# Anne Kruijt\* The use of the ablative clitic in locative phrases in Iraqw, a Cushitic language of Tanzania

https://doi.org/10.1515/jall-2018-0009

**Abstract:** This paper examines the use of the ablative case clitic in locative phrases in Iraqw, a South Cushitic language of Tanzania. In the typological classification of locative marker syncretisms, Iraqw has been classified as a language with a Source=Location≠ Goal pattern. This pattern is extremely rare in languages of the world and has been argued to be unattainable. The Iraqw ablative case clitic has been reported as both source and location marker. New data shows that the directional case clitic, a goal marker, appears on locative constructions as well, but that it is used to express purpose rather than location. The data also shows that the ablative case clitic is found mainly in locational clauses with a main verb with a durative aspect. Based on this, I argue that in locative constructions, the ablative clitic expresses duration rather than location and I propose the reanalysis of the ablative marker in locative phrases as a durational marker. The notion of location does not need to be expressed overtly, but is a zero-marker. Therefore, the rare Source=Location≠ Goal pattern is no longer valid for Iraqw, and instead I propose the pattern Source≠ Location≠ Goal, which is common in languages of the world.

Keywords: Iraqw, source, ablative case, location, spatial domain

### **1** Introduction

This article discusses the ablative clitic and its use in locative constructions in Iraqw, a South-Cushitic language of Tanzania. Iraqw is spoken by roughly 500.000 people in the northern parts of Tanzania and is spoken by all generations of the Iraqw people (Mous 1992). Since Swahili is the dominant language in the region and Iraqw is relatively small, there is only a limited amount of literature available in and on the language. Iraqw has two grammars (Nordbustad 1988; Mous 1992), and some religious texts (The Bible Society of Tanzania 1995) and collections of traditional stories in the language

\*Corresponding author: Anne Kruijt, University of Verona, Verona, Italy,

E-mail: annekruijt@hotmail.com

itself (Berger and Kiessling 1998; Mous and Sanka 2008). There are multiple orthographies available for the language, though very few speakers use them actively. The main topic of this article is the use of Iraqw adverbial clitics in locative constructions, with special focus on the ablative clitic. According to the existing grammars (Nordbustad 1988; Mous 1992), the Iraqw ablative clitic is used to express both location and source. Goal information, on the other hand, is expressed by the directional clitic. Based on these sources, Iraqw is reported to have a locative marker syncretism of the pattern Source=Location≠ Goal (Creissels 2006), which means that the same marker is used to express source and location in contrast to a distinct goal marker. This pattern has been proven by typological research (Blake 1977; Creissels 2006; Noonan 2008; Pantcheva 2010) to be extremely rare in languages of the world, and has even been argued to be an unattainable linguistic pattern. In order to account for the occurrence of this unusual pattern in Iraqw, this article re-examines the use of the adverbial clitics in locative phrases and presents new data collected during a two-month period in the field. The data was collected in the village of Kwermusl, located in the Mbulu region of the Rift Plateau, and was gathered through elicitation, translation tasks, a storyboard and other visual tools. The main consultant was a woman, who is a native speaker of Iraqw and is also fluent in Swahili and English. The data was checked with numerous other consultants of both sexes and in the age range of  $18-65^1$ . Additional data stems from a corpus compiled from various secular texts (Berger and Kiessling 1998; Mous 1992: 299-359; Mous and Sanka 2008). The corpus has been used to find new contexts of use, has allowed for an analysis of the frequencies of constructions, and provides external validation for the elicited data. The entire corpus is composed of roughly 83.000 words and contains 114 different locative constructions. This article is structured in the following manner. Section 2 introduces the Iraqw adverbial clitics and discusses their use, semantics and syntactic behaviour. In Section 3, the syncretism patterns of locative markers are examined both from a typological perspective and for Iraqw in particular. In Section 4, locative constructions in Iraqw are discussed and the use of the directional and ablative clitic in these types of constructions is examined in detail. Finally, there is a summary of the data and a discussion of the implications of the data for the typological classification of Iraqw locative markers.

**<sup>1</sup>** This article could not have been written without Basilisa Hhao, my main language consultant, whose dedication and patience made this research possible. I am also very grateful to Ephraim Neema, who opened his house to me, and the rest of the Kwermusl community for their kindness, acceptance, and support during my research.

# 2 Adverbial clitics

To allow for a proper understanding of the data, it is necessary to first discuss the semantics and syntactic properties of the Iraqw adverbial clitics. Throughout this article I will use the term "adverbial clitics", while the same particles are referred to as "adverbial case clitics" by Mous (1992: 102–112) and "locative particles" by Nordbustad (1988: 194). Iraqw has, in total, four of these adverbial clitics. They are the directional, ablative, instrumental and the reason clitic. Their labels are, for the most part, self-explanatory. The directional clitic =**i** expresses the goal of a motion (1a), whereas the ablative clitic =**wa** indicates the source of a movement (1b). The instrumental clitic =**(a)r** indicates the instrument with which an action is performed (1c). The reason clitic =**sa** generally indicates a reason or a purpose (1d), but has fallen mostly out of use these days.

- (1) a. **/ameeni i hi'i<m>iit dír yaeé-r=i alé**<sup>2</sup> woman SBJ.3 walk<DUR>:3SG.F place:CON river-F=DIR RESPRO 'The woman walks to the river.'
  - b. naxés ba'ari ni-na bará sla/a-tá=wa ti'it well bees PL-PST in:CON bush-F1=ABL appear:3SG.F 'Then bees appeared from the bush.'
  - c. **dooslitamo /ayto'o ga-na doósl kurmó=r alé** farmer maize OBJ.3.F-PST dig:3SG.M hoe=INS RESPRO 'The farmer dug the maize with a hoe.'
  - d. **hhawaata i-na hikwá=sa daqay** man SBJ.3-PST cattle=REAS go:3SG.M 'The man went for (to get) the cattle.'

For this article only the directional and the ablative clitic are of interest, but it is important to realize that they belong to a larger set of clitics, which behave in the same way syntactically. To properly understand how these particles function within a clause, it is necessary to discuss both the term "adverbial clitic" and the syntactic properties that this entails.

