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On *At*-Causatives of Transitive Verbs in Chaha¹

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1. Introduction

Chaha, a Semitic language spoken in South-West Ethiopia, is an SOV, pro-drop language in which verbs are heavily inflected for agreement, such as person, number, and gender of the subject and the object (Hetzron 1977) as in (1).

(1)

a.	aləmu	jəm ^w əta	aŋgatʃa	k'əp ^w ərənim
	Alemu	dead	cat	buried.3smS.3smO
	'Alemu buried the dead cat'			
b.	<i>pro</i>	jəm ^w əta	aŋgatʃa	k'əpərnem
		dead	cat	buried.1plS.3smO
	'We buried the dead cat'			

In (1a), the verb shows subject agreement with 'Alemu (3sm)' and object agreement with 'the dead cat (3sm)'. Probably due to the strong verbal agreement, a null pronominal (*pro*) can be used as the subject (or the object), as in (1b).

Besides agreement-marking, Chaha verbs host prefixes to yield transitivity alternations, passivization, and causativization. Hetzron's (1977) summary of the three main verbal prefixes for these purposes, *tə-*, *a-*, and *at-* is shown in (2).

(2) Hetzron (1977)

<i>tə-</i>	passive-reflexive
<i>a-</i>	causative, adjunctive ('help to')
<i>at-</i>	factive ('make someone do something')

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To form causatives of transitive verbs, *at-* is used as shown in (3).

(3)

a. Simple transitive

raxel	jəm ^w əta	angatʃa	k'əp ^w ərətʃinim
Rachel	dead	cat	buried.3sfS.3smO

'Rachel buried the dead cat'

b. Accusative causee

jə-raxel	jəm ^w əta	angatʃa	at-k'əpərnəjam
ACC-Rachel	dead	cat	CAUS-buried.1plS.3sfO

'We had Rachel bury the dead cat'

c. Oblique causee

jəm ^w əta	angatʃa	bə-raxel	at-k'əpərnem
dead	cat	OBL-Rachel	CAUS-buried.1plS.3smO

'We had the dead cat buried by Rachel'

At-prefixation to a simple transitive sentence like (3a) yields two types of causatives. One is the type shown in (3b), with an accusative-marked causee 'ACC-Rachel' and the verb exhibiting object-agreement with it for '3sf'. The other type is with an oblique-marked causee 'OBL-Rachel' and the verb showing object-agreement with the base object 'dead cat' for '3sm' as shown in (3c).

In addition to triggering different verb-object agreement, the two constructions correlate with different grammatical properties of the causee. For instance, it is possible to omit the oblique-marked causee, which is not shown in verb-object agreement. However, although the accusative-marked causee may also be null, agreement must still be shown on the verb. Additionally, the accusative-marked causee controls PRO in a purpose clause, but the oblique-marked causee cannot, as in (4).

(4)

a. Accusative causee

[PRO_{i/*arb} waga tɪrəxʃe] jə-raxel_i jəm^wəta angatʃa at-k'əpərnəjam
 money get.3sfS.to ACC-R dead cat CAUS-buried.1plS.3sfO
 'We had Rachel bury the dead cat in order for her (Rachel/*someone else)
 to get money'

b. Oblique causee

[PRO_{*i/arb} waga tɪrəxʃe] jəm^wəta angatʃa bə-raxel_i at-k'əpərnem
 money get.3sfS.to dead cat OBL-R CAUS-buried.1plS.3smO
 'We had the dead cat buried by Rachel in order for her (*Rachel/someone
 else) to get money'

In (4a) the causee 'ACC-Rachel' is the only possible recipient of money, while in (4b) the recipient must be someone other than the causee 'OBL-Rachel'.

In this paper I provide a structural account of the two *at*-causatives of Chaha transitive verbs. Building on Hale and Keyser's (1993) semantic decomposition of verbs, I show that they are formed using different verbal heads. Following Amberber (1996) and Harley (1995, 1996), I argue that the different verbal heads have different functions: CAUSE adds an external argument while BECOME suppresses it. The accusative causee causative combines the CAUSE morpheme *at-* with a transitive predicate headed by another CAUSE. The oblique causee causative combines *at-* with a detransitivized predicate headed by BECOME. In the latter construction the suppressed external argument licenses an argument adjunct, or the oblique-marked causee, as argued by Grimshaw (1990). In these derivations, I show that different Event heads play a crucial role. Section 2 provides the background for my analysis, followed by my proposal in Section 3. Section 4 shows why alternative accounts to similar types of causatives do not work for Chaha, and conclusions are given in Section 5.

