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On the Causative of Intransitives in Somali: A Preliminary Study of Djibouti Somali¹

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Our aim in this article is to gain insight into the grammatical structure of *sii*-causatives in Somali, and in particular to understand the conditions that govern case marking of the subject of the predicate embedded under *-sii*. We first provide the relevant background information as established by Saeed (1989, 1999). Then we outline some preliminary empirical generalizations based on data elicited with a Djibouti Somali native speaker. Given the apparent amount of variation, we think that these generalizations must be tested on the basis of a large scale survey. To this effect, we designed an online judgment task that we briefly present in a third step.

1. Background

Somali, like many other languages of the region, has two causative suffixes: *-i* and *-sii*. For some verbs, both the *-i* causative and the *-sii* causative exist, as shown in (1).

- (1) *ur* ‘to stink’
a. *uri* ‘to smell’
b. *ursii* ‘to cause someone to smell’

However in most cases, only either the *-i* causative or the *-sii* causative is attested. In this article, we focus on *sii*-causatives.²

1.1. Basic properties of *sii*-causatives

According to Saeed (1999: 141-3), *-sii* has the following properties:

- (2) a. it « may be attached to either transitive or intransitive root verbs. »
b. it is « typically attached to activity verbs, especially with human Actor subjects. »
c. it is « largely restricted to an animate [...] sentient, causee. »

These observations taken together indicate that the subject of the predicate embedded under *SII* (also called the causee) is a sentient subject, with the following specifications [+human, +actor]. In addition, Saeed observes that this restriction on the features of the causee are identical with those of the indirect object of the homophonous verb *sii* ‘to give’: « This restriction is shared by the second (Recipient) argument of the homophonous verb *sii* ‘give.’ »

We first consider Saeed’s observations concerning the derivation of *sii*-causatives on the basis of transitive bases, and then turn to intransitive bases.

Saeed (1999: 141) writes that: « With transitive verbs the effect is to add a third argument: the Causer is subject; the Actor-subject and the Patient-object of the root verb both become objects of the derived causative. » This pattern is exemplified in (3): the arguments of the base verb *cun* ‘to

1 Acknowledgments: to be added

2 The suffix *-sii* is said to be less commonly used than *-i*. A quick survey of two standard dictionaries (Zorc & Osman 1993, and Agostini, Puglielli & Siyaad 1985) gives a total of 130 *sii*-causatives vs 1037 *i*-causatives. According to Saeed (1989, 1999), the pattern with *ka* vs without *ka* described in this article for *-sii* causatives applies to *-i* causatives, too.

eat' are underlined, and the additional causer argument introduced by SII in (3b) is indicated in bold face.

(3) Saeed (1999): (23) p. 142

- a. Carruúr-tii wáy cun-een bariis-kii.
 children-the DM+they eat-3PL:PAST rice+the
The children ate the rice.
- b. **Faadúmo** ayáa carruúr-tii cun-sií-say bariis-kii.
 Fatima FOC children-the eat-CAUSE-PAST rice-the
FATIMA caused the children to eat rice/fed the children rice.

With intransitive bases, the situation is more complex and Saeed observes two patterns. A subset of intransitive bases behaves like transitive bases: « There are some cases [...], where an intransitive verb patterns like a transitive verb [...], i.e. where the root verb's subject becomes a second object of the derived causative. » (Saeed 1999: 142) This is illustrated in (4) with the verb *sabar* 'to be patient'. The argument of the base verb, *Cali*, is underlined. In (4b) the additional causer argument introduced by SII is indicated in bold face.

(4) Saeed (1989): (43)

- a. Cali wuu sabr-ayaa.
 Ali DM+he patient-PRES PROG
Ali is being patient.
- b. Cali w-**aan** sabar-sii-yey.
 Ali DM+I patient-CAUSE-PAST
I caused Ali to be patient / I appeased Ali.

Saeed further observes that the usual pattern for intransitive bases is a different one: « When [sii] is attached to intransitive verbs, the usual pattern is for the root verb's Actor-subject to become an oblique NP governed by the adposition *ka* 'from'. » This is illustrated in (5) with the verb *feker* 'to think'. (5b) shows that the subject of the embedded predicate, *Cali*, is realized as an oblique object with *ka*.