Firstly, the term "adverbial". This term is used, because the particles occur in similar environments as the Iraqw verbal adverbs (Mous 1992: 117, 210–217). There are two positions in the clause where verbal adverbs and noun phrases marked with an adverbial clitic can occur. The first is inside the verbal complex. The Iraqw

**<sup>2</sup>** Iraqw orthography is for the most part similar to the symbols used by the International Phonetic Alphabet (IPA). However, there are four exceptions to this: sl [4],  $hh [\hbar]$ , / [S], and tl [t4].

verbal complex consists of a selector and a main verb. Selector is the term used for Iraqw copulas, which are present in basically every Iraqw sentence. A variety of grammatical piece of information e.g. argument, aspect and mood (Mous 1992: 123–154; Mous 2015) can be marked on the selectors. The first position of adverbial items is within the verbal complex, meaning that the marked phrase must occur after the selector and in front of the main verb. In example (2a) the noun phrase with the ablative clitic **tsiindówa** 'from the evening on', occurs after the selector **guna** and before the main verb **amohhe'eés** 'to prepare'. In (2b) the noun phrase marked with the directional clitic **yaeéri** 'to the river' occurs in the same position. This position is identical to the one of a verbal adverb, like **ada** 'quickly' in example (2c).

(2)a. murú /ayma Joseph gu-na tsiindó=wa amohhe'eés food Joseph OBJ.3.M-PST evening=ABL prepare:3SG.M 'From the evening on Joseph prepared the food.' b. /ameeni i dír vaeé-r=i hi'i<m>iit SBI.3 place:CON river-F=DIR walk<DUR>:3SG.F woman 'The woman walks to the river.' c. dooslusmo qaymo ga-na adá doósl fields OBJ.3.F-PST quickly cultivate:3SG.M farmer

'The farmer cultivated the fields quickly.'

The second adverbial position is after the verbal complex, which means that the adverb or noun phrase must occur after the main verb. In these cases, the adverb or noun phrase must be followed by the resumptive pronoun **alé**. Example (3a) illustrates this with the ablative marked noun phrase **dír qatuúwa** 'from the bedroom'. Note that the noun phrase occurs after the main verb **hingeés** 'to move' and is followed by the resumptive pronoun **alé**. In (3b) the same pattern with a noun phrase marked with the directional clitic occurs. Note that (3b) is identical to (2b) in meaning, but simply places the noun phrase in a different position in the clause. The same goes for a verbal adverb in this position, as in (3c).

(3) a. kitaangw u-na hingeés dír gat-uú=wa alé OBJ.M-PST move:1SG place:CON bedroom-M=ABL RESPRO chair ay gawá muundí DIR top:CON courtvard 'I moved the chair from the bedroom to the courtyard.' b. /ameeni i hi'i<m>iit dír vaeé-r=i alé woman SBJ.3 walk<DUR>:3SG.F place:CON river-F=DIR RESPRO 'The woman walks to the river.'

c. **dooslusmo qaymo ga-na doósl adá alé** farmer fields OBJ.3.F-PST cultivate:3SG.M quickly RESPRO 'The farmer cultivated the fields quickly.'

Note also that in (3a) the unmarked locative noun phrase **ay gawá muundí** 'to the courtyard' is not followed by the resumptive pronoun despite occurring in a position after the main verb. Unmarked noun phrases occur in different positions from phrases marked with adverbial clitics, and can generally occur in relatively free order outside the verbal complex. Their position in the clause is mainly determined by pragmatics (for detailed description of the different positions and their implications see Mous 1992: 235–275). Phrases with adverbial clitics however are tied to the two positions given above and are ungrammatical outside of them. They cannot occur in front of the verbal complex (4a) nor can they occur after the verbal complex without the resumptive pronoun (4b).

- (4) a. \*murú /ayma Joseph tsiindó=wa gu-na amohhe'eés food Joseph evening=ABL OBJ.3.M-PST prepare:3SG.M
   'From the evening on Joseph prepared the food.'
  - b. **\* /ameeni i hi'i<m>iit dír yaeé-r=i** woman SBJ.3 walk<DUR>3SG.F place:CON river-F=DIR 'The woman walks to the river.'

This indicates that the adverbial clitics are closely tied to the verbal complex and that they influence the syntactic properties of the noun phrases that they mark. A noun phrase marked with an adverbial clitic cannot function as a core argument of the clause and cannot agree with the selector. Compare (5a) and (5b).

(5) a. i /aymár sla'-ír SBJ.3 eat:CON want-3PL 'They want to eat.'
b. i /aymá-r=wa sla'-ír OBJ.1SG/2SG.F eat-F=ABL want-3PL 'They want to eat me/you (2SG.F).' \*'They want to eat.'

In (5a) the nominalised verb **/aymár** 'to eat' occurs inside the verbal complex but is not marked with any adverbial clitic. The nominalised verb functions as the direct object of the verb **sla'** 'to want'. In (5b) the nominalised verb is marked with the ablative clitic, making it unavailable to take an argument role in the clause. As a result an additional argument must be added in order to take the

DE GRUYTER MOUTON

vacant direct object role. The selector **i** can either be interpreted as a third person subject, as in (5a), or as a first person singular or second person singular feminine object. The second option has to be chosen in (5b) as it is the only way to fill the direct object role, which can no longer be filled by the nominalised verb. This renders the meaning of (5a) unobtainable.

Secondly, the term "clitic" and the removal of the term "case" which is most commonly used for these particles (Mous 1992) must be discussed. The term "case" is used by linguists to label a broad range of items, but is most commonly interpreted as an inflectional category system (Haspelmath 2009: 505). Haspelmath (2009) points out that the main function of case is "marking dependent nouns for the type of relation they bear to their heads" (Blake 1994: 1 as cited in Haspelmath 2009) and notes that this function is also often fulfilled by adpositions. Iraqw uses its adverbial clitics to establish such relationships, and uses them to signal four semantic roles: reason, instrumental, directional, and ablative. The trouble with using the term "case" has to do with the attachment of the adverbial clitics. The clitics are closely tied to the verb and attach to a noun phrase through a gender linker, but they attach not necessarily to the noun phrase which is bound to the verb. Whenever the object is foregrounded, it moves out of the domain of the adverbial clitic, which must then attach to another host. For example, in (6) the directional clitic is placed on the noun **sumu** 'poison' rather than on **buura** 'beer', which is the actual goal of the action.

(6) buura a-n sum=i qaas-áan
 beer OBJ.F-EXPEC poison=DIR put-1PL
 'We'll put poison into the beer.'
 (Mous 1992: 246)

Dryer (2013) points out that the major difference between case affixes and adpositions is that the former must phonologically attach to nouns, whereas the latter are separate words that combine syntactically with noun phrases. Adpositional clitics need not attach to a noun, but their attachment is determined syntactically. This is exactly the behaviour the Iraqw adverbial clitics exhibit. Example (6) already illustrated that their attachment to the noun is determined by syntax, and similarly they are known to attach to the end of the noun phrase, not to the noun itself. The adverbial clitics can, for example, attach to a possessive (7a) or a relative clause (7b).