2. Background

2.1 Event Heads

Hale & Keyser (1993) posit a structural configuration of arguments in the lexicon (L-syntax): verbs are made of different types of verbal heads such as DO, CAUSE, and BECOME, incorporated with lexical heads, such as A, N, and P. For example, all forms of the English verb *thin* involve the adjectival head *thin*. 'Inchoative *thin*' is headed by BE and BECOME while 'transitive *thin*' is headed by CAUSE and BECOME. In both cases, the internal argument (*the gravy* as in *The gravy thinned* or *The cook thinned the gravy*) is a part of the lexical projection. On the other hand, the external argument (*The cook* in the transitive example), if it exists, is introduced in [Spec, IP] at the real syntax level, S-syntax.

With the development of the Minimalist Program, Hale and Keyser's (1993) ideas on semantic and syntactic decomposition of verbs has been transported from the L-syntax level to the real syntax level. Harley (1995, 1996) proposes the use of EventP for both L-syntax and S-syntax, suggesting that EventP is headed by a light verb which delimits the eventiveness of a base verb. If the event denoted by the verbal head has an argument in its specifier (external argument), the Event head is interpreted as CAUSE. If there is no argument in the specifier of EventP, the Event head is interpreted as BECOME/HAPPEN. (5a) shows inchoative *thin* with a BECOME/HAPPEN head and (5b) shows transitive *thin* with a CAUSE head. Notice there is no external argument in the inchoative *thin* (5a) while there is an external argument (*the cook* in this case) in the transitive *thin* (5b).

(5)

a. Event=BECOME/HAPPEN

e.g. inchoative *thin*

b. Event=CAUSE

e.g. transitive *thin*

2.2 Intransitive/Transitive Alternations in Chaha

The intransitive/transitive alternations of Chaha verbs are shown in (6).

(6)

Intransitive

Transitive

a. Suppletive

nədədəm²

'burned'

mək'ərəm

'burned'

m^wət'əm

'died'

k'ət'ərəm

'killed'

b. Transitives only

--

k'əpərəm

'buried'

--

nəkəsəm

'bit'

c. Inchoative/Transitive (with *tə-*)

tə-kəfətəm

'opened'

kəfətəm

'opened'

tə-səpərəm

'broke'

səpərəm

'broke'

² I use the standard citation forms (third singular masculine perfect) as basic verb forms.

d. Unaccusative (?³) + *a*-

tʃənəm	'came'	a-tʃənəm	'(let come-->) brought'
nəpərəm	'lived'	a-rəpərəm	'(let live-->) supported'

Some alternations (6a-b) are lexically specified, while others require the use of *a*- for increasing the valence or *tə*- for decreasing the valence⁴. Amberber (1996) argues that in Amharic, a closely related language, intransitive/transitive/causative alternations are 'an artifact of Event-type alternations' that can be captured configurationally by phrase structure. For example, the *tə*- prefix has two functions. It is both a passive morpheme that absorbs the external argument, and an aspect head that suppresses the CAUSE morphology of transitive verbs. Amberber (1996) argues that the class of transitive verbs that are conceptualized as events which normally come about by external causes, such as 'open' and 'break', can become inchoative by taking *tə*-. For instance, transitive 'break' has two lexical VPs. However, if *tə*- is inserted as an aspect head, the CAUSE morpheme in the higher VP is suppressed (thus the higher VP is eliminated along with the external argument) and the inchoative 'break' is derived. On the other hand, *a*- and *as*- are used to add an argument by adding another VP shell⁵.

3. Structural Account on Chaha *At*-Causatives of Transitive Verbs

In this section I show that accusative-causee and oblique-causee constructions are formed by embedding different verbal heads into the *at*- 'CAUSE' head. I adopt phrase structure trees based on MPLT (Chomsky 1993) with the 'attract' (Chomsky 1995) version of the feature checking mechanism: syntactic heads have strong category features that need to be checked before Spell-out, while DPs raise when attracted by heads. Along with this process, other features (ϕ i, Case) on heads get checked-off as free riders. Recall that the points to account for are: (a) different verb-object agreement, (b) omissibility of the oblique-causee, and (c) different PRO control properties associated with the two types of *at*-causatives.

3.1 Chaha *At*-Causatives with the Accusative-Marked Causee

Following Harley (1995; 1996) and Amberber (1996), I argue that different verbal heads have different functions: CAUSE adds an external argument while BECOME suppresses it. Let us start with the simpler case of the Chaha *at*-

³ There are intransitive verbs that can take only the *a*- prefix ('arrive', 'get fat', 'grow', 'survive', etc.) and those that can take both *a*- and *at*- prefixes ('run', 'dance', 'get better', etc.) for causativization in Chaha. In Ueno (1999) I argue that the first group is unaccusative verbs, while the latter group is unergative verbs. Also see Petros (1996a) for a different account.