(5) Saeed (1999): (25) p. 142

- a. Calí wúu feker-ayay.
 Ali DM+he think-PAST PROG
Ali was thinking.
- b. **Way** ká feker-sií-say Calí.
 DM+she ADP think-CAUSE-PAST Ali
She caused Ali to think / She made Ali think.

The question we would like to address in this article is the following: Why is there such a split in the behaviour of the *sii*-causatives derived from intransitive bases ?

As a starting point, consider the following conjecture offered by Saeed:

(6) « It is not clear why [some] intransitive verbs pattern like transitives [...], unless we speculate that there are semantically understood objects [...] which influence the argument structure of the derived causative. » Saeed (1999: 143)

The notion of ‘semantically understood object’ is not easy to falsify. In order to have a more solid ground, we tried to see whether ‘semantically understood’ can be replaced by ‘syntactically represented’ in Saeed’s generalization. When an intransitive verb subcategorizes for DO, then this DO is a cognate. We will thus pay particular attention to the occurrence of the cognate noun in the argument positions of the verbs we will examine.

Under this hypothesis, we can adapt Saeed’s conjecture as in (7). There are two groups of verbs, group A and group B. Group A is for transitive bases, and intransitive bases with a potential syntactic object. The embedded predicate has a subject and a referential or a cognate object. Group B is for the intransitive bases. In this group, the subject of the embedded predicate is realized as an oblique object with *ka* in the *SII* construction.

(7)	Group A (excludes <i>ka</i>)	Group B (requires <i>ka</i>)
	transitive bases intransitive bases with cognate	intransitive bases
	[SUBJ SII [subj _{DO2} V (obj _{DO1})]]	[SUBJ SII [subj _{obl} V]]
	ex: <i>cun, sabar</i>	ex: <i>feker</i>

As can be seen in (7), the difference between the intransitive bases of group A and the intransitive bases of group B lies in the embedded predicate. Accordingly, we will investigate the argument structure properties, and the thematic roles of the base verbs and their derived *sii*-causatives, and the (in)compatibility of the subject embedded under *SII* with *ka*.

1.2. *ka* ‘from, away from, out of’

Given the central role of the preverbal element *ka*, we now briefly review its properties. *ka* is one of the « preverbal morphemes which semantically govern oblique elements of the predication » (Saeed 1999: 109-10). It is generally considered that there are four such morphemes: *u* ‘to, for’, *ku* ‘in, into’, *ka* ‘from, away from’, *la* ‘with (comitative)’. These morphemes are characterized by the following two syntactic properties, which will be relevant for our purposes:

- (8) a. « The morpheme remains in pre-verbal position regardless of the position of the NP it semantically governs. »
 b. « When more than one non-subject NP is involved, these structures can give rise to ambiguity, which is resolved by contextual information. » (Saeed 1999: 110)

As for the semantic import of *ka*, it is usually associated with a source argument (9a), but can also be part of a lexicalised verb-particle construction (9b):

- (9) a. Nin-kán báa Cadán **ká** yimi (Saeed 1999: 109)
 man-this FOC Aden **from** came
This man came from Aden.
- b. **ká** céli (Saeed 1999: 111)
from send back
to defend

Finally, at the morphological level, adpositions can be combined, and they appear in a fixed order *u+ku+ka+la*. In addition, Somali adpositions are famous for involving coalescence processes, which give rise to neutralisation phenomena. In particular, both *ku+ka* and *ka+ka* result in *kaga*:

- (10) a. ku+ka → kaga
Waxay **kaga** hadleen shirkii shaley **arrintan**.
*They talked **about this matter** at the meeting yesterday*
- b. ka+ka → kaga
Macallinku wuxuu **kaga** fekersiiyay Cali **casharkii**.
*The teacher caused Ali to think **about the lesson**.*

2. Empirical generalizations

In order to confirm/falsify (7), we conducted a pilot study, based on regular elicitation sessions with a Somali native speaker between September 2020 and June 2021. The speaker is in his late 30's, he is originally from Djibouti where he was raised in Somali at home and in French at school. He has been living in France for approximately 10 years, and speaks Somali on a daily basis with his family, and the members of the Somali diaspora in France. Our elicitation sessions aimed at providing a lexical-semantic description of a selected set of base verbs and their argument roles, and a lexical-semantic description of their derived *sii*-causatives and their argument roles. We compared the two sets of data, and arrived at two generalizations:

- (11) a. next to Saeed's groups A and B, a third group of verbs seems to show a mixed pattern
b. the capacity of the base to take a direct object is not sufficient to define the group the *sii*-causative will belong to.