(7) a. **sleé ga-na dír inslawamo-wós=wa sláy** cow OBJ.3.F-PST place:CON neighbour-3SG.POSS=ABL get:3SG.M 'He got a cow from his neighbour.' b. **iimpirmo u-na taataáhh dír na/ay-dá'** ball OBJ.M-PST take:1SG place:CON child-DEM4 **gwaa fiís=wa alé** OBJ.3.M:PFV steal=ABL RESPRO 'I took the ball from the child who stole it.'

It might therefore be concluded that the Iraqw adverbial clitics are postpositional clitics that mark the type of relationship they have with the head verb. Languages with postpositional clitics are quite common among languages of the world (e.g. Japanese, Quechua). They are less common on the African continent, but do occur in East Africa (e.g. Sandawe (Khoisan), Dime (Omotic), Nara (Nilo-Saharan) (Dryer 2013).

This concludes the discussion of the class of Iraqw adverbial clitics and its syntactic properties and their role in a clause. The adverbial clitics share syntactic properties, but diverge in their semantics and usages in the clause. For this article, only the ablative and the directional clitic are of interest, and therefore the other two will not be discussed further.

### **3** Locative marker syncretism

This section focuses on locative constructions, both in the typological perspective and for Iraqw in particular. As was mentioned in the introduction, Iraqw locative constructions have typologically been reported to have a rare syncretism of location and source markers. The expression of location, goal and source lies at the very basis of the expression of motion events and forms an important part of the spatial domain. Languages differ in the way that they encode these three concepts. Each concept can either be encoded individually or can be conflated with one or both of the other two concepts. There are in total five different patterns logically available (8).

(8)	a.	Location	=	Goal	= Source
	b.	Location	≠	Goal	≠ Source
	c.	Location	=	Goal	≠ Source
	d.	Location	≠	Goal	= Source
	e.	Location	=	Source	≠ Goal
	(Pantcheva 2010: 2)				

Some of the patterns in (8) are more common than others. Typological research on adpositions and case affixes (Blake 1977<sup>3</sup>; Creissels 2006; Noonan 2008<sup>4</sup>; Pantcheva  $2010^5$ ) suggests that the first three patterns (8a/b/c) are much more common than the last two (8d/e). These findings give typological support to the generalization made by Andrews (1985), who claimed that the last two patterns are completely unattested in languages of the world. The absence of pattern (8d), which has one marker to express both source and goal and another for location, can be quite easily explained. Such a pattern would attempt to use the same marker to express opposite meanings, making it pragmatically unacceptable. On the other hand, pattern (8e), which groups source with location in opposition to goal, is pragmatically perfectly fine, yet is rarely attested. Only for Dinka (Andersen 2002) and Iraqw (Mous 1992) has the pattern Location=Source≠ Goal been documented, and so it has been suggested that this pattern might be specific to North East African languages (Creissels 2006: 22). It has been suggested that the pattern is commonly overlooked, rather than not documented, in synchronic and diachronic literature by Narrog (2010: 246), but most researchers argue that there are syntactic reasons for not finding pattern (8e).

It is generally accepted that directional expressions consist of minimally two heads: a Path head and a Place head. The Path head is commonly believed to dominate the Place head resulting in the basic structure as illustrated in the diagram in (9). This is supported by literature (e.g. Koopman 2000; Riemsdijk and Huybregts 2002; Den Dikken 2010; Svenonius 2010) mainly based on Jackendoff (1983) and his conceptual structure in which the PATH function dominates the PLACE function.

(9) Path Place DP

The postulation of the Place position within the Path position is supported by morphological data from a variety of languages (Pantcheva 2010), and this syntactic structure is mirrored in the semantic representation of spatial constructions as well. Zwarts (2005) argues that source and goal prepositions always

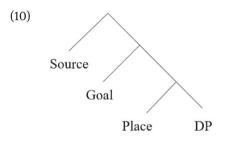
<sup>3</sup> Based on sample of 115 Australian languages.

<sup>4</sup> Based on sample of 76 Tibeto-Burman languages.

<sup>5</sup> Based on sample of 53 languages of 22 different genera, and two isolates.

demand a location as semantic complement. In the case of source prepositions this is the starting point and for goal markers this is the end point. Based on this convergence of syntactic and semantic theories on the hierarchy of Path and Place, I will assume the hierarchy as postulated in diagram (9).

Deriving from this basic hierarchy, a further split in the structure has been suggested (e.g. Pantcheva 2010; Nam 2004). This split is the postulation of a Source head that dominates a Goal head, resulting in the diagram in (10), which results in a syntactic asymmetry between the goal and source encoding. This is partly based on the well-known bias towards expressing goal over source. This preference is also present in non-linguistic cognitive patterns attested in research on the non-linguistic interpretation of motion events both by adults and children (e.g. Woodward 1998; Lakusta and Landau 2005).



It must be noted that the Goal-Source hierarchy is not without its critics (e.g. Gehrke 2007). However, this hierarchy does provide an explanation for the rarity or even absence of pattern (8e), something the Path-Place hierarchy does not, therefore fitting the empirical data better. The implications of the structure in (10) are, that if that pattern was to be lexicalized, the syncretism patterns of (8a/b/c/d) would be perfectly possible, whereas the pattern of (8e) would be inaccessible. The pattern of Source=Location≠ Goal (8e) faces the problem of the intervening Goal structure, which results in violations of the lexicalization rules which block the structure from being expressed. I would like to refer readers to Pantcheva (2010) for a full syntactic account of the lexicalization processes, as they fall outside the scope of this article. It can be concluded that there are syntactic barriers that bar source markers and location markers from merging without including the goal marker.

This account makes the Iraqw case and its reported pattern (8e) all the more strange. The Source=Location $\neq$  Goal pattern which is reported for Iraqw by typological researches is based on the available grammars (Nordbustad 1988; Mous 1992). They base this typology on sentences like the ones in example (11).

(11) a. **i-na** ti'iít bará qaymó-r=wa alé SBJ.3-PST appear:3SG.M in:CON field-F=ABL RESPRO 'He went out of the field.' (Nordbustad 1988: 194) b. **i-na** gadivuús bará gavmó-r=wa alé SBI.3-PST work: 3SG.M in:CON field-F=ABL RESPRO 'He worked in the field.' (Nordbustad 1988: 194) c. /eesi inós i hi'<iim~am>íit alé amo-r=i always 3SG SBJ.3 travel<HAB~HAB>:3SG.M place-F=DIR RESPRO 'He always travels to this place.' (Mous 1992: 219)

In example (11a), the ablative clitic =wa is used to indicate the source of a motion. In (11b), the same clitic is used to indicate the location of an event. There is no source meaning present in (11b) at all, and based on this typological research has concluded that the ablative clitic can be used to indicate both location and source. To complete the picture, in (11c) a goal construction is formed with the directional clitic =i, which shows that the language has a separate marker to indicate goal.