⁴ Besides the above, there is a class of verb called stem necessitating verbs that can only exist with certain prefixes. See Petros (1994) for details.

⁵ Amberber (1996), however, does not provide a separate structural account for the oblique-marked causee construction in Amharic. He attributes the difference in case-marking to the competition to one AgrO for two objects (causee and base object).

causative: the accusative-marked causee construction. Again following Harley (1995; 1996) and Amberber (1996), I assume that a transitive verb has two VP shells: a BaseVP that has the internal argument, and an EventP headed by CAUSE that has the external argument. I propose that the accusative-causee construction is formed by embedding the transitive EventP into another EventP headed by *at-* 'CAUSE' as shown in (7)⁶.

(7) Accusative-Causee Construction

The embedded Event P has a specifier for the external argument of *bury*, thus, AgrOP is projected above. I assume overt raising of argument DPs, due to the canonical word order of the oblique-causee construction (see below). The base object DP 'dead cat' raises to Spec, AgrOP of the lower EventP to check its D feature. The (abstract) accusative Case and (abstract) object agreement features on the AgrO are checked as free riders. The causee DP 'ACC-Rachel' raises to Spec, AgrOP of the matrix EventP headed by *at-* to check the D feature of AgrO. Accusative case and verb-object agreement features on the matrix AgrO are also checked along with this process, requiring accusative marking of the causee and verb-object agreement with it. The causer *pro 'we'* also raises to Spec, AgrSP.

⁶Cf. Petros (1996b) for arguments against AgrOP in Chaha and other Ethiopian Semitic languages.

3.2 Chaha At-Causatives with the Oblique-Marked Causee

Next, I illustrate below how the oblique-causee construction is formed. I propose that in this case the *at*-causative is formed by embedding the detransitivized EventP with the external argument suppressed by a null BECOME head into another EventP headed by *at*- 'CAUSE' as shown in (8).

(8) Oblique-Causee Construction

The derivation is as follows: first, the external argument (causee) of the transitive EventP is suppressed by the BECOME head. This is similar to the *tə*- prefix suppressing the external argument of transitives to form passives or inchoatives, such as *səpərəm* 'break (transitive)' vs. *tə-səpərəm* 'be broken (passive)/break (inchoative)', although in this case the BECOME head is null instead of *tə*-. There is no need for an AgrOP for an EventP headed by BECOME with no specifier, thus AgrOP is not projected above the lower EventP. Second, the suppressed external argument (causee) licenses an argument adjunct, as discussed later. Finally, the detransitivized EventP is combined with the matrix EventP headed by *at*-, that licenses the causer in its Specs⁷.

⁷ Similar analyses to the present analysis have been offered in the GB framework. Romance languages have a similar oblique-causee construction (the *faire par* construction) as shown in (i).

(i) Pierre a fait réparer sa voiture par le mécanicien
Peter had repaired his car by the mechanic
'Peter had his car repaired by the mechanic'

Since the canonical word order in this construction is [causer, base object, OBL-causee], as in '*pro*, dead cat, OBL-Rachel', I propose overt raising of argument DPs, thus strong D features on Agrs, as shown in (9).

(9)

[AgrSP causer_i [AgrOP base object_j [EventP t_i [EventP OBL-causee t_j bury]CAUSE]]]

The diagram shows a syntactic tree structure. At the top level is [AgrSP causer_i [AgrOP base object_j [EventP t_i [EventP OBL-causee t_j bury]CAUSE]]]. Arrows indicate movement: one arrow points from causer_i to the Spec, AgrOP position, and another arrow points from base object_j to the Spec, AgrOP position.

The base object 'dead cat' raises to Spec, AgrOP of the matrix EventP to check the D feature of AgrO. Along with this, the (abstract) accusative Case and object-agreement features on AgrO are checked by DP, requiring verb-object agreement with the base object. The causee DP 'Rachel' gets its Case checked within its PP.

Adopting Grimshaw's (1990) analysis of argument adjuncts, I propose that the oblique-marked causee is an argument adjunct. Grimshaw (1990) argues that argument-adjuncts (a-adjuncts) are licensed by suppressed argument positions, including passive *by* phrases and possessives. A-adjuncts are adjunct-like in that they are optional and behave like adjuncts with respect to omissibility, anaphora, and extraction. However, even though a-adjuncts are licensed by argument positions, they lack several properties of true arguments. When an a-adjunct is present, control is impossible, as the relevant argument position of the verb or noun is not syntactically satisfied and thus not available for a syntactic control relationship. Besides the omissibility, recall from (4) that the oblique-marked causee cannot control PRO in a purpose clause, while the accusative-marked causee can. This is in the spirit of Grimshaw (1990), who argues that a construction with an argument adjunct involves suppressed argument that cannot participate in control.