These generalizations are to be taken with caution, because they are based on data elicited from a single speaker, speaking a specific variety of Somali (Djibouti Somali). The observations to follow are thus meant as a methodological illustration of the strategy we will apply to address the puzzle in (7) in the future.

2.1. An intransitive base (no DO)

2.1.1. General pattern

A first group of base verbs does not seem to accept any direct object. In particular, the cognate noun is not possible in that position. We illustrate this group with the verb *hadal* 'to speak'.

Hadal is compatible with the full range of adjuncts introduced by an adposition (12a-d). It also cooccurs with the adverb *wada* 'together' (12e).

- (12) a. Maxamed si tartiib ah buu u hadlaa. (u: manner)
Mohamed speaks slowly.
- b. Af Faransiis buu ku hadlaa. (ku: locative)
He speaks in French.
- c. Afka Faransiiska buu ka hadlaa. (ka: theme)
He speaks about the French language.
- d. Maxamed wuxuu la hadlay aroosaddii. (la: addressee)
Mohamed spoke with the bride.
- e. Shaleyto Maxamed iyo Cali way wada hadleen. (wada 'together')
Yesterday, Mohamed and Ali talked together.

By contrast, our informant refused a combination of *hadal* with a DO. In particular, as shown in (13), the cognate NP *hadallo wanaagsan* ‘good words’ must be introduced by the adposition *ku*, i.e. it cannot be a DO.

- (13) Wasiirku wuxuu *(ku) hadlay hadallo wanaagsan.
 minister.NOM FOC+he KU speak.3MS.PAST word.PL good
The minister spoke good words.

Note that the cognate NP *hadallo wanaagsan* ‘good words’ can appear as a subject with the verb *hadal* (14). The fact that we observe an alternation between an oblique and a subject indicates that the NP *hadallo wanaagsan* ‘good words’ in (13) is not an adjunct but an oblique instrument argument.

- (14) a. Hadalladan wanaagsan si naxariis leh bay u hadleen.
These good words were pronounced in a compassionate way.
 b. Hadalladan wanaagsan way nala hadleen.
These good words touched us.
 c. Hadallo wanaagsan waxay ka hadleen saaxiibkay.
Good words were pronounced about my friend.

From a lexical semantics perspective, the verb *hadal* ‘to speak’ can be classified as an intentional emission verb. It has an external argument, and no direct NP object: it is intransitive in this sense.

Given the fact that *hadal* behaves like an intransitive verb, (7) predicts *hadalsii* to belong to group B, i.e. to require *ka*. This is indeed the case: (15a, b). Note in particular that in (15c), the only possible interpretation is that Ali’s daughter is talking, and we do not know what she is talking about. This indicates that the constituent *Cali gabadhiisa* must be interpreted as a prenominal genitive construction: Ali’s daughter. *gabadhiisa* ‘his daughter’ cannot be interpreted as a *ka*-adjunct of *hadalsii* (the theme of the talking). *Ka* introduces the causee *Cali gabadhiisa*.

- (15) a. Xanuunkii madaxweynaha ayaa *(ka) hadalsiiyey shacabkii.
The president’s illness caused conversations among the population.
 b. Ilwaad waxay *(ka) hadalsiisay Cali.
Ilwaad caused Ali to speak.
 c. Ilwaad waxay ka hadalsiisay Cali gabadhiisa.
*Ilwaad caused Ali’s daughter to speak. *Ilwaad caused Ali to talk about his daughter.*

We interpret the requirement of *ka* in structures like (15a, b) to indicate that SII causes the only structural argument of the base verb (=external argument, *Cali*) to disappear. In order for this argument to be recovered (as the causee), *ka* must be inserted.

2.1.2. Cooccurrence of *ka* with *la*, *wada* in group B verbs

Our preliminary survey of group B verbs reveals cooccurrence restrictions between the *ka* introducing the causee and, on the one hand, the adposition *la* and on the other hand, the adverb *wada*. The facts, which must be confirmed with additional verbs belonging to group B, and with additional native speakers in the future, are summarized below.

Consider the paradigm involving the base verb *hadal* ‘to speak’ in (16) below. The adposition *ka* introducing the locative adjunct can be combined with no apparent restriction with other

adpositions, e.g. *ku*, *la* (16a, b). *ka* as a locative adjunct is also compatible with the adverb *wada* (16d).