These examples, however, do not give a complete account of locative constructions in Iraqw. There are two types of locative constructions; one with only a selector and another with an entire verbal complex. The first type does not have a main verb, but only the selector as copular item to link the two noun phrases (12) together. In example (12), the linking element in the clause is the selector **i**, which connects the subject and the locative noun phrase. Note that the locative noun phrase **baraá Ma/aangwatáy** 'in Ma/angwatáy' is not marked by any adverbial clitic.

(12) bálgeeraa kil'-ee Iraqw i baraá Ma/aangwatáy
long\_time\_ago whole-BACK Iraqw SBJ.3 in:CON Ma/angwatáy
'A long time ago, the Iraqw were in Ma/angwatáy.'
(Berger and Kiessling 1998: 146)

In fact, this type of construction can never feature a noun phrase marked with an adverbial clitic. As was mentioned in Section 2, the adverbial clitics are closely tied to the verb and therefore they cannot appear if there is no verb present in the clause. It would be completely ungrammatical to use an adverbial clitic in clauses which only have a selector. This is illustrated by examples (13a) and (13b). The utterance in (13a) is perfectly acceptable,

but the addition of the ablative clitic renders the same phrase completely ungrammatical (13b).

(13) a. kitaangw i gawá muundí chair SBJ.3 top:CON grass
b. \* kitaangw i gawá muundí-r=wa alé chair SBJ.3 top:CON grass-F=ABL RESPRO 'The chair is on the grass.'

It is only in the second type of locative constructions where we find pattern (8e). To recall, this construction has a complete verbal complex with both selector and main verb, as in example (14).

(14) inós i-ri matliít dír ku/aá geendaryaandi
 3SG SBJ.3-CONSEC hide:3SG.M place:CON ledges:CON baobab
 'So he was hiding in between the ledges of the baobab trunk.'
 (Berger and Kiessling 1998: 100)

Note that in (14) the locative noun phrase **dír ku/aá geendaryaandi** 'between the ledges of the baobab' is unmarked, and that therefore the use of an adverbial clitic in these types of constructions is not obligatory, but optional.

Leaving the locative noun phrase unmarked is only one of the options open to Iraqw speakers. In some cases, like in example (15), we find that the locative noun phrase is marked with the ablative clitic, similar to example (11b) from Nordbustad (1988) which triggered the Source=Location classification. In example (15), the locative noun phrase **gawá muundír=wa** 'on the grass=ABL' occurs in a clause with a complete verbal complex. In example (15) the locative noun phrase is located outside of the verbal complex and is therefore followed by the resumptive pronoun.

(15) /ameeni i iw<iw>it gawá muundí-r=wa alé woman SBJ.3 sit<DUR>:3SG.F top:CON grass-F=ABL RESPRO 'The woman is sitting on the grass.'

To further complicate matters, a search of the corpus also reveals that the directional clitic occurs on some locative noun phrases (16). In example (16), the directional clitic is used to indicate the place where the calf was left **dida'=í** 'at that place', rather than the goal of the motion. This means that in some phrases it seems like the directional clitic is also used to express location.

(16) damaa-r-ós ti-dá' /awaak ga-ri
calf-F-3SG.POSS OBJ.3:IMPS-DEM4 white OBJ.3.F-CONSEC
di-da'=í geexáy
place-DEM4=DIR leave:3SG.M
'He left that white calf of his at that place.'
(Berger and Kiessling 1998: 115)

This use of the directional clitic has not been reported for Iraqw before and is completely unaccounted for in the current typological classification of Iraqw. In order to account for this, Section 4 expands on the uses of the ablative and directional clitic in locative constructions.

To briefly summarize, Iraqw has two ways of forming locative clauses, one with only the selector and one with a full verbal complex. In the first case, the rare syncretism pattern does not play a role as adverbial clitics are absent in these clauses, and therefore it simply does not exist. In the case of the latter, it does come into play as there are three options available for marking the locative noun phrase. Speakers can either leave the noun phrase unmarked or mark it with either the ablative or the directional clitic. However, this already seems to show a different pattern from the originally reported one, suggesting both a Location=Source≠Goal and a Location=Goal≠Source pattern. The next section examines this situation more closely and elaborates further on the environments in which the different markers appear and the consequences this has for the analysis of Iraqw locative markers.

#### 4 Adverbial clitics on locatives

There are three types of locative constructions with a main verb that should be examined more closely for Iraqw. These are locative expressions with an unmarked locative noun phrase, with an ablative marked noun phrase and with a directional marked noun phrase. All three constructions have a reasonable number of attestations in the corpus. The bare locational phrases and the ablative locative phrases occur in roughly the same quantity; the bare locative has 42 attestations and the ablative 41. The directional locative phrase is slightly less common with 31 attestations, but by no means rare. This section examines all three constructions further. The main focus lies on the ablative and the bare constructions as this is the part which has typologically been declared rare. Yet, the directional is of importance as well, both as the separate marker of goal constructions and in the way it is used in locative constructions. This section will first briefly discuss the directional clitic in locative phrases, before moving on to the ablative locative constructions.

## 4.1 Directional clitic

Finding the directional clitic in locative constructions came as a surprise as this use has not been reported before, and as such the directional has not been described as a locational marker in any of the grammars (Mous 1992; Nordbustad 1988). It is only reported as a goal marker without further uses outside of the goal domain. The syncretism of goal and location markers is a very common pattern in languages of the world, implying that this is a conceptually easily accessible pattern. In Iraqw the directional clitic can be used in constructions that indicate the goal of a motion (17a), but in effect also imply location (17b).

(17) a. /ameeni i hi'i<m>iii dír yaeé-r=i alé woman SBJ.3 walk<DUR>:3SG.F place:CON river-F=DIR RESPRO 'The woman walks to the river.'
b. tlakway-í dahas-eek bará hhar-t=i alé sack-DEM1 put-IMP.SG.OBJ in:CON stick-F1=DIR RESPRO 'Put this sack on a stick.' (Mous 1992: 104)

Based on the attestations in the corpus, it might be hypothesized that the directional clitic is often used if there is a purpose or goal to an action. In example (18a), there is the intention of hiding someone in the house, which indicates the location. In (18b) the son is absent because of his herding activities, which indicates the reason for his being absent.