4. Alternative Accounts and Why They Do Not Work for Chaha

In this section I briefly discuss alternative accounts to similar types of causatives and why they do not work for Chaha *at*-causatives.

4.1 Oblique Causee Construction: *A-/At-* plus *Tə*-Passive?

Recall that the passive in Chaha is formed by *tə*-prefixation, as in *bənam* 'ate' and *tə-bənam* 'was eaten'. This may lead us to believe that the oblique-marked causee construction is the causative of *tə*-passive, as in *a-* or *at-* + *tə-* + verb = *at*-verb. However, not many verbs can take the *tə-* prefix⁸ in Chaha, while *at*-causatives

Burzio (1986) argues that if the verb cannot assign a theta-role to the subject, either when (a) a verb has passive morphology or (b) there is no subject position, a *par* 'by' phrase can appear. The former yields the passive construction while the latter yields the *faire par* construction. Zubizarreta (1985) argues that *faire* functions as an indirect trigger of deletion or blocking of the external argument of the verb, thus substituting for passive or anticausative morphology.

⁸ Rather than the passive construction, Chaha often uses impersonal.

(with both accusative causee and oblique causee) are built on base verbs which cannot take the passive prefix *tə-* alone, as shown in (10).

(10)	a. mək'ərəm	'burned'	*tə-mək'ərəm	at-mək'ərəm
	b. k'əpərəm	'buried'	*tə-k'əpərəm	at-k'əpərəm
	c. dəpərəm	'price-increased'	*tə-dəpərəm	at-dəpərəm
	d. m ^w ək'əm	'boiled'	*tə-m ^w ək'əm	at-m ^w ək'əm

This rules out the *at-* as *a-* or *at-* plus *tə-* passive analysis.⁹ So even if it may be still said that the oblique-causee construction in (8) is the causative of some form of abstractive passive, it is certainly not the causative of the passive form that can stand independently. The suppression of the external argument for the oblique causee construction must occur accompanied by the *at-* 'CAUSE' morpheme.

4.2 Baker (1988)

Similar to Chaha, Chicheŵa, a Bantu language, also has two constructions with an accusative-marked causee or an oblique-marked causee shown in (11: examples from Alsina and Mchombo 1990), depending on the dialect.

- (11)
- a. Nūngu i-na-phík-íts-a kadzidzi maūngu (Chicheŵa-B)
 9 porcupine 9S-PS-cook-CAUS-FV 1 a owl 6 pumpkins
 'The porcupine made the owl cook the pumpkins'
- b. Nūngu i-na-phík-íts-a maūngu kwá kádẏdẏzi (Chicheŵa-A)
 9 porcupine 9S-PS-cook-CAUS-FV 6 pumpkins OBL 1 a owl
 'The porcupine made the owl cook the pumpkins' (OR 'The porcupine had the pumpkins cooked by the owl')

Based on the Uniformity of Theta Assignment Hypothesis (UTAH), which states that constructions with the same theta-roles share the same D-structure, Baker (1988) compares the morphologically derived causative construction with the bi-clausal causative construction and argues that they share the same D-structure, but incorporate verbal heads differently. He argues that due to the Extended Projection Principle (EPP), which requires all phrases to be fully projected, the morphologically derived causative remains bi-clausal at S-structure.

Chaha *at*-causatives show strong evidence for mono-clausality in terms of negation and subadjacency, ruling out Baker's (1988) biclausal account. Assuming that at most one NegP can be projected in a clause, a bi-clausal structure could allow two NegPs. However, this is not the case in Chaha. As shown in (12) and

⁹ For a similar causative pair in Chicheŵa, which will be discussed in (11), Baker (1988) denies the passive of causative analysis for the lack of passive morphology, as well as Alsina (1992) does so for the lack of passive morphology, different oblique-markers for the passive agent and the causee, and the fact that not all passivizable verbs can take the oblique causee construction.

(13), *at*-causatives of transitive verbs with both accusative- and oblique-marked causees can only negate the cause predicate (12a and 13a) but not the base verb predicate (12b and 13b).

