

THE SUBJUNCTIVE MOOD IN GIRYAMA AND TANZANIAN NYANJA

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This paper presents a study of the Subjunctive in the Bantu languages of Giryama in Kenya (E72a) and Nyanja in Tanzania (N201), and explores its distribution in the two languages. As in other Bantu languages, the Subjunctive is a morphological feature characterized by a verbal suffix *-e*, an obligatory subject marker, and the absence of tense. Syntactically, the Subjunctive appears in independent clauses, as well as dependent clauses with a certain class of predicates and adverbial subordinators. Independent clauses that may carry the Subjunctive are those that express exhortations or suggestions, and sentences marked with the future tense. Dependent clauses with Subjunctive verbs include: (a) complement clauses containing directive, volitional, and causative verbs, and (b) adverbial clauses such as clauses of purpose. Studies of the subjunctive have often associated its semantic distribution with irrealis, in contrast with the Indicative, which is associated with realis or assertion. We present evidence showing that the irrealis reading may sometimes appear to be absent. We argue that irrealis may not be a necessary and sufficient condition for the Subjunctive. However, the constructions that give irrealis readings provide the best exemplars of Subjunctives in these two languages. Independent clause Subjunctives are shown to be clearly non-factive. Matrix verbs that take subjunctive complements are described as presupposition triggers of events that are non-factive relative to the matrix event.

1. INTRODUCTION

The subjunctive is a widely attested phenomenon in the languages of the world but is subject to considerable cross-linguistic variation with respect to its meaning, functions, syntactic distribution, and triggers (Bybee & Fleischman 1995; Laskova 2017; Portner 2009; Quer 2006). Features attested in the subjunctive form of one group of languages may be totally different from those in another group of languages. Meanings available in one language may be totally absent in another. For example, belief predicates in Standard Italian take Subjunctive complement clauses. In Spanish and French, however, such predicates do not take the Subjunctive (Quer 2009). In European languages, the Subjunctive expresses counterfactuality, while in Persian, counterfactuality is expressed by the Indicative (Laskova 2017). In many Bantu languages tense-marking is incompatible with the Subjunctive; see for instance Ngonyani (2013). In European languages, on the other hand, tenses can combine with the Subjunctive (Giorgi 2009).

One of the challenges in the study of subjunctives has been to identify the distinctive meaning of the subjunctive and what unifies the diverse range of phenomena as subjunctive. Studies of the

subjunctive have often associated its semantic distribution with irrealis, in contrast with the Indicative, which is associated with realis (Givón 1994; Ilkhanipour 2018; Portner 2009). This association has been called into question by several researchers. Siegel (2009), for example, presents many examples from different languages that show that the subjunctive does occur in the realis environments of complements of factive verbs (*please, surprise, regret*) and causative verbs (*force, prevent, make*). Therefore, the semantics of the subjunctive remains a question that calls for further investigation of more cross-linguistic data.

Bybee & Fleischman's (1995) depiction of irrealis as non-assertion seems to capture most subjunctives. Givón (1994; 2001) refines this notion of non-assertion by identifying two kinds of modality expressed by the subjunctive, namely lower certainty and weaker manipulation. The former, epistemic modality, refers to the commitment of the speaker with respect to the truth, probability, certainty, belief, or evidence of the proposition. Givón (1994: 280) notes that there is a gradation of irrealis within the epistemic mode from high certainty to low certainty. The following examples from English are instructive. Although they both express the fact that the coming has not taken place (irrealis), these two sentences differ with regard to the speaker's level of certainty.

(1a) *She will come.*

(1b) *Perhaps she might come.*

Sentence (1a) expresses certainty or higher certainty, in Givón's terms, while in (1b) the speaker is not certain about her coming. This second sentence is regarded as being of lower certainty. The subjunctive expresses lower certainty.

Manipulation is concerned with getting others to do things and how to control the addressee. This falls within the realm of traditional deontic modality. A command shows a stronger degree of control while a suggestion indicates weaker control. For example, a command and permission are expressed in the following sentences.

(2a) *Come!*

(2b) *You may come.*

These two sentences, the imperative in (2a) and permission in (2b), illustrate different levels of the speaker's control over the addressee's action, or what Givón calls manipulation. They differ in the strength of the manipulation. The imperative is the strongest form of manipulation because the speaker asserts herself strongly, while permission in (2b) is weak manipulation because it lacks that level of force by the speaker. The subjunctive is associated with weaker manipulation and may therefore express epistemic modality and deontic modality.

The subjunctive has not received much attention in Bantu languages. This is a study of the Subjunctive in two Bantu languages, Giryama and Tanzanian Nyanja. These two languages are not well documented and the description of how they use the Subjunctive provides fresh new data for the study of Bantu mood and an examination of the modality that is linked to it. The two languages in this study display both similarities and differences in their Subjunctive constructions. Besides contributing to the empirical base of the subjunctive mood, we discuss the contribution of this mood to meaning and modality. Giryama, coded E72a by Guthrie (1967–1971), is a Mijikenda language spoken in Eastern Kenya (ISO 639-3: nyf). Nyanja of Tanzania, (henceforth Nyanja), coded in Maho's revised Guthrie classification as N201 (Maho 2009), is spoken in southwestern Tanzania around and to the south of Mbamba Bay (ISO 639-3: mjh).

It is a dialect of Chinyanja and part of the Chinyanja-Chichewa-Mang'anja cluster (Nkhoma-Darch 2005). Data for Giriyama was supplied by the first author, who is a native speaker; the Nyanja data was collected by the second author during two fieldwork visits in Mbamba Bay in 2011 and 2012.

