, but the identity of this person is not of relevance for the discourse. With the noncausal verb, such an interpretation is lacking.

<sup>&</sup>lt;sup>21</sup> Some Muher speakers accept the mediopassive of 'wash' with nonhuman nouns, when there is no information about the instigator of the event, i.e., whether the cups have been washed by a person or, for instance, by the rain.

(25)	∫ärätwe	/ assɔwäwe	f™ɔd&im.	
	∫ärät-we	assäwä-we	fäd&ä- <sup>wj</sup> -i-m	
	food-def	salt-def	finish\pfv-sbj.3sg.m-obj.3sg.m-csm	
	'The food/salt is finished (lit. one finished the food/salt).'			

(26)	m <sup>w</sup> ətäm	vs.	k'ätt'äɛm	vs.	k'ätt'ojm
	m <sup>w</sup> ät-ä-m		k'ätt'ä <sup>j</sup> -ä-m		k'ätt'ä <sup>j</sup> - <sup>wj</sup> -i-m
	die\pfv-sbj.3sg.m-csm		kill\pfv-sbj.3sg.m-csm		kill\pfv-ips-obj.3sg.m-csm
	'he died'		'he killed'		'he was killed; one killed
					him'

Thus, the difference between a noncausal verb and the impersonal has mainly to do with a possible or hypothetical instigator of the expressed verbal event. Although the two constructions differ formally, functionally they both express a verbal event with a foregrounded patientive object. Moreover, the impersonal is preferred in this type of construction and seems to be in the process of superseding the mediopassive derivation, which in turn is often no more available as verbal derivation of a causal verb or acquired a more specialized meaning.

# **6** CONCLUSION

Out of the 31 noncausal/causal pairs in Haspelmath's (1993) list, only 27 occur in Muher. Four verb pairs from Haspelmath lack a noncausal verb in Muher, and for one verb pair the causal member is unattested in Muher.

For the formation of noncausal/causal pairs, the directed alternation prevails in Muher. It amounts to about two-third of the data. Furthermore, the causative strategy is more frequent than the anticausative strategy. The latter seems to be in the process of being replaced by a functional similar morphosyntactic verb form, the impersonal. The impersonal is currently the most productive way to express verbal events with a foregrounded patientive constituent, while the mediopassive has acquired a more specialized semantics in many cases. In directed pairs, the derived causal verb is usually marked by the direct causative prefix a-, and the derived noncausal verb by the mediopassive prefix  $t\ddot{a}$ -.

Within the smaller set of nondirected alternations, only one labile verb exists: *männam* 'fill', whereas suppletive and equipollent pairs are almost equally frequent. The two verbs in the equipollent pairs contain derivational prefixes, either mediopassive *tä*- vs. direct and indirect causative *a*- and *at*-, or the nonproductive intransitive and transitive derivations marked by the prefixes *in*- and *an*-. In addition, equipollent pairs marked by light verbs (*bä<sup>j</sup>äm* 'say' for the noncausal and *amäŋŋäm* 'make' for the causal correspondent) express the causal alternation with complex predicates, which are not included in the Muher translational equivalents of the original 31-item list.

In addition to the basic noncausal/causal alternation, a number of verbs have secondary correspondents, which for causal expressions are typically derived by the indirect causative marked by *at*-, while a secondary noncausal correspondent usually occurs in the mediopassive derivation.

# **ABBREVIATIONS**

1, 2, 3	1st, 2nd, 3rd person or root consonant/radical
CAUS	Causative
CAUS.DR	Direct causative
CAUS.IDR	Indirect causative
CVB	Converb
CSM	Clausal status marker
DEF	Definite
DIR	Directional
F	Feminine
FOC	Focus
GAD	Genitive, accusative, dative marker
IPFV	Imperfective
IPS	Impersonal passive
INTR	Intransitive
JUSS	Jussive
Μ	Masculine
MIL	Malefactive, instrumental, locative marker
MP	Mediopassive

OBJ	Object
PFV	Perfective
PL	Plural
POSS	Possessive
REL	Relative clause
SG	Singular
SBJ	Subject
SM	Singular masculine
TR	Transitive
VN	Verbal noun

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### **R**EFERENCES

- Aregawi, Maru. 2018. *Descriptive grammar of Muher*. Addis Ababa: Addis Ababa University (PhD Dissertation).
- Baye, Yimam. 1999. Root extension and root reduction in Amharic. *Ethiopian Journal* of Language and Literature 9. 56–88.
- Biruk, Kediru. 2013. Forms and functions of the impersonal passive in Muher. Addis Ababa: Addis Ababa University (MA Thesis).
- Creissels, Denis. 2022. The noncausal/causal alternation and the limits of ambitransitivity in a sample of sub-Saharan languages. *Linguistique et Langues Africaines*.
- Goldenberg, Gideon. 1977. The Semitic languages of Ethiopia and their classification. Bulletin of the School of Oriental and African Studies 40. 461–507.
- Grünthal, Riho & Johanna Nichols. 2016. Transitivizing–detransitivizing typology and language family history. *Lingua Posnaniensis* 58(2). 11–31.
- Haspelmath, Martin. 1993. More on the typology of inchoative/causative verb alternations. In Bernard Comrie & Maria Polinsky (eds.), *Causatives and transitivity*, 87–120. Amsterdam: John Benjamins.
- Haspelmath, Martin, Andreea Calude, Michael Spagnol, Heiko Narrog & Elif Bamyaci. 2014. Coding causal-noncausal verb alternations: a form-frequency correspondence explanation. *Journal of Linguistics* 50(3). 587–625.
- Hetzron, Robert. 1972. Ethiopian Semitic: studies in classification. Manchester: Manchester University Press.
- Hetzron, Robert. 1977. The Gunnän-Gurage languages. Napoli: Istituto Orientale di Napoli.