- (16) a. Waxay kaga hadleen shirkii shaley **arrintan.** (ku+ka)
They talked about this topic in yesterday's meeting.
- b. **Arrintan** ayuu igala hadley. (ka+la)
He talked with me about this matter.
- c. **Af Soomaali** igula hadal! (ku+la)
Talk to me in Somali!
- d. Shaleyto Maxamed iyo Cali waxay ka wada hadleen xafladda arooska. (ka+wada)
Yesterday Mohamed and Ali talked together about the reception of the wedding.

Now, let us turn to the derived causative *hadalsii* 'to cause to speak', which requires the causee to be introduced by *ka* (group B). Our speaker accepted the combination of various adpositions with *ka*, e.g. u+ka, ku+ka, ka+ka, see (17a-c). By contrast, he systematically rejected the combinations of la+ka and wada+ka: in this case *ka* cannot be realized (17d-e).

- (17) a. Waxay uga hadalsiisay **Saalim si naxariis leh.** (u+ka)
 *Waxay u hadalsiisay **Saalim si naxariis leh.**
She caused Saalim to speak in a compassionate way.
- b. Waxaad igaga hadalsiisay **af Soomaali.** (ku+ka)
You caused me to talk in Somali.
- c. Wuxuu igaga hadalsiiyay **arrintan.** (ka+ka)
He caused me to talk about this matter.
- d. Waxay nala hadalsiisay wasiirka. (*ka+la)
 *Waxay nagala hadalsiisay **wasiirka.**
She caused the minister to talk to us.
- e. Waxay na **wada** hadalsiisay Axmed. (*ka+wada)
She arranged things so that we speak with Ahmed.

This incompatibility cannot be ascribed to a general ban on *la/wada+ka*, since *la/wada* and *ka* do cooccur in the language: (16b, d). The contrast between (17d, e) and (16b, d) thus indicates that *ka*-adjunct and *ka*-causee-under-sii behave differently. This observation must be confirmed before we can hypothesize an analysis.

We now turn to verbs that can be used in an intransitive way, but that are also compatible with a restricted set of DO. In section 2.2., we illustrate the case where the DO can only be the cognate noun, and in section 2.3, we turn to cases where, in addition to the cognate noun, a restricted set of referential NPs is allowed as DO.

2.2. An intransitive base with a cognate object

We exemplify this group with the verb *bood* 'to jump'. As illustrated in (18a), the cognate NP *bootin dheer* 'a long jump' is a possible direct object. By contrast, referential NPs appear as adjuncts, as illustrated in (18b-d) with *ka* and in (18e, f) with *ku*:

- (18) a. Ilwaad waxay booddey bootin dheer.
Ilwaad made a high/long jump.
- b. Cali wuxuu *(ka) boodey albaabka.
Ali jumped through the door.

- c. Daboolkii baa *(ka) boodey dheriga.
The lid fell from the pan.
- d. Ilwaad waxay *(ka) booddey dugsiga.
Ilwaad skipped the class.
- e. Ilwaad waxay *(ku) booddey Deeqa.
Ilwaad jumped on Deeqa.
- f. Dhamac baa na*(gu) booddey.
The flame jumped on us.

Given the fact that *bood* accepts the cognate noun *bootin* as a DO, the generalization in (7) suggests that it should belong to group A, not group B. This is indeed the case: as illustrated in (19a,b), the subject of the embedded predicate, *Ilwaad* and *gurigii Maxamed* ‘Mohamed’s house’, is not introduced by *ka*. In (19c), *boodsii* cooccurs with *ka*, but *ka* introduces a locative argument (*albaabka* ‘the door’), not the causee (*Ilwaad*).

- (19) a. Saalim wuxuu boodsiyey Ilwaad.
Saalim made Ilwaad jump (e.g. he took her by her shoulders and helped her.)
- b. Cali wuxuu boodsiyey gurigii Maxamed.
Ali blew up Mohamed’s house.
- c. Saalim wuxuu ka boodsiyey Ilwaad albaabka.
Saalim helped Ilwad across the door (i.e., he carried her.)

boodsii thus behaves as if the base *bood* ‘to jump’ were transitive. Compare for instance the facts with a transitive verb that can be used in an intransitive context, *daaq* ‘to graze’:

- (20) a. Ridu way daaqaysaa. (no overt DO)
The goat is grazing.
- b. Ridu waxay daaqaysaa daaqa. (DO=cognate NP)
The goat is grazing the grass.
- c. Ridu waxay daaqaysaa cawskan wanaagsan/beertiisa. (DO=referential NP)
The goat is grazing this lovely grass/his field.