(18) a. ka-ri lúu/ baraá dó'=í alé OBI.3.F:IMPS-CONSEC hide:3PL in:CON house=DIR RESPRO 'And they hid her in the house.' (Berger and Kiessling 1998: 86) b. dír garmaa-wós ku-qá' bará i-ri place:CON boy-3SG.POSS OBJ.3.M:IMPS-DEM3 SBJ.3-CONSEC in:CON de'éngw=í kahhi herding=DIR be\_absent:3SG 'As long as that son of his is absent herding cattle.' (Berger and Kiessling 1998: 99)

From elicitation, more evidence for this hypothesis can be drawn. The most convincing argument for this analysis of the use of the directional clitic are the examples in (19). The use of the directional clitic in these examples

implies a very direct involvement of the Ground in the event. This implication makes the phrase very marked as it would mean that the woman cuts the vegetables directly on the grass (19a) rather than on a plate or a cutting board as would be expected. However, if one uses the ablative clitic, this implication is not present and the phrase is pragmatically fine. Example (19b), which uses the ablative clitic, indicates the location where the action is taking place, but does not suggest that the location has a direct involvement in the event like in (19a).

- (19) a. **?/ameeni naanú gu síq bará muundí-r=í alé** woman vegetables OBJ.3.M cut:3SG.F in:CON grass-F=DIR RESPRO 'The woman is cutting the vegetables (directly) on the grass.'
  - b. **/ameeni naanú gu síq bará muundí-r=wa alé** woman vegetables OBJ.3.M cut:3SG.F in:CON grass-F=ABL RESPRO 'The woman is cutting the vegetables (on a plate) on the grass.'

The use of the directional clitic in locative phrases therefore seems be related to the abstract goal semantics of the clitic. The directional clitic expresses the notions of Place and Path. In the examples given above (18a/b), the notion of Path is expressed as an abstract path of purpose or intention rather than a spatial path. The goal semantics of the directional clitic are conceptually very accessible for the expression of purposiveness, as this implies a goal or conceived end point of an action. In Heine and Kuteva (2002: 39) a common grammaticalization path from goal marker to purpose marker is drawn, proving that this extension occurs across languages of the world. I argue that the same has happened for the Iraqw directional clitic, and that it can be used to express Path as purpose in locative constructions. This means that the directional clitic does not function as a marker of location, but as a marker of purpose or intention in examples like (16) and (18). The core semantics of the clitic are preserved and influence the semantics of the locative phrase outside of the spatial domain. This means that the directional clitic should not be analysed as a locative marker, but as a purpose marker in these types of sentences.

## 4.2 Ablative clitic

Now it is time to take a closer look at the use of the ablative clitic in locational constructions and in relation to the unmarked locative constructions. The ablative marker is used 41 times to indicate location in the corpus, making it one of

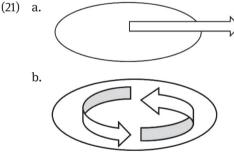
its most frequent uses<sup>6</sup>, apart from indicating source. There are different types of locative constructions in which we find this use of the ablative clitic. For example, the ablative marker can be used to indicate undirected motion on a Ground (20). In these cases, the motion described is not boundary-crossing, but rather occurs on a single Ground. In (20a/b), the Ground is the valley in which the cattle moves about, but does not move out of.

(20) a. i bará xats-ta-ka-r=wa qa~ qeér SBJ.3 in:CON valley-F1-INDF-F=ABL HAB~graze:3SG.F 'It usually grazes in a certain valley.' (Mous 1992: 106) b. saree/a i-wa bará xats-ta=wa qa~ qeér Geesoó buffalo SBJ.3-BGND in:CON valley-F1=ABL HAB~ graze:3SG.F Geesoó di-dá=wa Dugangw i iwi<iw>iit Dugangw SBJ.3 place-DEM4=ABL sit<DUR>:3SG.M

'When the buffalo was grazing in the valley, Geesoó Dugangw was there.' (Mous and Sanka 2008: 1)

If we consider the core primitives of the ablative clitic to be the notions of Place and Path, the expression of a basic locative construction would leave the notion of Path unexpressed. It can be argued that the examples in (20) do express a notion of Path, but that this Path lacks directionality. Contrary to the source constructions, which can be represented as (21a), the locational expressions lack a sense of boundary crossing or directed motion, and could be represented as (21b) with undirected Path on a Ground.

b.



<sup>6</sup> The ablative clitic has a wide range of uses. It is mainly used to indicate source and location, both of which this article discusses. However, it can also be used in temporal clauses, adverbial clauses, and causal clauses (Mous 1992: 104-106). All of these uses can be tied back to the source semantics of the clitic (Kruijt 2017), which due to space restraints will not be elaborated on here.

If the use of the ablative was restricted to these types of clauses, it could be argued that the directionality of the clitic had become lost somehow, but it was still used as a Path indicator. However, the clitic is often found in clauses that do not possess a motion verb, but that have a stative main verb, e.g. **sihhiit** 'to stand' in (22a), or active non-locomotion verb, e.g. **dahis** 'to dress' in (22b) instead.

- (22) a. xaa'i i bará qaymó-r=wa sihh<m>iit-ír trees SBJ.3 in:CON field-F=ABL stand<DUR>-3PL 'The trees stand in the field.'
  b. /ameeni i tlabá dah<m>ís dír qat-uú=wa
  - woman SBJ.3 clothes dress<DUR>:3SG.F place:CON bedroom-M=ABL alé RESPRO 'The woman is putting on clothes in the bedroom.'

Despite occurring in combination with different types of verbs, the ablative clitic cannot be used in all locative constructions. There are situations in which the use of the ablative is ungrammatical, and the use of an unmarked locative phrase is needed to render a correct sentence. For example, in (23a) the use of the ablative clitic on the locative noun phrase results in a phrase judged to be ungrammatical by speakers. It can be fixed by removing the ablative clitic and leaving the locative phrase unmarked (23b).

(23) a. \*amaslaahhi aa tsoxnono'ót gawá loo/i-r=wa alé frog SBJ.3:PFV squat:3SG.F top:CON leaf-F=ABL RESPRO 'The frog is squatting on the leaf.'
b. amaslaahhi aa tsoxnono'ót gawá loo/i frog SBJ.3:PFV squat:3SG.F top:CON leaf 'The frog is squatting on the leaf.'

The opposite situation occurs as well. In some cases, the bare locative noun phrase is ungrammatical, and the ablative clitic is necessary to form a grammatically acceptable sentence. In example (24a), the ablative clitic is used in order to get a grammatical sentence, and leaving the noun phrase bare results in an ungrammatical one (24b).