As in other languages, an examination of the Subjunctive in Giriyama and Nyanja also reveals a wide range of meanings. Using the prototype approach to morphosyntax (Taylor 2003), we argue that non-factive may not be a necessary and sufficient condition for the Subjunctive. However, we demonstrate that constructions that produce irrealis submodes of lower certainty and weaker manipulation readings (Givón 1994) as non-assertions (Bybee & Fleischman 1995) provide the best exemplars of Subjunctives.

The description is presented in the following five sections. In Section 2, mood and the morphology associated with it in the two languages is outlined, noting its interaction with tense and aspect. Syntactic aspects of the Subjunctive are explored in Section 3, where the different syntactic environments are identified and exemplified. Semantic aspects of the Subjunctive, especially the irrealis reading, are examined in Section 4. Section 5 links the diverse readings of the Subjunctive with the irrealis in a prototype approach. Concluding remarks and directions for future research are presented in Section 6.

2. MOOD IN GIRYAMA AND NYANJA

This section describes the morphology of the Subjunctive, contrasting it with other moods. Before describing mood and the Subjunctive in the two languages, we must begin by setting out what we understand mood and modality to be.

Mood is a morphological category, an expression of modality (Barbiers 2002; Palmer 2001; Portner 2009). Modality is a semantic category that expresses the speaker's commitment with respect to the factual status of what she is saying, her emphatic certainty, her uncertainty or doubt, and so forth (Bybee & Fleischman 1995; Lyons 1971; Palmer 2001). We may consider the connection between mood and modality to be parallel to that between tense and time. Tense is a morphological object on the verb which is often used to express time. In addition to tense, time may be expressed by adverbs and other deictic devices. Likewise, in addition to mood, modality can be expressed by adverbs (e.g. *perhaps*, *certainly*), auxiliary verbs (e.g. *can*, *must*, *should*), and other modal expressions.

Giriyama and Nyanja distinguish three moods: (a) Indicative, (b) Subjunctive, and (c) Imperative, which are marked in similar ways. The similarity is best understood by first considering the morphological structure of the verb, as presented in the template below (Table 1).

Table 1 Verb complex in Giriyama and Nyanja (based on Meeussen 1967)

	Pre-initial	Initial	Post-initial	Formative	Pre-radical	Radical	Extension	Final
Giriyama		SM	NEG	Tense	OM	Root	Verb Ext.	Mood Aspect
Nyanja	REL NEG FUT	SM		Tense	OM	Root	Verb Ext.	Mood

In both Giryama and Nyanja, mood appears as the final element in the verb structure. All prefixes are inflections, while suffixes include combinations of derivations known as verb extensions and inflections such as mood and aspect.

2.1 Mood in Giryama

The three moods in Giryama are distinguished by (a) a morphological marker, (b) the presence or absence of tense, and (c) the presence or absence of a subject or object marker, as shown in the examples below. In (3a), the verb *munagita* ‘you are cooking’ ends in the final vowel *-a*, which is identified as Indicative. With the same verb root, the Subjunctive *-e* appears in (3b) in *mgite* ‘you cook’, while the plural Imperative form *-ani* appears in (3c) as *gitani* ‘give (pl)’.

(3) Giryama

a. *mu-na-git-a* *vi-razi.* (Indicative)
2PL.SM-PRS-cook-FV 8-potato

‘You are cooking potatoes.’

b. *m-git-e* *vi-razi.* (Subjunctive)
2PL.SM-cook-SBJV 8-potato

‘You should cook potatoes.’

c. *Git-ani* *vi-razi!* (Imperative)
cook-IMP.PL 8-potato

‘Cook (pl.) potatoes!’

Note that both the Subjunctive and the Indicative are marked with a subject marker *mu-/m-* for 2nd person plural. However, unlike the Indicative, the Subjunctive does not display a tense marker. The Imperative form, unlike the other two, does not carry a subject marker.

(4) Giryama

a. *U-vi-git-e* *vi-razi*
2PL.SM-8OM-cook-SBJV 8-potato

‘You should cook the potatoes.’

b. *Vi-git-e* *vi-razi*
8OM-cook-SBJV 8-potatoes

‘Cook the potatoes.’

While both the subject marker and the object marker appear in (4a), only the object marker appears in (4b). In some cases, the Giryama Subjunctive allows object marking without subject marking.

The features of the three moods are summarized in Table 2. The Indicative mood is characterized by the presence of the subject marker, the tense marker, and the final slot occupied by the final vowel *-a*. The Imperative is marked by the absence of the subject marker and the tense marker, with *-a/-ani* occupying the final slot. The subjunctive morphology of the verb consists of the final vowel *-e* and the absence of tense. In addition, the subject or object or both must be marked.

Table 2 Summary of morphological features of moods in Giriyama

	Indicative	Imperative	Subjunctive
Subject Marking	yes	no	(yes)
Object Marking	(yes)	no	(yes)
Tense Marking	yes	no	no
Final Suffix	-a	-a/-ani	-e

A note on tense marking and the Subjunctive is in order here. We have noted that tense marking is incompatible with the Subjunctive mood. There is one notable exception, however, in which tense marking appears in the tense formative slot in the template presented in Table 2 above. The Subsecutive *-ka-* appears in this slot and can appear in the Subjunctive.

(5) Giriyama

- a. *Hek-a ma-dzi!*
 fetch-FV 6-water
 ‘Fetch water!’
- b. *U-hek-e ma-dzi.*
 2SG.SM-fetch-SBJV 6-water
 ‘You should fetch water.’
- c. *U-ka-hek-e ma-dzi.*
 2SG.SM-SUBS-fetch-SBJV 6-water
 ‘Go and fetch water.’

Unlike the verb in (5b), which is a bare subjunctive without any tense formative, the verb in (5c) bears the subsecutive in addition to the subjunctive. This formative suggests a movement that leads to another action. Thus, (5c) translates as ‘go and fetch’. This exception needs further investigation to determine how it differs from other tenses.