As can be seen in (21a, b), with *daaqsii*, the causee is not introduced by *ka*. *Ka* can only introduce a locative adjunct. (21a, b) parallels (19a, c).

- (21) a. Axmed wuxuu daaqsiyey arigiisa.
Ahmed made his goats/sheep graze.
- b. Axmed wuxuu ka daaqsiyey arigiisa beerta Cali.
Ahmed made his goats/sheep graze in Ali’s field.

This behaviour suggests that *bood* ‘to jump’ fails to select a direct object, but that it subcategorizes for NP. Since no semantic content is selected for the NP object position, only a cognate NP can appear there.

To conclude so far, the behaviour of both *hadal* and *bood* is compatible with Saeed’s conjecture in our syntactic reformulation as given in (7).

2.3 An intransitive base with a severely restricted referential DO

Let us now turn to verbs that allow not only the cognate noun as a DO, but also a restricted set of referential NPs. To this effect we consider the verb *qufac* ‘to cough’, illustrated in (22) with the adpositions *u*, *ku*, *ka*, *la*, and with the adverb *wada*.

- (22) a. Gabadheydii **aad** bay **u** qufacaysey.
My daughter was coughing a lot.
 b. **Ku** qufac **gacmahaaga dhexdooda** !
Cough in your hands!
 c. Axmed wuxuu **ka** qufacay **warkii/hadalkii Maxamed/beentiisi**.
Ahmed coughed because of Mohamed’s words/his lies.
 d. Axmed wuxuu **la** qufacay **Cali**.
Ahmed coughed with Ali/in reaction to Ali’s coughing.
 e. Axmed iyo Cali way **wada** qufaceen.
Ahmed and Ali were both coughing.

Qufac seems to combine mostly with animate subjects, but inanimate subjects like an engine are also acceptable:

- (23) Moteerka baabuurka baa qufacaya.
The engine of the car is coughing.

As shown in (24a) *qufac* accepts a cognate NP as a direct object. In this respect it behaves on a par with *bood*, cf. (18a). However, in addition, it accepts the referential object *dhiig* ‘blood’ as a direct object (24b). (Recall that for *bood* we were not able to find any referential object as a DO.)

- (24) a. Axmed wuxuu qufacayay qufac daran/xun.
Ahmed was coughing a severe/bad cough.
 b. Axmed wuxuu qufacay dhiig.
Ahmed coughed blood.

As shown in (25), *qufacsii* requires the causee to be introduced by *ka*: it belongs to group B.

- (25) a. Koronagii ayaa *(ka) qufacsiyey ilmaha.
The coronavirus made the baby cough.
 b. Dhaxantii baa ka qufacsiyey hooyadii.
The cold made the mother cough.
 c. Beentiisi baa iga qufacsiyey.
His lies made me cough.
 d. Moteerka baabuurka ka qufacsii!³
Make the engine cough ! (I.e., accelerate to unclog the thing !)

Thus the problem for (7): our data suggest that *qufac* ‘to cough’ is ‘more transitive’ than *bood* ‘to jump’ because it accepts both a referential NP like *dhiig* ‘blood’ and the cognate noun *qufac* as direct objects. However *qufacsii* belongs to group B (requires *ka*), on a par with e.g. *hadal*, i.e. it behaves as if the base were intransitive while *bood* belongs to group A, i.e. it behaves as if the base were transitive, on a par with e.g. *daaq*. In addition, we find group B patterns with base verbs that allow only the cognate noun as a direct object. Such is for instance the case of *ci* ‘to cry/scream’:

3 This example suggests that the restriction on the features of the causee observed by Saeed (a sentient subject, with the following specifications [+human, +actor], cf. section 1, (2)) is not strict in the Somali variety spoken by our informant.

- (26) a. Dameerku wuu ciyey.
The donkey screamed.
 b. Dameerku wuxuu ciyey cidiisii.
The donkey let out his scream.
 c. *Dameerku wuxuu ciyey heestiisii/gaajadiisii.
The donkey screamed his song/his hunger.
- (27) Gaajadii baa *(ka) cisiisey ilmaha.
Hunger made the baby cry.