(24) a. **dasi i naanú huu<m>iín bará tla/fi-r=wa alé** girl SBJ.3 vegetables cook<DUR>:3SG.F in:CON kitchen-F=ABL RESPRO 'The girl is cooking vegetables in the kitchen.' b. **\*dasi i naanú huu<m>iín bará tla/fi** girl SBJ.3 vegetables cook<DUR>:3SG.F in:CON kitchen 'The girl is cooking vegetables in the kitchen.'

The main question here is in which environments is the ablative clitic used or even obligatory and in which environments is the bare noun phrase used? A survey of the corpus reveals that a large amount of the locational constructions with the ablative clitic have a main verb which takes durative aspect. The total number of occurrences in the corpus of the ablative clitic in locational constructions is 41, of which 22 have a main verb which has overt durational morphology, like in (25).

(25) inós da'aangw-dá' gu-ri 'ót baabá i
3SG song-DEM4 OBJ.3.M-CONSEC hold:3SG.F father SBJ.3
di-dá=wá axa<m>iis
place-DEM4=ABL listen<DUR>:3SG.M
'So she stroke up that song and father pricked up his ears.'
(Berger and Kiessling 1998: 83)

This means that in over 50 percent of the cases that the ablative clitic is used, the verb takes durative aspect. This percentage is significantly higher than the percentage of durative aspect in other locative constructions. For comparison, there are only six main verbs with durative morphology in the total of 42 bare locational constructions.

Durative aspect can be expressed by a variety of morphemes in Iraqw. The most common one is the durative affix **-m** (25, 26a). Not all verbs are able to use this morpheme, so there are a number of different strategies for marking durativity. The habitual reduplication can be used for this function in case there is no way to use the durative morpheme (26b). In other cases the middle suffix **-t** can be used to indicate the durative aspect (26c).

- (26) a. **hhawaata i sihh<m>iit gawá tloomá-r=wa alé** man SBJ.3 stand<DUR>:3SG.M top:CON mountain-F=ABL RESPRO 'The man is standing on the mountain.'
  - b. hhawaata i-n tlinti<'a>'iit gawá ku/-uú=wa alé man SBJ.3-EXPEC lean<HAB>:3SG.M top:CON wall-M=ABL RESPRO 'The man is leaning against the wall.'
  - c. /ameeni i naanú siiqí-t gawá woman SBJ.3 vegetables:CON cut:3SG.F-MID over:CON muundí-r=wa alé grass-F=ABL RESPRO 'The woman is cutting the vegetables (while sitting) on the grass.'

All of these ways of marking durative aspect are attested in combination with locative noun phrases with the ablative clitic (26a/b/c), signalling that the correlation is not between a single morpheme and the ablative clitic, but that the durational semantics<sup>7</sup> are the key factor here.

The importance of durative aspect for the ablative clitic also comes forth in the rest of the data, and is best visible in positional verbs<sup>8</sup>. With most positional verbs in the durative form only the use of the ablative clitic is allowed (27a), whereas the unmarked locative noun phrase is completely ungrammatical (27b). If the durative form is reduced to the simple verb form, this pattern is turned around, compare (27c) and (27d).

(27) a. muu i tumnanaa'a<m>iit bará guru kanisá-r=wa people SBJ.3 kneel<DUR>:3SG.M in:CON stomach:CON church-F=ABL alé RESPRO

'The people are kneeling in the church.'

- b. **\*muu i tumnanaa'a<m>iii bará guru kanisa** people SBJ.3 kneel<DUR>:3SG.M in:CON stomach:CON church 'The people are kneeling in the church.
- c. \*muu i tumnanaa'aat bará guru kanisá-r=wa people SBJ.3 kneel:3SG.M in:CON stomach:CON church-F=ABL alé RESPRO

'The people will kneel in the church.'

d. **muu i tumnanaa'aat bará guru kanisá** people SBJ.3 kneel:3SG.M in:CON stomach:CON church 'The people will kneel in the church.'

The way that the ablative clitic affects the semantics of the clause is best seen in clauses with a positional verb in the verbal complex. In example (28a) the verb **iwit** 'to sit' is used as it is most commonly used, as a durational action. The verb has overt durative morphology, the habitual reduplication, and the locative noun phrase is marked with the ablative clitic. In the case of (28b) the verb is

<sup>7</sup> Iraqw durational morphology is a complicated issue with forms and their exact mean that can vary wildly from one verb to another (Mous 1992: 178–180).

**<sup>8</sup>** There are some cases where the adverbial clitics have been assimilated with the verb, also called compound verbs (Mous 1992: 198–199), e.g. **wa/aa/** 'be sad about' (Mous et al. 2002: 100). Their original reason for compounding is in many cases not clear. None of these compound verbs are positional verbs, so none of the verbs in the examples belong to the category of compound verbs.

used to indicate a single event, a bird that touches down on the ground and therefore the verb is in the simple form and the locative noun phrase is bare. In (28c) there is a mix of these two types present. The verb is in simple form, but the semantics still indicate a longer event, as the meaning of the verb here is not literally 'to sit' but rather 'to stay, to remain'. Note that here the ablative clitic is used on the locative noun phrase, and therefore seems to be licensed by or to be adding to the durational semantics of the clause.

(28) a. i tlahháv=wa iw<iw>iit SBJ.3 elder's\_assembly\_place=ABL\_sit<DUR>:3SG.M 'He was sitting in the elder's outdoor assembly place.' (Berger and Kiessling 1998: 177) b. inós i-ri iwít gawá muundi SBJ.3-CONSEC sit:3SG.F top:CON grass 3SG 'She touched down in the grass on the courtvard's edge.' (Berger and Kiessling 1998: 91) c. dag-dá' a-qo tsaahh-aán avór na/ay time-DEM4 OBJ.F-EMPH recognize-1PL mother:CON child gwaá xwávluur wa/ari i-go bará OBI.3.M:PFV give birth:3SG.F vomit SBI.3-EMPH in:CON gur'u-wós=wa iwit-ír stomach-3SG.POSS=ABL stay-3PL 'Then we will find out the real mother, the vomit will stay in her stomach.' (Berger and Kiessling 1998: 136)

For most positional verbs, the use of the ablative clitic is quite strict. It is allowed if the verb has durational aspect, but is ungrammatical if the verb lacks this. However, with other verbs, the use of **=wa** seems to be relatively free, and speakers can decide to either use it or use the bare form. For example, in some cases, both the bare noun construction (29a) and the ablative clitic (29b) are attested in almost identical clauses. The verb does not take any durational morphology, yet can occur in combination with the ablative clitic.