2.2 Mood in Nyanja

In Nyanja, as in Giriyama, the final slot distinguishes the three moods: Indicative, Subjunctive, and Imperative. These are illustrated in the following examples, in which the agent subject is in the second person plural. As in Giriyama, the final vowel of the singular Imperative is indistinguishable from the Indicative. For this reason, we use the plural Imperative to illustrate the unique imperative morphology. The Indicative (6a) is characterized by the final vowel *-a*, as in *mdapika* ‘you cooked.’ In addition, there is a subject marker, a tense marker, or an infinitive marker. The Subjunctive (6b), *simpike* ‘you will cook,’ on the other hand, is marked by the final vowel *-e* and no tense marker in the formative slot. In addition, there must be a subject marker. The Imperative (6c) *pikani* ‘cook’ is indicated by the verbal suffix *-ani* and the obligatory absence of subject marker and tense marker. The Imperative singular is marked with *-a*.

(6) Nyanja

- a. *M-da-pik-a sipa* (Indicative)
2PL.SM-PST-cook-FV 10.sardine
'You (pl.) cooked sardines.'
- b. *Si-m-pik-e sipa* (Subjunctive)
FUT-2PL.SM-cook-SBJV 10.sardine
'You (pl.) will cook sardines'
- c. *pik-ani sipa* (Imperative)
cook-IMP.PL 10.sardine
'Cook (pl.) sardines!'

These features are summarized in Table 3. The two languages show similarities in how mood is marked. Both mark the verb with the final *-a* for the Indicative mood, which also has a subject marker and tense. The Imperative is marked by the absence of the subject marker and the suffixes *-a* (singular) and *-ani*. No tense or aspect is indicated on the verb. The subjunctive verb bears a subject marker and the final vowel *-e*. In addition, no tense marking appears, although sometimes the Subsecutive co-occurs with the Subjunctive form.

Table 3 Summary of morphological features of moods in Nyanja

	Indicative	Imperative	Subjunctive
Subject marking	yes	no	yes
Object marking	(yes)	no	(yes)
Tense marking	yes	no	FUT
Final suffix	<i>-a</i>	<i>-a/-ani</i>	<i>-e</i>

Both languages permit the co-occurrence of the subject marker and the object marker in the Subjunctive mood. However, in *Giryama*, an object marker may appear on the subjunctive verb without the subject marker. Another difference is the future prefix in Nyanja which, unlike other tenses, which appear in the tense formative position, appears in the pre-initial position of the subjunctive verb. The past tense prefix *da-* in (7a) appears between the subject marker *ni-* and the root *pika* 'cook'. The order of the prefixes is SM-tense. The Future tense *si-* in (7b), in contrast, appears before the subject marker *ni-*. The order of the prefixes is FUT-SM. *Giryama* tenses, in contrast, are consistently marked after the subject marker.

(7) Nyanja

- a. *Ni-da-pik-a sipa*
1SG.SM-PST-cook-FV 10.sardine
'I cooked sardines.'
- b. *Si-ni-pik-e sipa*
FUT-1SG.SM-cook-SBJV 10.sardine
'I will cook sardines.'

As noted, there are more similarities than differences between the subjunctive morphology in Giriyama and in Nyanja, as well as in Bantu languages generally. The similarities are not restricted to the morphology but extend to syntax. The Subjunctive in the two languages appears in very similar environments. In Section 3 we consider its distribution and show similarities with other non-Bantu languages.

3. DISTRIBUTION OF THE SUBJUNCTIVE

In this section, we explore the syntactic configurations in which the Subjunctive is found. Cross-linguistic studies have revealed that the Subjunctive is realized in three kinds of syntactic environments (see, e.g. Bosque 2012; Giannakidou 2009; Ngonyani 2013; Quer 2006; 2009). It appears in independent clauses, in dependent clauses, and in positions considered to be within the scope of modal operators. This section provides examples of these environments in the two languages under consideration.

3.1 *The subjunctive in independent clauses*

The first kind of environment is independent clauses, where the use of the Subjunctive is not triggered by any other lexical item in the construction, such as a verb or a modal. The contrast between the Indicative and the Subjunctive in the following pair of sentences from Giriyama shows the alternation in modality as a function of mood. Both the Indicative and the Subjunctive occur in independent clauses. In other words, the Subjunctive in (8b) appears in exactly the same syntactic environment as the present tense marked clause in (8a). The indicative sentence asserts a fact, while the subjunctive clause makes a suggestion.

(8) Giriyama

a. *John a-na-shom-a ki-tabu.*

John SM1-PRS-read-FV 7-book

‘John is reading a book.’

b. *John a-shom-e ki-tabu.*

John SM1-read-SBJV 7-book

‘John should read a book.’

Sentence (8b) provides an example of an environment where the Subjunctive appears in an independent clause in Giriyama. In this case, the Subjunctive is triggered by the future tense marker. However, Future tense is not the only environment for the Subjunctive in independent clauses in Nyanja. The Subjunctive is also used in exhortations, as demonstrated in the following examples. Sentence (9a) has the indicative marker, which is the final vowel *-a*, with the tense marker. In contrast, (9b) is not marked for tense and is marked with the Subjunctive in the final slot. Likewise, (10a) is Indicative and differs from (10b), which is Subjunctive.

(9) Nyanja

a. *tu-da-chok-a*

1PL.SM-PST-leave-FV

‘we left’

- b. *ti-chok-e*
 1PL.SM-leave-SBJV
 ‘let us leave/we should leave’

(10) Nyanja

- a. *John a-som-a chi-kalakala*
 John SM1-read-FV 7-book
 ‘John is reading a book’
- b. *John a-som-e chi-kalakala*
 John SM1-read-SBJV 7-book
 ‘John should read a book.’