At the present stage, we therefore must conclude that it is not clear that the capacity of the base to take a direct object is sufficient to define the group the *sii*-causative will belong to.

2.4. A third group of *sii*-causatives derived from intransitive bases?

In addition to the two patterns illustrated in the preceding sections (with *ka* in group B, cf. section 2.1 ; and without *ka* in group A, cf. sections 2.2 and 2.3), the data elicited with our informant defines a third pattern. For certain verbs, like *ciyaar* ‘to play’, the derived *sii*-causative allows both a structure without *ka* and one with *ka*: both (28a) and (28b) are acceptable.

- (28) a. Cali wuxuu **ku** ciyaarsiiyey Ilwaad **shirimiriga**.
 b. Cali wuxuu **kaga** ciyaarsiiyey Ilwaad **shirimiriga**. (=ku+ka)
Ali caused Ilwaad to play with the swing.

We first review the properties of the base verb *ciyaar*. *ciyaar* ‘to play’ allows both referential NPs and cognate NPs as direct objects (29a-b). Not all object types are possible, though: in (29c), the adposition *ku* is obligatory: the structure must include a *ku*-adjunct.

- (29) a. Waxaan ciyaarayey boqorka Axmed.
I played king Ahmed (e.g. in the context of a movie.)
 b. Ilwaad waxay ciyaaraysaa ciyaar cusub.
Ilwaad is playing a new game (e.g. with her hands, making funny faces.)
 c. Ilwaad waxay *(ku) ciyaaraysaa turubka.
Ilwaad is playing with the cards.

In (29a), the object refers to a role in a virtual world, which is created by the activity denoted by the verb, and no adposition is used: the NP *boqorka Axmed* ‘king Ahmed’ appears as a DO. In (29b), the interpretation seems to be restricted to a reflexive activity: the subject *Ilwaad* is playing with her hands/face, and not with an external object. By contrast, in (29c), the activity denoted by the verb cannot be conceived of as being emitted by the cards: the subject is the origin of the playing. There *ku* is obligatory. *Ku* introduces the real world object that is used to perform the playing. It thus seems that the DO selected by *ciyaar* ‘to play’ is restricted to objects that are in direct relation with the virtual world created by/in the activity of playing. The particular interpretation of sentences like (30) can be attributed to the same generalization: the subject (*Ilwaad*) sends the object (*i* = 1S) in a virtual world, and this object becomes an object that is used to play, like playing cards.

- (30) Ilwaad way igu ciyaaraysaa.
Ilwaad is making fun out of me.

Turning to *ciyaarsii*, as mentioned above, and repeated below in (31) for convenience, *ka* is optional. The same pattern can be observed in (32). In addition, there is a difference in the interpretation of the sentence without *ka* in (31/32a) and the one with *ka* in (31/32b): with *ka* the causing action is intentional, while without *ka* the subject of the *sii*-causative is an unintentional trigger.

- (31) a. Cali wuxuu **ku** ciyaarsiiyey Ilwaad **shirimiriga**.
Ali had Ilwaad play with the swing. (She played alone, Ali was just watching her.)
 b. Cali wuxuu **kaga** ciyaarsiiyey Ilwaad **shirimiriga**.
Ali helped Ilwaad play with the swing (e.g. he pushed the swing.)
- (32) a. Cali wuu ciyaarsiiyey Ilwaad.
Ali caused Ilwaad to play. (Both were playing together, nobody directed the game.)
 b. Cali wuu **ka** ciyaarsiiyey Ilwaad.
Ali caused Ilwaad to play. (He oriented the game/offered her various playing options.)

2.6. Intermediate conclusion

According to our preliminary survey, the correct description of the situation is as follows:

- (33) There are three groups of *sii*-causatives:
 a. a group that excludes *ka* (Saeed's group A)
 b. a group that requires *ka* (Saeed's group B)
 c. a group with optional *ka* with a difference in the interpretation (group C)

This result is based on the exploration of the behaviour of 7 verbs with respect to the DO selection. The results are summed up below:

(34)	base	No DO	DO = cognate NP	DO = other
Group A ('transitive' pattern)				
i.	daaq 'to graze'	OK	OK	OK
ii.	bood 'to jump'	OK	OK	*
Group B ('intransitive' pattern)				
iii.	qufac 'to cough'	OK	OK	OK
iv.	ci 'to cry'	OK	OK	*
v.	hadal 'to talk'	OK	*	*
Group C (mixed pattern)				
vi.	ciyaar 'to play'	OK	OK	OK
vii.	feker 'to think'	OK	OK	*

At the present stage, the only solid generalization seems to be that true intransitive verbs must belong to group B (34.v).