- Hudson, Grover. 2007. North and South Ethiopian Semitic. In Rainer M. Voigt (ed.), "From beyond the Mediterranean" – Akten des 7. internationalen Semitohamitistenkongresses (VII. ISHaK), Berlin 13. bis 15. September 2004, 339– 348. Aachen: Shaker.
- Hudson, Grover. 2013. Northeast African Semitic: lexical comparisons and analysis. Wiesbaden: Harrassowitz.
- Huehnergard, John & Na'ama Pat-El (eds.). 2019. *The Semitic languages*. 2nd edn. London: Routledge.
- Leslau, Wolf. 1959. Taboo expressions in Ethiopia. American Anthropologist 61(1). 105–108.
- Leslau, Wolf. 1979a. *Etymological dictionary of Gurage (Ethiopic) I.* Vol. 1: individual dictionaries. Wiesbaden: Harrassowitz.
- Leslau, Wolf. 1979b. *Etymological dictionary of Gurage (Ethiopic) III*. Vol. 3: etymological section. Wiesbaden: Harrassowitz.
- Leslau, Wolf. 1981. Ethiopians speak: studies in cultural background. Part IV: Muher. Wiesbaden: Harrassowitz.
- Mengistu, Amberber. 2010. The structure of the light verb construction in Amharic. In Amberber Mengistu, Brett Baker & Mark Harvey (eds.), *Complex predicates: cross-linguistic perspectives on event structure*, 291–318. Cambridge: Cambridge University Press.
- Meyer, Ronny. 2006. Wolane: descriptive grammar of an East Gurage language (Ethiosemitic). Köln: Rüdiger Köppe.
- Meyer, Ronny. 2009. The quotative verb in Ethiosemitic languages and Oromo. In Joachim Crass & Ronny Meyer (eds.), *Language contact and language change in Ethiopia*, 17–42. Köln: Rüdiger Köppe.
- Meyer, Ronny. 2010. The use of Muher demonstratives for references in space and discourse. *Afrika und Übersee* 91. 161–202.
- Meyer, Ronny. 2011a. Gurage. In Stefan Weninger (ed.), *The Semitic languages: an international handbook*, 1220–1257. Berlin: De Gruyter Mouton.
- Meyer, Ronny. 2011b. Amharic. In Stefan Weninger (ed.), *The Semitic languages: an international handbook*, 1178–1212. Berlin: De Gruyter Mouton.
- Meyer, Ronny. 2014. Finiteness in Gurage languages. In Ronny Meyer, Yvonne Treis & Azeb Amha (eds.), *Explorations in Ethiopian linguistics: complex predicates, finiteness and interrogativity*, 225–258. Wiesbaden: Harrassowitz.
- Meyer, Ronny. 2016a. Aspect and tense in Ethiosemitic languages. In Lutz Edzard (ed.), *The morpho-syntactic and lexical encoding of tense and aspect in Semitic*, 159–239. Wiesbaden: Harrassowitz.
- Meyer, Ronny. 2016b. Emergence of tense in Ethio-Semitic. In Ronny Meyer & Lutz Edzard (eds.), *Time in languages of the Horn of Africa*, 179–236. Wiesbaden: Harrassowitz.
- Meyer, Ronny. 2019. Gurage (Muher). In John Huehnergard & Na'ama Pat-El (eds.), *The Semitic languages*, 227–256. 2nd edn. London: Routledge.
- Meyer, Ronny & H. Ekkehard Wolff. 2019. Afroasiatic linguistic features and typology. In H. Ekkehard Wolff (ed.), *The Cambridge handbook of African Linguistics*, 246–325. Cambridge: Cambridge University Press.

- Nichols, Johanna, David A. Peterson & Jonathan Barnes. 2004. Transitivizing and detransitivizing languages. *Linguistic Typology* 8. 149–211.
- Office of the Population Census Commission. 2008a. *The 2007 Population and Housing Census of Ethiopia: statistical report at country level*. Addis Ababa: Central Statistics Agency, Population Census Commission. https://www.statsethiopia.gov.et/wp-content/uploads/2019/06/National Statistical.pdf. (3 May, 2022).
- Office of the Population Census Commission. 2008b. *The 2007 Population and Housing Census of Ethiopia: statistical report for Southern Nations, Nationalities and Peoples' Region. Part I: population size and characteristics*. Addis Ababa: Central Statistics Agency, Population Census Commission. https://www.statsethiopia.gov.et/wp-content/uploads/2019/06/Statistical SNNPR.pdf. (3 May, 2022).
- Rose, Sharon. 2000. Epenthesis positioning and syllable contact in Chaha. *Phonology* 17(3). 397–425.
- Wakasa, Motomichi. 2014. Transitivity (non-causative/inchoative vs. causative verb) pairs in Amharic. The World Atlas of Transitivity Pairs (WATP). https://watp.ninjal.ac.jp/static/pdf/Transitivity%20pairs-Amharic-20140707.pdf. (15 January, 2022).