In both (9b) and (10b), the Subjunctive is not triggered or required by any superordinate structure. The two examples are independent clauses. The Subjunctive is also required, however, by matrix structures in several dependent clause environments, to which we now turn.

3.2 *The subjunctive in dependent clauses*

The Subjunctive is used extensively in dependent clauses. In such positions, it may be triggered by (a) a matrix verb, or (b) an adverbial environment. Matrix verbs that trigger the Subjunctive in the dependent verb may be directive, causative, or volitional.

3.2.1 *Dependent clauses triggered by matrix verbs*

Directive verbs are verbs that express a command or a demand that is made for someone to take action (Timberlake 2007: 319). They are verbs that convey attempts to have someone else do something (Crystal 2008). Such verbs include *order*, *instruct*, *command*, and *direct*. The directive may be explicit in the verb; for instance, ‘instruct’ is followed by a subordinate clause that expresses what is to be done. Less explicit directions include verbs such as ‘say’. In Giryama, directive verbs include *voya* ‘ask someone to do something’, *lagiza* ‘instruct, direct, give instructions’, *longoza* ‘guide’, and *huma* ‘instruct, send someone to do something’. In Nyanja, verbs such as *tuma* ‘instruct’ trigger the subjunctive in the subordinate clause. The following examples illustrate such an environment in the two languages. The verb in the Giryama matrix clause is *fwambira* ‘we told/instructed’ in (11), while in Nyanja (12), the matrix verb is *tudamtuma* ‘we instructed him/her’. The subordinate clause in (11) is *ende* ‘she go’ and in (12) it is *apite*, both meaning ‘that s/he go’.

(11) Giryama

- Fu-mw-ambir-a mu-hoho end-e*
 1PL.SM-1OM-tell-FV 1-child SM1.go-SBJV
 ‘We instructed the child to go.’

(12) Nyanja

Tu-da-m-tum-a *mw-ana* *a-pit-e*.
 1PL.SM-PST-1OM-instruct-FV 1-child SM1-go-SBJV

‘We instructed the child to go.’

In both cases, the Subjunctive is required by the directive verb in the matrix clause.

The second type of subordinate clause environment in which the Subjunctive occurs is when the matrix verb is causative. Causative verbs express a causal relationship with another event (Crystal 2008). In this case, the causative matrix verb establishes a causal relationship with the event expressed by the subordinate clause. Such verbs include *cause* and *make*. These are syntactic or analytical causatives and not morphological causatives. In the context of complex sentences involving subjunctives, the caused event appears in the subordinate clause with the verb marked as Subjunctive. Giriyama causative verbs include *zulia* ‘prevent’, *kahaza* ‘refuse, prohibit’, *kinja* ‘prevent, protect’, *ruhusu* ‘permit’, and *henda* ‘cause’. In Nyanja, *chita* ‘make’ is an example. The matrix verb in Giriyama (13) is *lwamuhenda* ‘it made it’, which is complemented by *nyoka ambole* ‘the snake come out’. In (14), the Nyanja matrix clause verb *zidanchita* ‘they made it’ takes the complement *njoka achoke* ‘the snake come out’.

(13) Giriyama

Lonzo *lw-a-mu-hend-a* *nyoka* *a-mbol-e*.
 11.noise SM11-PST-1OM-cause-FV 1.snake SM1-exit-SBJV

‘Noise caused the snake to come out.’

(14) Nyanja

Pokoso *zi-da-n-chit-a* *njoka* *a-chok-e*.
 10.noise SM10-PST-1OM-make-FV 1.snake SM1-exit-SBJV

‘Noise caused the snake to come out.’

In both sentences, the verb in the subordinate clause is marked with the Subjunctive mood. In these cases, the Subjunctive in the subordinate clause is required by the matrix causative verb.

The third type of subordinate environment is triggered by volitional verbs that express desire. The prototypical example of such verbs is ‘want’, which is *mala* in Giriyama and *funa* in Nyanja. Other verbs include *lindila* ‘wait for’ in Nyanja. The subordinate clause is the object of the desire and that is where we find the subjunctive predicate, as illustrated in the examples below.

(15) Giriyama

Fu-na-mal-a *ma-dz-e*
 1PL.SM-PRS-want-FV 3PL.SM-come-SBJV

‘We want them to come.’

(16) Nyanja

Ni-fun-a *John* *a-som-e* *chi-kalakala*
 1SG.SM-want-FV John SM1-read-SBJV 7-book

‘I want John to read a book.’

In (15), the subordinate clause *madze* ‘they come’ is the complement of the matrix verb *funamala* ‘we want’ in Giriyama. Likewise, in (16), the verb *asome* ‘he read’ in Nyanja complements the predicate *nifuna* ‘I want’ in the matrix clause.

In both Giriyama and Nyanja, an infinitive complement to ‘want’ is only possible when the subject of the matrix clause is also the implicit subject of the subordinate clause. The Subjunctive is required when the two subjects are different. Here are examples from Nyanja:

(17) Nyanja

a. *M-lendo a-fun-a ku-pit-a ku-mu-nda.*

1-guest SM1-want-FV INF-go-FV 17-3-farm

‘The guest wants to go to the farm.’

b. *M-lendo a-fun-a iwe u-pit-e ku-mu-nda.*

1-guest SM1-want-FV 2SG 2SG.SM-go-SBJV 17-3-farm

‘The guest wants you to go to the farm.’