The question is whether the distribution summarized in (34) is an idiosyncrasy of the speaker, or of the very limited number of verbs that we examined so far. We therefore need to carefully check these preliminary observations. More specifically, we need to answer the following two questions:

- (35) a. Is the capacity of the base to take a DO statistically related to the behavior of *sii*-causatives (group membership)? In other words, is a verb's selection of a direct object related to the form of its subject under SII ?
- b. Can we find evidence for the existence of an independent group C?

(35a) is Saeed's generalization, and we expect from our preliminary survey that, if there is such a relation, it is probably more complex than it is described in Saeed's original version. This is our second question in (35b): if such a relation exists, is it binary or multifaceted?

Since we are dealing here with the lexical semantic representation of individual verbs, we naturally expect to find a considerable amount of variation among speakers, even if we succeeded in isolating a single dialectal variant. For this reason, it appears necessary to us to test our data with a sufficiently large number of participants. Only if the judgments we reported above are solidly confirmed by a sufficiently large panel of native speakers can we pretend to amend Saed's original generalizations about the distribution of *ka* in *sii*-causatives.

In order to provide this empirical basis, we designed an online questionnaire that we briefly describe in the final section of this article.

3. Experimental task

Concerning the experimental task itself, we will use a forced judgment task. The judgment is forced, because the participants cannot pass on to the next question, unless they have given a judgment.

We use a cross modal technique to prime the target meaning, because we know that *ka* is not only a grammatical, but also a meaningful element. For this reason, it is often possible that a sentence that would be ungrammatical under the relevant meaning, can be acceptable under a different, irrelevant meaning. It is for this reason that we need to make sure that the participants judge our sentence on the relevant meaning. For this reason, we present this intended interpretation before the test sentence. We use a cross-modal technique for the simple reason to make the task less monotonous, and to make a clear distinction between the primes and the test sentences: first the participants listen to an audio paraphrase, then they read the test sentence they will have to judge.

For practical reasons, we need the test to run on a smartphone. The platform PAVLOVIA (<https://pavlovia.org/>), the online version of the PSYCHOPY stimulus presentation software (Peirce, J. W., Gray, J. R., Simpson, S., MacAskill, M. R., Höchenberger, R., Sogo, H., Kastman, E., Lindeløv, J. 2019) gives us this possibility.

Our design is represented in (36) below.

(36)		Target sentence						F ₀	F ₁ : obj	F ₂ : subj	F ₃ : V
	a.				su	V	do	base	ref		V _n
					su	V	cogn	base	cogn		V _n
					su	V		base	zero		V _n
	b.	SU		sii	su	V	do	caus	ref	NP	V _n
		SU		sii	su	V	cogn	caus	cogn	NP	V _n

		SU		sii	su	V		caus	zero	NP	V _n
		SU	ka	sii	su	V	do	caus	ref	KA	V _n
		SU	ka	sii	su	V	cogn	caus	cogn	KA	V _n
		SU	ka	sii	su	V		caus	zero	KA	V _n

In this design we use 4 factors:

(37) a. the first factor (F₀) has two levels. It distinguishes base verbs in (36a) from their causative counterparts in (36b). For the base verbs, we give lexical paraphrases of the verbs. In all causative examples, the paraphrase is not lexical, but syntactic. What we mean by this is that the base verb is used in the paraphrase, but *-sii* is not. We give a syntactic paraphrase of the causative meaning.