(12) Accusative-marked causee

- a. aləmu jə-raxel mət'af an-at-nəbəβəna
 Alemu ACC-Rachel book NEG-CAUS-read.3msS.3fsO
 'Alemu didn't make Rachel read the book'
- b. *aləmu jə-raxel mət'af at-an-nəbəβəna
 Alemu ACC-Rachel book CAUS-NEG-read.3msS.3fsO
 'Alemu made Rachel not read the book'

(13) Oblique-marked causee

- a. aləmu mət'af bə-raxel an-at-nəbəbəm
 Alemu book OBL-Rachel NEG-CAUS-read.3msS
 'Alemu didn't make the book read by Raxel'
- b. *aləmu mət'af bə-raxel at-an-nəbəbəm
 Alemu book OBL-Rachel CAUS-NEG-read.3msS
 'Alemu made the book not be read by Raxel'

Moreover, this does not seem to be due to morphological ordering restrictions. For (12a) and (13a), the readings 'Alemu made Rachel not read the book' and 'Alemu made the book not be read by Rachel' are impossible.

Another test for mono-clausality is Subjacency. Using Subjacency violation, Baker (1988) provides data that supports the bi-clausality of Chicheŵa causative¹⁰. He argues that in Chicheŵa-A IP is the bounding node and oblique causees cannot be relativized, as they have to cross two IPs according to his proposal. However, this is not the case in Chaha, although IPs are bounding nodes, just like English or Chicheŵa-A, as shown in (14).

(14)

a. *Wh*-island

?/*zix [[m'an ___jə-k'əpərə xəma] j-əɕin] jəm'əta aŋgatʃa u
 this who REL-buried.3msS that REL-know.1sS.3smO dead cat is
 *'This is the dead cat [which_i I know [who buried ____i]]'

b. Long distance dependency

zix [raxel ___jə-k'əp'wəɾətʃin xəma] j-əɕim] jəm'əta aŋgatʃa u
 this R REL-buried.3sfS.3smO that REL-know.1sS3msO dead cat is
 'This is the dead cat [which_i I know [that Rachel buried ____i]]'

¹⁰ Moore (1991) argues that this may be due to bi-clausal 'phenomena' rather than real bi-clausal structure.

In (14a), since Spec of the most embedded CP is occupied by 'who', 'dead cat' cannot be extracted, crossing two IPs. Conversely, in (14b) since Spec of the most embedded CP is not occupied, 'dead cat' can be extracted via the Spec, crossing one IP at a time. With respect to *at*-causatives, it is possible to extract either the causee or the base object for either construction as shown in (15)-(16).

(15)

- a. [jə-aləm j-at-fəkətne k'awa] wahek'ar banə
ACC-Alemu REL-CAUS-made.1plS.3smO coffee good-thing pastAUX
'The coffee we had Alemu make was good'
- b. [k'awa j-at-fəkətne mis] aləmu banə
coffee REL-CAUS-made.1plS.3smO man Alemu pastAUX
'The man we had make coffee was Alemu'

(16)

- a. [bə-aləmu j-at-fəkətne k'awa] wahek'ar banə
OBL-Alemu REL-CAUS-made.1plS.3smO coffee good-thing pastAUX
'The coffee we had made by Alemu was good'
- b. [k'awa j-at-fəkətne mis] aləmu banə
coffee REL-CAUS-made.1plS.3smO man Alemu pastAUX
'The man by whom we had coffee made was Alemu'

From the above examples demonstrating negation and Subjacency, we conclude that Chaha *at*-causative is mono-clausal, unlike Baker's (1988) proposal.

4.3 Summary of Section 4

To sum up, we have seen that neither the causative of the *tə*-passive analysis nor the bi-clausal analysis works for Chaha *at*-causatives on transitive verbs.

5. Conclusion

For *at*-causatives on transitives in Chaha, I have shown that the accusative-causee construction is derived by embedding a transitive EventP into the matrix EventP headed by *at*-. The oblique causee construction is formed by detransitivizing a transitive EventP with the BECOME head and then embedding it into the EventP headed by *at*-. The suppressed external argument licenses an argument adjunct, or the oblique-marked causee, that can be omitted and cannot control PROs. The two constructions yield different object agreement on the verb, as different DPs raise to the AgrOP of *at*- and check AgrO's object agreement feature, depending on the construction. In deriving the two constructions, the most crucial issue was the nature of the event heads. The BECOME head detransitivizes or suppresses the external argument of a transitive predicate which was originally headed by the CAUSE head. This utilizes a language-internal mechanism similar to the *tə*-

prefix suppressing the external argument of transitives to form inchoatives or passives. This mechanism is able to account for the data, while alternative accounts cannot. Semantic decomposition of verbs, therefore, seems to be an effective approach to account for morphological causatives.

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