The verb *funa* ‘want’ takes these two possible complements. In (17a), the subject of the matrix verb is *mlendo* ‘guest’, which is also interpreted as the subject of *kupita* ‘to go’ in the subordinate clause. The subject of the matrix verb in (17b) is *mlendo* ‘guest’, while the subordinate clause has *iwe* ‘you’ as the subject. In the latter case, the Subjunctive is required.

3.2.2 Adverbial environment

Some adverbial clauses are associated with the Subjunctive form when the subordinating conjunction requires the subjunctive verb in the subordinate clause it embeds. The following examples from Giriyama have subordinating conjunctions that trigger the Subjunctive mood. The subordinating conjunctions *ili* ‘so that’ in (18a) and *hangu* ‘since’ in (18b) require the verb in the subordinate clause to be Subjunctive. Thus, we get *ushome* ‘you study’ in the former and *ugite* ‘you cooked’ in the latter.¹

(18) Giriyama

a. *F-a-ku-hirik-a sikuli ili u-shom-e.*

1PL.SM-PST-2SG.OM-send-FV 9.school so.that 2SG.SM-read-SBJV

‘We sent you to school so you could study.’

b. *Hangu u-git-e vi-razi, f-a-git-a zha-kurya vi-nji zaidhi*

since 2SG.SM-cook-SBJV 8-potato 1PL.SM-PST-cook-FV 8-food 8-plenty more

‘Ever since you cooked potatoes, we have cooked more food.’

1 A reviewer has pointed out that some studies have suggested that the *-e* of the verb following *hangu* ‘since’ in Giriyama and *tangu* ‘since’ in Swahili (G42d), also found in several other Bantu languages, may not be a subjunctive but rather a remnant of some other affix such as Perfective **-ide*. This might explain why the semantics of this particular construction is not consistent with irrealis or lower certainty. We leave this open to further investigation but note that in some languages, such as Ndendeule (N101), both *-ile* and *-e* are used with *tangu* ‘since’. *Tangu ahike* ‘since s/he arrived’ and *tangu ahikite* ‘since s/he has arrived’ differ in a subtle way, with the latter being more specific to a more recent time (examples from the second author, a native speaker of Ndendeule).

Similar adverbial environments are also observed in Nyanja, as in the example below. The subordinate clause is made up of only the subjunctive verb *usome* ‘you read’ (19).

(19) Nyanja

Tu-da-ku-pelek-a ku-sukulu kuti u-som-e.
1PL.SM-PST-2SG.OM-send-FV 17-9.school that 2SG.SM-read-SBJV

‘We sent you to school so you could study.’

The subordinator *kuti* ‘that’ appears as the subordinating conjunction and is interpreted as ‘so that’ in this example. *Kuti* is also used to introduce non-purpose clauses. When this subordinator is not interpreted as introducing a purpose clause, the subjunctive mood may not be required, as shown in (20).

(20) Nyanja

U-z-a a-tate w-ako kuti ine ndi n-kazi w-anga ti-da-fik-a
2SG.SM-tell-FV 1a-father 1-your that 1SG and 1-wife 1-my 1PL.SM-PST-come-FV

‘Tell your father that my wife and I have arrived.’

In this sentence, the conjunction *kuti* is interpreted as equivalent to the English subordinator ‘that’. It does not introduce a purpose clause. The verb in the subordinate clause does not bear subjunctive morphology; it is Indicative.

3.3 *The subjunctive in the scope of a modal*

Apart from independent clauses and subordinate clauses, the Subjunctive can also be marked on verbs in matrix or independent clauses with modal adverbs, words that express such notions as possibility, probability, necessity, desirability, and obligation. Such modals include *lazima* ‘must’ and *baha* ‘better’ in Giryama,² and *apuna* ‘it is better’ and *kasina* ‘perhaps’ in Nyanja. These trigger the use of the Subjunctive on the verb. For example, in Giryama, the modal *lazima* ‘must’ introduces the Subjunctive form of the verb ‘go’, as in *nende* ‘I go’ (21a). Likewise, in (21b), *baha* ‘it is better’ introduces the Subjunctive *adze* ‘he come’.

(21) Giryama

a. *Lazima n-end-e*
must 1SG.SM-go-SBJV

‘I must go.’

b. *Baha a-dz-e*
better SM1-come-SBJV

‘It’s better he comes.’

A similar feature is observed in Nyanja, where *apuna* ‘it is better’ in (22a) expresses a desirable situation, and *kasina* in (22b) expresses probability.

2 The modal *lazima* ‘must’ is a loan from Arabic, probably via Swahili. *Baha* ‘it is better’ is a modal that appears in several Bantu languages in similar forms, including Ndendeule (N101) *mbaha* and Ngoni (N12) *mbanga* (Ngonyani 2013).

(22) Nyanja

- a. *Apuna Halima a-gul-e gali.*
 better Halima SM1-buy-SBJV 5.car
 ‘Halima had better buy a car.’
- b. *Kasina sa-a-j-e.*
 perhaps FUT-SM1-come-SBJV
 ‘Perhaps s/he will come.’

The modals *apuna* ‘it is better’ and *kasina* ‘perhaps’ require the Subjunctive in these sentences.

To sum up, we have described three environments in which the Subjunctive is found in both Giryama and Nyanja. The first environment is independent clauses. These may be hortatives or suggestions. Additionally, in Nyanja, the Future tense marker requires the Subjunctive form. The second environment is subordinate clauses either triggered by certain kinds of verbs or by adverbial subordinators. The third environment is clauses introduced by modals. So far, the description has focused on the morphosyntactic properties of the Subjunctive in these two languages. The Subjunctive appears to be associated with a range of meanings. An important question at this point is why certain syntactic environments require the Subjunctive and others do not.