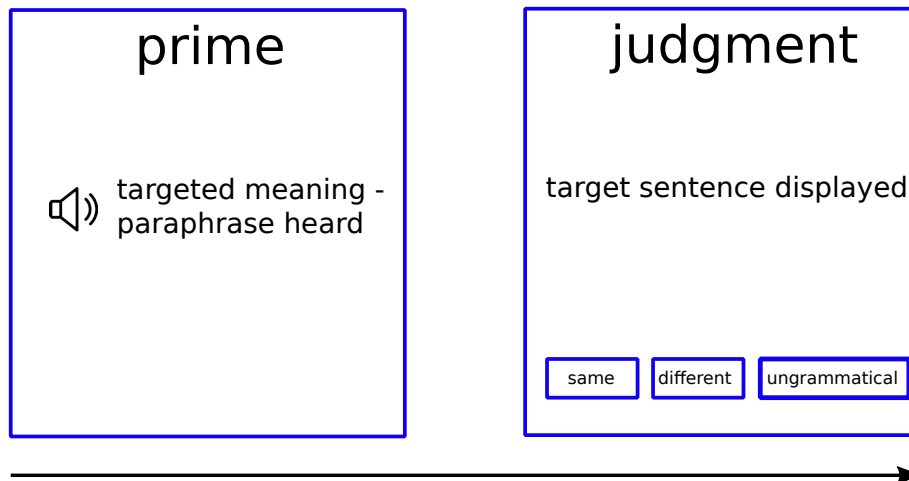
b. we present each base verb in three configurations, in function of the three levels of the second factor OBJECT (F₁): each verb is presented with a direct referential object (ref), with a direct cognate object (cogn), and without an object (zero).

c. the third factor (F₂) distinguishes causative constructions by the presence or absence of *ka*. NP means that the embedded subject is a bare NP, KA means it is associated with *ka*.

d. finally, we consider each individual verb as a factor (F₃). This is so, because lexical properties like the semantic selection of an object, and the subcategorization of the form of its arguments can be idiosyncratic.

We use the 7 verbs mentioned in table (34) above. With the 9 configurations in design (36), this gives a total of 63 test items. The order of presentation of the test items is randomized on each run.

The temporal organization of each test item can be schematized as follows:



Speaker icon made by <https://icon54.com> from www.flaticon.com

The participants first hear the paraphrase. When the audio of the paraphrase is finished, they see a written sentence displayed on the screen. This written sentence is the one we are interested in. The participants must then choose if the written sentence has the same meaning as the one they just heard. We count "SAME" as acceptance.

There are two options to reject a sentence. Either, it is grammatical, but it has a different meaning. This is in fact nothing else than saying it is ungrammatical on the relevant meaning. But we want to

avoid such academic subtleties and allow for a robust judgement, DIFFERENT meaning. The second option for rejection is UNGRAMMATICAL. This option will be selected if the participant feels that the sentence is unacceptable no matter what meaning it could have. As far as we are concerned, both DIFFERENT and UNGRAMMATICAL count as rejection of the target sentence on the relevant meaning.

In order to familiarize the participants with the task, we present three training items before the actual test. One training item presents an audio paraphrase that is synonymous with the written sentence and explains that SAME should be chosen in such a situation. A second training example presents a test sentence that is plainly grammatical, but different in meaning from the audio paraphrase. The participants are then instructed to click DIFFERENT. The final training example presents a written test sentence that contains an ungrammatical adposition. This example is chosen to be clearly ungrammatical on any reading, for all speakers. The participants are then instructed to click UNGRAMMATICAL.

Once the participants have completed the test runs, they are asked to answer a few questions about their sociological profile, their native language, and about the variant of Somali they speak.

We intend to test at least 100 speakers, before we start the statistical evaluation.

References

- Agostini, F., A. Puglielli & C.M. Siyaad (eds.) 1985. *Dizionario somalo-italiano*. Rome: Gangemi.
- Peirce, J. W., Gray, J. R., Simpson, S., MacAskill, M. R., Höchenberger, R., Sogo, H., Kastman, E., Lindeløv, J. 2019. [PsychoPy2: experiments in behavior made easy](https://link.springer.com/article/10.3758%2Fs13428-018-01193-y). *Behavior Research Methods*. 10.3758/s13428-018-01193-y URL : <https://link.springer.com/article/10.3758%2Fs13428-018-01193-y>
- Saeed, J.I. 1989. Morphological Causatives and Verbal Argument Structure in Somali, in G. Banti (ed.) *Proceedings of the Second international Symposium on Cushitic and Omotic Languages*. Roma: University of Rome La Sapienza.
- Saeed, J.I. 1999. *Somali*. Amsterdam & Philadelphia: John Benjamins.
- Zorc, R.D. & M.M. Osman. 1993. *Somali-English Dictionary with English Index*. Third edition. Kensington, Maryland: Dunwoody Press.