(29) a. naagáy Iraqw i-ri hót yaamu-dá' then Iraqw SBJ.3-CONSEC live:3SG.F land-DEM4 'And then the Iraqw lived in that land.'
b. ta-ri hoót yaamu-dá=wa ale DEP-CONSEC live:3SG.M land-DEM4=ABL RESPRO 'And they lived in that land.' (Berger and Kiessling 1998: 147) This means that there is a degree of freedom in its use, and that it cannot always be predicted despite its ties to durational morphology. The data given above does however provide evidence that the ablative marker is not obligatory in locative expressions and is therefore not necessary in order to indicate location. Rather location does not appear to be marked overtly at all, but the clauses with the bare locative noun phrases suggest that assuming a zero marker for location would be more accurate. The ablative clitic seems to be correlated with durative semantics and to be used to add durational information regarding the event rather than locative information. This durational dimension of the ablative may be tied back to its source semantics. For the ablative marker, it can be stated that the central semantic field contains the notions of Path and Place. In any construction that features the ablative clitic both notions must be expressed. In cases that a spatial interpretation of Path is not available, as it is not for locational phrases, it instead expresses temporal Path which is translated into durative aspect. The expression of temporal Path is a common one for the Iraqw ablative clitic as it can also be used to indicate the source of a temporal event (30). Not just that, but by indicating a starting point, you also add the notion of durativity to an event, compare (30b) and (30c). In (30b) the event is implied to take a relatively short period of time, whereas in (30c) the presence of the ablative clitic implies that the event will take a longer time to complete.

iimír (30) a. hhawaata qaymo ga-n doosl field OBI.3.F-EXPEC cultivate:3SG.M from:CON man laarí=wa alé today=ABL RESPRO 'The man will cultivate the field from today on.' laarí iimu/uúm b. gadyeé a SBJ.1/2 today start:1SG work 'I will start the work today.' Implication: the work will be finished soon, either today or else tomorrow. c. gadyeé a laarí=wa iimu/uúm work SBJ.1/2 today=ABL start:1SG 'I will start the work today.' Implication: the work will go on for many days, weeks or even months.

Due to these uses of the ablative clitic, I argue that it can be used as a tool to express durativity. Locative sentences that imply durativity usually take the ablative clitic. In cases where the bare noun phrase is used rather than the ablative, this is seen as a marked choice and it can result in infelicitous sentences. The use of the unmarked noun phrase in those cases is pragmatically marked and

therefore suggests that the noun phrase functions as a full argument rather than an oblique argument. In Section 2 it was discussed that noun phrases marked with an adverbial clitic can never function as a full argument in the clause, but rather are oblique or circumstantial. In (31a) the event takes a while since cutting takes multiple actions to complete and the ablative clitic is used. Leaving the clitic out results in a very marked sentence suggesting that the locative phrase has a central role to play, which leads to the unusual meaning of the sentence (31b).

(31) a. /ameeni naanú gu síq gawá muundí-r=wa woman vegetables OBJ.3.M cut:3SG.F over:CON grass-F=ABL alé RESPRO 'The woman is cutting the vegetables (while sitting) on the grass.'
b. ??/ameeni naanú gu síq gawá muundí woman wogstables OBL2 M gut 200 F, gyar CON, grass

woman vegetables OBJ.3.M cut:3SG.F over:CON grass Implication: 'The woman is cutting the vegetables (directly) on the grass.'

The data presented in this section supports the claim that the ablative clitic adds durative meaning to a clause and that it cannot be freely used in locative constructions. As such, I think it would be wrong to label the ablative clitic as a location marker. The most basic locative construction is the answer to the question "where is X". Sentence (32a) answers this question in the most basic way. Note that here the use of the ablative clitic is not allowed (32b), supporting the hypothesis of a zero marker for location.

(32) a. amaslaahhi aa tsoxnono'ót gawá loo/i
frog SBJ.3:PFV squat:3SG.F top:CON leaf
'The frog is squatting on the leaf.'
b. \*amaslaahhi aa tsoxnono'ót gawá loo/i-r=wa alé
frog SBJ.3:PFV squat:3SG.F top:CON leaf-F=ABL RESPRO
'The frog is squatting on the leaf.'

This leads me to conclude that the ablative clitic is not a location marker, just like the directional clitic is not a location marker. If we assume that location is not overtly marked, the adverbial clitics, rather than express location themselves, can be added to an existing locative phrase in order to add extra meaning. Both markers can be used to add information to a clause based on their own individual core semantics. In the case of the ablative marker these are source semantics, including temporal source semantics. This has the implication that the Location=Source syncretism is no longer valid.

#### **5** Conclusion

This article examined the claim that the Iraqw language possesses the rare locative syncretism pattern Location=Source≠ Goal. To briefly summarize, Iraqw expresses source and goal with the ablative and the directional clitic respectively. These are part of the adverbial clitics. These clitics are closely tied to the verb and share syntactic properties. Typologically, Iraqw has been classified as a language with the rare Source=Location $\neq$  Goal marker syncretism. This syncretism is commonly regarded as rare or even impossible due to syntactic constraints. There are two types of locative constructions in Iraqw. The first type is a copular locative clause which can never take an adverbial clitic. The syncretism does not hold for these clauses. The second type is composed of locative clauses with a complete verbal complex. These clauses can be formed in three ways: with a noun phrase marked with the directional clitic or the ablative clitic or with a bare unmarked noun phrase. The use of the directional clitic has not been reported on locatives before, but the data shows that the clitic implies purpose or intention rather than location. The attestation of the ablative clitic in locative constructions was the reason for the current classification of Iraqw spatial markers. The data proves that the ablative clitic cannot be used in every locative construction, but has a strong correlation with durative morphology. Over half of the attestations of the ablative clitic in the corpus are in clauses with overt durational morphology on the main verb. Especially in combination with positional verbs, the durative aspect is often obligatory in order to get the ablative clitic. Without overt durative morphology the bare noun phrase construction is favored. Durative aspect can be reconceptualised as a temporal Path, and I have argued that this is exactly what happens in locative phrases marked with the ablative clitic. In locative phrases marked with the directional clitic, the non-spatial expression of Path manifests as purpose or goal semantics. In this manner both the ablative and the directional clitic retain their core notions of Place and Path, but they express them in different ways. It is the Path property that is reconceptualised in such environments and extended in meaning to add to the semantics of the clause. The directionality of the Path is the driving force behind the interpretation of the clitic and plays a determining role in the use of the ablative and directional clitic in locative expressions. The bare noun phrase construction can be considered as the most basic locative construction, which means that the notion of Place is not overtly marked in Iraqw.