4. SUBJUNCTIVE AND IRREALIS

It is clear from the foregoing description that the Subjunctive is licensed by certain syntactic environments but is also necessitated by some semantic demands at the intersection of the realis-irrealis axis and the strong-weak manipulation axis. In this section, we address the question of what the semantic contribution of the Subjunctive is. To put the semantics of the Subjunctive in a proper perspective, let us consider the following pair of sentences from Giryama, one Indicative (23a) and the other Subjunctive (23b).

(23) Giryama

- a. *Wa-amb-a u-nda-shom-a*
 SM1-say-FV 2SG.SM-FUT-read-FV
 ‘S/he said you will read.’
- b. *Wa-amb-a u-shom-e*
 SM1-say-FV2 SG.SM-read-SBJV
 ‘S/he said you should read.’

The use of the Subjunctive in (23b) changes the reading of an otherwise similar sentence to an instruction. This demonstrates that the Subjunctive has a significant role in the semantic packaging of the sentences. The motivation for many of the environments remains elusive. However, examining the central feature of the semantics of the Subjunctive will shed some light on the problem.

As noted earlier, the subjunctive is considered an expression of non-fact. The best exemplars of the subjunctive meaning are non-assertions (Bybee & Fleischman 1995) or lower certainty and weaker manipulation (Givón 1994). In Giryama, the gradation in epistemic modality can be shown by comparing the Indicative Present tense (24a) and the Subjunctive (24b).

(24) Giryama

- a. *John a-na-shom-a ki-tabu.* (higher certainty)
 John SM1-PRS-read-FV 7-book
 ‘John is reading a book.’
- b. *John a-shom-e ki-tabu.* (lower certainty)
 John SM1-read-SBJV 7-book
 ‘John should read a book.’

The Indicative Present tense form in (24a) expresses a higher degree of certainty than the Subjunctive form in (24b). The event expressed with the Subjunctive is not real, or not asserted as real. It is a wish or permission.

With respect to deontic modality, the Imperative expresses strong manipulation, as in commands, while the Subjunctive expresses weaker manipulation appropriate for suggestions and exhortations. Giryama illustrates this gradation when we contrast the Imperative with the Subjunctive. The Imperative clause in (25a) strongly asserts a directive or command to cut the trees. The Subjunctive in (25b), on the other hand, expresses permission or desire for someone to cut the trees.

(25) Giryama

- a. *Tos-ani mi-hi!* (stronger manipulation)
 cut-IMP.PL 4-tree
 ‘Cut (pl.) the trees!’
- b. *M-tos-e mi-hi.* (weaker manipulation)
 2PLSM-cook-SBJV 4-tree
 ‘You (pl.) should cut the trees.’

A similar gradation in epistemic mode is observed in Nyanja. We contrast here the Indicative Present tense *soma* ‘read’ with its Subjunctive counterpart. The Indicative Present tense form in (26a) expresses an assertion of a fact that the Subjunctive in (26b) does not. Similarly, in deontic modality, the Subjunctive expresses weaker manipulation than the Imperative.

(26) Nyanja

- a. *Joni a-som-a chi-kalakala.*
 John SM1-read-FV 7-book
 ‘John is reading a book’
- b. *Joni a-som-e chi-kalakala.*
 John SM1-read-SBJV 7-book
 ‘John should read a book.’

The Imperative in (27a) expresses a command, while the Subjunctive in (27b) expresses a suggestion or desire on the part of the speaker. The command expresses stronger manipulation and greater assertion while the Subjunctive expresses weaker manipulation and non-assertion.

(27) Nyanja

- a. *end-a!*
walk-FV
'walk!'
- b. *w-end-e*
2SG.SM-walk-SBJV
'you (should) walk'

The examples from Giriyama and Nyanja seem to confirm Givón's (2001) proposal of the subjunctive being associated with weak manipulation and lower certainty. However, there are cases of Subjunctive use that are not consistent with this proposal. Siegel (2009), for example, presents evidence from Romance and Balkan languages, as does Lunn (1995) from Spanish, that Givón's irrealis readings are not always obtained. There are likewise cases in Giriyama and Nyanja that indicate that irrealis and lower certainty readings are sometimes not available. The first one is evidence against a weaker certainty reading. Consider, for example, a sentence cited earlier and repeated here for convenience, with the Subjunctive in the subordinate clause (28).

(28) Nyanja

Hangu u-git-e *vi-razi, f-a-git-a* *zha-kurya vinji zaidhi*
since 2SG.SM-cook-SBJV 8-potato 1PL.SM-PST-cook-FV 8-food 8-plenty more
'Ever since you cooked potatoes, we have cooked more food.'

The subordinator *hangu* 'since' triggers the Subjunctive in the subordinate clause. *Hangu ugite* 'ever since you cooked' expresses an assertion that something happened in the past. In other words, the irrealis reading that is associated with the Subjunctive is not possible in this case. Furthermore, there is no hint of uncertainty with respect to the event that is referred to.

In the second case, the Subjunctive is triggered by a causative verb. Earlier on we presented this example:

(29) Nyanja

Pokoso zi-da-n-chit-a *njoka a-chok-e.*
10.noise SM10-PST-1OM-make-FV 1.snake SM1-leave-SBJV
'Noise made the snake come out.'

The coming out of the snake did actually happen. It is asserted as factual, and clearly with higher certainty. But this event is expressed in the Subjunctive.

When a modal that expresses necessity or obligation is used, the weak manipulation of the Subjunctive is no longer evident. In fact, a reading of strong manipulation may become more prominent, as shown here (30).

(30) Giriyama

Lazima u-git-e
must 2SG.SM-cook-SBJV
'You must cook.'

The modal *lazima* ‘must’ and the form *ugite* ‘you cook’ in this sentence express neither lower certainty nor weak manipulation. The combination of the Subjunctive and the modal has resulted in some variability in the semantics of this mood.

These facts complicate the semantic picture of the Subjunctive. It is clear that the Subjunctive has fuzzy boundaries and that it cannot be defined with a binary opposition of features. A prototype approach offers a flexibility that leads to a better understanding that may link the different environments (Haspelmath 2003). The non-factive reading of the subjunctive can be regarded as an exemplar or prototypical meaning.

5. NON-FACT AS THE PROTOTYPE OF THE SUBJUNCTIVE

The various meanings associated with the subjunctive are not totally unrelated. We can discern some meanings which appear to be better exemplars than others of non-factive meanings. The non-assertion or irrealis meaning should be taken as the prototypical meaning. The idea of the prototype approach is extended to morphosyntactic categories in a rather insightful way by some writers by linking multiple meanings to polysemy (see, e.g. Bybee & Moder 1983; Panther & Köpcke 2008; Taylor 2003; 2011). The prevalence of polysemy in morphosyntactic categories is very widely recognized (Haspelmath 2003; Panther & Köpcke 2008; Taylor 2003; 2011). Related senses are often expressed by single linguistic forms. A clusters of related meanings may be associated with an affix, for example; an interrogative form does not always mark a question, but may express a request or other communicative function, or some other polyfunctionality. The English Past tense, for example, prototypically expresses deictic past. But there are other uses, as illustrated below (31).

(31) Past tense in English (Taylor 2003: 177–178)

- | | |
|---|--------------------------------|
| a. <i>He saw a panther.</i> | (deictic past, narrative past) |
| b. <i>If I had enough time ...</i> | (counterfactual) |
| c. <i>It's time we went to see him.</i> | (suggestion for future) |
| d. <i>I was wondering if you could help me.</i> | (pragmatic softening) |

The prototypical meaning is found in (31a), which expresses an event that occurred before the time of speech. However, the other three uses of the Past tense do not express the past. The combination of the conditional *if* and the Past tense *had* in the conditional clause results in a counterfactual reading in (31b). The Past tense *went* in (31c) is a common means of expressing a suggestion or exhortation. In fact, it suggests that it should happen in the future. Sentence (31d) exemplifies the use of the past tense to express a request. From these examples, we are reminded of the different roles that inflections can play.

As an inflection, the Subjunctive displays similar versatility. Suggestions and non-facts may be regarded as the prototypical meaning of the non-factive Subjunctive. In this role, independent clause Subjunctives are good exemplars. Recall that independent clause Subjunctives are used for exhortations, suggestions, and with certain modals. In addition, in Nyanja, the Subjunctive co-occurs with the future tense. Consider, for example, the following Nyanja sentences. The Past tense form in (32a) expresses something that has already happened. This is contrasted with (32b), with the same verb but in the Subjunctive form. There is an exhortation or suggestion that the speaker and other(s) should leave. The leaving is a non-fact or might happen at some later point, a meaning that is associated with the Subjunctive form. It is also weak manipulation in the sense that the speaker is not forcing or commanding the addressee.

(32) Nyanja

- a. *Ti-da-chok-a.*
1PL.SM-PST-leave-FV
'We left.'
- b. *Ti-chok-e.*
1PL.SM-leave-SBJV
'Let us leave.'

The irrealis sense is often reinforced by other devices, such as the use of other inflections to express a non-factive meaning. The combination of the Subsecutive *-ka-* and the Subjunctive reinforces the non-factive meaning in (33a) because the Subsecutive points to a time in the future when the event denoted by the verb will take place. The Subsecutive depends on other tenses in the context of the narrative or may be used with the core meaning of 'go and X'. Another morphological formative that is consistent with the irrealis reading of the Subjunctive is the Future. The Future is inherently irrealis and that is why it is consistent with the Subjunctive (as in 33b).

(33) Nyanja

- a. *A-ka-gul-e* *m-unda.*
SM1-SUBS-buy-SBJV 3-farm
'S/he should (go) buy a/the farm.'
- b. *S-a-gul-e* *m-unda.*
FUT-SM1-buy-SBJV 3-farm
'S/he will buy a/the farm.'

The non-factive reading in subordinate clause Subjunctives may be less clear than those in independent clause Subjunctives. Consider the Subjunctives that are triggered by matrix verbs, for example. The Subjunctive clause event is considered to be a non-fact relative to the event that is denoted by the matrix verb. The matrix verb is effectively a trigger for a presupposition. Let us examine three Nyanja sentences to illustrate how non-fact is expressed using the Subjunctive. The matrix verbs in (34a) *chita* 'make' and (34b) *tuma* 'send (to do something)' are directive, while that in (34c) *funa* 'want' is volitional.

(34) Nyanja

- a. *Pokoso* *zi-da-n-chit-a* *njoka* *a-chok-e.*
10.noise SM10-PST-1OM-make-FV 1.snake SM1-leave-SBJV
'Noise made the snake come out.'
- b. *Tu-da-m-tum-a* *mw-ana* *a-pit-e.*
1PL.SM-PST-1OM-send-FV 1-child SM1-go-SBJV
'We instructed the child to go.'
- c. *Ni-fun-a* *John* *a-som-e* *chi-kalakala.*
1SG.SM-want-FV john SM1-read-SBJV 7-book
'I want John to read a/the book.'

The verb *zidanchita* ‘made it’ in (34a) presupposes that the snake was inside (maybe in a hole) before the noise. That means the coming out of the snake was a non-fact at least at the time when the noise began. At utterance time, the event in the subordinate clause in (34a) is a reality. Likewise, *tidamtuma* ‘we sent’ in (34b) presupposes that the child did not go before being sent, a non-factive reading of the event expressed by the Subjunctive. The Subjunctive clause presents the possibilities that the child went or might not have gone at all. In (34c), *nifuna* ‘I want’ expresses what the speaker wishes would happen. The Subjunctive time is dependent on the past tense of the matrix clause. The idea of the Subjunctive as a dependent tense has been discussed in studies of Subjunctives in other languages (Laskova 2017). Note that with respect to the time referred to by the matrix verb, the event of the Subjunctive verb has not happened. Therefore, the matrix verbs function as presupposition triggers for non-factive or non-assertive events.