These conclusions have a significant impact on the spatial marker classification of Iraqw, as it means that the analysis of the spatial markers as a Source=Location $\neq$  Goal syncretism is incorrect. Rather I have argued that the

locative marker is a zero marker, and the source and goal markers are built on top of this. This leads to the reanalysis of Iraqw as a language with a Source  $\neq$  Location  $\neq$  Goal system that can be lexicalized as **wa/ø/i** 'ABL/ZERO/DIR'. This location marker system is very common in languages of the world, and so Iraqw can no longer be considered a typological rarity in the field of spatial marker syncretisms, but instead will have to content itself with conformity.

## Abbreviations

1	first person
2	second person
3	third person
ABL	ablative
BACK	background suffix
BGND	background aspect
CON	construct case
CONSEC	consecutive
DEM1	demonstrative 1
dem3	demonstrative 3
DEM4	demonstrative 4
DEP	dependent
DIR	directional
DP	determiner phrase
DUR	durative
MPH	emphatic
EXPEC	expectational
F	feminine
F1	feminine subclass
HAB	habitual
IMP	imperative
IMPS	impersonal
INDF	indefinite
INS	instrumental
М	masculine
MID	middle
OBJ	object
PST	past
PFV	perfective
PL	plural
POSS	possessive
REAS	causational
RESPRO	resumptive pronoun
SBJ	subject
SG	singular.

**Acknowledgements:** This article could not have been written without Basilisa Hhao, my main language consultant, whose dedication and patience made this research possible. I am also very grateful to Ephraim Neema, who opened his house to me, and the rest of the Kwermusl community for their kindness, acceptance, and support during my research.

#### References

- Andersen, Torben. 2002. Case inflection and nominal head marking in Dinka. *Journal of African Languages and Linguistics* 23. 1–30.
- Andrews, Avery. 1985. The major functions of the noun phrase. In Timothy Shopen (ed.), Language typology and syntactic description, vol I, 62–154. Cambridge: University Press.
- Berger, Paul & Roland Kiessling (eds.). 1998. *Iraqw texts* (Archiv Afrikanistischer Manuskripte: Herausgegeben von Gudrun Miehe und Hilke Meyer-Bahlhurg, band 4). Köln: Rüdiger Köppe Verlag.
- The Bible Society of Tanzania. 1995. *limu/uungw* (The book of Genesis). Dodoma: The Bible Society of Tanzania.
- Blake, Barry J. 1977. *Case marking in Australian languages*. Canberra: Australian Institute of Aboriginal Studies.
- Blake, Barry J. 1994. Case. Cambridge: Cambridge University Press.
- Creissels, Denis. 2006. Encoding the distinction between location, source and destination: A typological study. In Maya Hickmann & Stéphane Robert (eds.), *Space in languages: Linguistic systems and cognitive categories*, 19–28. Amsterdam: John Benjamins.
- Den Dikken, Marcel. 2010. On the functional structure of locative and directional PPs.
   In Guglielmo Cinque & Luigi Rizzi (eds.), *The Cartography of Syntactic Structure*, vol. 6, 74–126. Oxford: University Press.
- Dryer, Matthew S. 2013. Position of Case Affixes. In Matthew S. Dryer & Martin Haspelmath (eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. http://wals.info/chapter/51 (accessed 03 October 2018).
- Gehrke, Berit. 2007. Goals and sources in event structures. *Linguistics in the Netherlands* 24(1). 86–98.
- Haspelmath, Martin. 2009. Terminology of Case. In Andrej L. Malchukov & Andrew Spencer (eds.), *The Oxford Handbook of Case*, 505–517. Oxford and New York: Oxford University Press.
- Heine, Bernd & Tania Kuteva. 2002. *World lexicon of grammaticalization*. Cambridge: University Press.
- Jackendoff, Ray. 1983. Semantics and cognition. Cambridge, MA: MIT Press.
- Koopman, Hilda. 2000. Prepositions, postpositions, circumpositions, and particles. In Hilda Koopman (ed.), *The syntax of specifiers and heads*, 204–260. London: Routledge.
- Kruijt, Anne 2017. Straight from the source: The semantics and functions of the ablative case clitic of Iraqw. Leiden: Leiden University Master Thesis. https://openaccess.leidenuniv.nl/ handle/1887/51473
- Lakusta, Laura & Barbara Landau. 2005. Starting at the end: The importance of goals in spatial language. *Cognition* 96. 1–33.

Mous, Maarten. 1992. A grammar of Iraqw. Leiden: Leiden University dissertation.

- Mous, Maarten. 2015. Copulas in Iraqw, a Cushitic language from Tanzania. *Lingue e linguaggio* XIV(2). 179–195.
- Mous, Maarten, Martha Qorro & Roland Kießling. 2002. *Iraqw-English Dictionary*. Köln: Rüdiger Köppe Verlag.
- Mous, Maarten & Safari Sanka. 2008. *Géeso Duqang na hadithi nyingine* [Géeso Duqang and other stories]. Nairobi: Kijabe Press.
- Nam, Seungho. 2004. Goal and source: Asymmetry in their syntax and semantics. *Workshop on Event Structure*. Leipzig, Germany.
- Narrog, Heiko. 2010. A diachronic dimension in maps of case functions. *Linguistic discovery* 8(1). 233–254.
- Noonan, Michael. 2008. Patterns of development, patterns of syncretism of relational morphology in the Bodic languages. In Jóhanna Bardal & Shobhana Cheliah (eds.), *The role of semantics and pragmatics in the development of case*, 261–282. Amsterdam: John Benjamins.
- Nordbustad, Frøydis. 1988. *Iraqw grammar: An analytical study of the Iraqw language* (Language and Dialect Studies in East Africa, 8). Berlin: Dietrich Reimer.
- Pantcheva, Marina. 2010. The syntactic structure of locations, goals, and sources. *Linguistics* 48(5). 1043–1081.
- Riemsdijk, Henk van & Riny Huybregts. 2002. Location and locality. In Marc van Oostendorp & Elene Anagnostopoulou (eds.), *Progress in Grammar: Articles at the 20th Anniversary of the Comparison of Grammatical Models Group in Tilburg*, 1–23. Amsterdam: Meertens Instituut.
- Svenonius, Peter. 2010. Spatial P in English. In Guglielmo Cinque & Luigi Rizzi (eds.), *The cartography of syntactic structure*, vol. 6, 127–160. Oxford: University Press.
- Woodward, Amanda L. 1998. Infants selectively encode the goal object of an actor's reach. *Cognition* 69. 1–34.
- Zwarts, Joost. 2005. Prepositional aspect and the algebra of paths. *Linguistics and Philosophy* 28. 739–779.