In adverbial environments, characterizing the semantics of the Subjunctive presents a particular challenge. The subordinating conjunctions can also be viewed as presupposition triggers. Purpose clauses introduced by *ili* ‘so that’, as in (18a), repeated here as (35), express non-reality.

(35) Giryama

F-a-ku-hirik-a *sikuli* *ili* *u-shom-e*.
1PL.SM-PST-2SG.OM-send-FV 9.school so.that 2SG.SM-read-SBJV

‘We sent you to school so you could study.’

We consider *ili* ‘so that’ as a presupposition trigger for something that is non-factive in relation to the event of the main clause. However, not all Subjunctives in temporal adverbial clauses are non-factive. The subordinating conjunction *muhachi* ‘until’ in Giryama, for example, can trigger a Subjunctive (36a), as can *hangu* ‘since’ in (36b).

(36) Giryama

a. *Fu-nda-rich-a* *ku-rim-a* *muhadhi* *u-hu-rih-e*.
1PL.SM-FUT-stop-FV INF-cultivate-FV until 2SG.SM-1PL.OM-pay-SBJV

‘We will not cultivate until you pay us.’

b. *Hangu* *u-git-e* *vi-razi*, *f-a-git-a* *zha-kurya* *vinji* *zaidhi*
since 2SG.SM-cook-SBJV 8-potato 1PL.SM-PST-cook-FV 8-food 8-plenty more

‘Ever since you cooked potatoes, we have cooked more food.’

The Subjunctive in the subordinate clause in (36a) is consistent with non-assertion in that it is non-factive. The temporal adverbial conjunction *muhachi* ‘until’ presupposes that the payment has not taken place yet. It is non-factive. However, the subordinating conjunction *hangu* ‘since’ in (36b) does not trigger the presupposition that the event expressed in the Subjunctive clause is non-factive. In fact, it states that the cooking by the addressee did actually take place. This sentence is inconsistent with the non-assertion interpretation of the Subjunctive, for which we do not have an explanation.

The Subjunctive that appears in the scope of modals expresses non-assertion and non-facts in general. This is because modals do not require the Subjunctive. It is possible to find the modals with tensed predicates, as in (37) from Giryama.

(37) Giryama

- a. *Baha a-ry-e*
better SM1-come-SBJV
'She'd better eat.'
- b. *Baha m-a-ry-a*
better SM2-PST-eat-FV
'They'd better eat.'

The modal *baha* 'it is better' appears with both the Subjunctive (37a) and the Indicative Past tense (37b). Although *baha* is consistent with the Subjunctive, it does not require it. The Subjunctive clearly expresses something that has not happened.

To sum up, the Subjunctive has a prototypical meaning of irrealis or non-assertion. However, in many environments, it may express irrealis in relation to another event even though this event may in fact have occurred. Thus, we have identified that certain matrix verbs trigger Subjunctives as presupposition triggers. Subjunctives may also have a pragmatic function, as in suggestions and weak commands. In such syntactic or pragmatic environments, the Subjunctive renders non-assertive readings.

6. CONCLUSION

This paper set out to describe the Subjunctive mood in Giryama and Tanzanian Nyanja, two Bantu languages spoken in East Africa. With a few minor differences between the two languages, the Subjunctive mood is characterized by the suffix *-e*, which contrasts with Indicative *-a* and the Imperative *-a/-ani*, the absence of tense markers, and the obligatory presence of the subject marker. With regard to its distribution, the Subjunctive appears in three environments. In both languages, the first environment is that of independent clauses where it expresses exhortation or suggestion, as well as co-occurring with the future tense. The second environment is in subordinate clauses triggered by matrix verbs of direction, causation, or volition, as well as by some subordinators in adverbial environments. The third environment is in independent clauses that are within the scope of modals.

Although many cases of the Subjunctive in these languages are consistent with Givón's semantic characterization of the subjunctive as expressing irrealis, lower certainty, and weaker manipulation, we presented evidence that demonstrated that in some cases the data are not consistent with this characterization. Subordinate clause Subjunctives are connected to triggers of presuppositions. The presupposed situations are not real before a certain point expressed by the matrix clause. Thus, although the meanings of the Subjunctive clauses are not irrealis, there is some non-fact involved. It is not very clear why certain non-factive environments call for the Subjunctive while others do not. Future work might shed more light on this.

The facts discussed here also call for further investigation regarding the structure of the Subjunctive clause. What, for example, is the relationship between the Subjunctive and the absence of tense? The only exception seems to be the morphologically marked Future tense in Nyanja, which consistently co-occurs with the Subjunctive. Another subject of interest is the requirement for the Subjunctive in cases of disjoint subject reference. The behaviour of disjoint reference in these Bantu languages is different from what is observed in Romance languages, for example. Further studies of Bantu languages should explore in greater depth the features

that characterize the subjunctive cross-linguistically, particularly with regard to its occurrence in expressions of fact.

ABBREVIATIONS

Numbers refer to person (first 1, second 2, third 3) or to noun classes (1, 1a, 2, etc.).

FUT	future tense	PST	past tense
FV	final vowel	REL	relative marker
IMP	imperative	SG	singular
INF	infinitive	SM	subject marker
OM	object marker	SBJV	subjunctive
PL	plural	SUBS	subsecutive
PRS	present tense		

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