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Valency-Increasing Verbal Derivational Devices in Oromo

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Abstract— In our paper, valency-increasing derivational devices of verbs in Oromo, a language of the Lowland East Cushitic family, are discussed. The first valecy-increasing devices are the causatives deriving from verbal stems and causatives of transitivizing denominative and deadjective verbalizing suffix. The second one is the applicatives through dative markers. The main research question which lies behind my study is whether verbs derived by means of a derivational marker, for instance, causatives and applicatives act in the course of other valency-changing operations differently from non-derived verbs. The verb derivation in Oromo has some typologically peculiar properties, the main one being that the morphological derivation distinguishes more specific classes than the purely lexical one. In other words, the fact that why a verb is derived for change of valency and how it is derived is crucial for its behavior. The language-specific properties of Oromo are also typologically relevant. They show that derived verbs and derivational mechanisms are of particular relevance in verb classification and should be given attention in linguistic work on change of valency.

Index Terms— valency; argument; valency increase; basic verbs; derived verbs; valency-changing verb derivational devices; causative; applicative; transitivization; denominative/deadjective transitivizing morphemes

1 Introduction

In this paper, we discuss valency-changing operations in Oromo language (Afaan Oromoo), a polysynthetic language of the Lowland East Cushitic. We will show that Oromo is a strongly valency-increasing language which has many possibilities of adding arguments to the subcategorization frame of a predicate. Despite this, the language seemingly has several valency-decreasing operations which could be regarded as eliminating some of the arguments when deriving intransitive verbs from transitive verbs. Thus, on a closer inspection these operations are found to be necessarily valency and transitivity changing devices. Hence, Oromo shows that valency-changing mechanism should mainly be tied with changing transitivity, as sometimes proposed, either implicitly or explicitly [1]. The structure of the paper is as follows. In Section 2 we provide general background on Oromo. Section 3 describes the main valency-increasing operations found in the language. In Section 4 we discuss operations which look as valency-decreasing, namely applicatives and causatives. The last section presents conclusion.

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2. Valency and Oromo Verbal Derivation

The basic assumption of valency theory starts with the verb which occupies a central position in the sentence because the verb determines how many its elements have to occur in order to form a grammatically correct sentence [2] & [3]. Thus, valency argumentation patterns primarily represent syntactic patterning, i.e. the language-specific grammar (or local grammar) of words. However, arguments also have semantic functions, since valency is not to be seen simply as a 'slot-and-filler' theory [4], semantic valency does not simply describe syntactic category slots which can be filled by any lexical item of this category. Valency theory is thus ideally suited to explore the lexis-grammar continuum in linguistic investigations. Maybe because of this dual aspect, Allerton [5] forcasts valency grammar may likely be an upsurge of interest of linguists in the next few years.

Valency theory is generally attributed to the French linguist Lucien Tesnière. Tesnière [6] transferred the idea of valency connections in chemistry to the arguments structure in a sentence. The concept of valency of a chemical element's capacity to combine with a fixed number of atoms of another element is similarly used by Tesnière to introduce the term 'valency' and to theoritize its concept in the property of words as a syntactic element to combine with another element to form a phrase and a sentence [3]. Therefore, valency theory is based on dependency relations, where the concern of linguistic investigation is the sentence.

Sentences are described as organized structures consisting of words [7]. Words do not occur randomly in a sentence but form connections, i.e. words are in relationship with other words syntactically or semantically. Structurally connections are ranked in one of two ways: regent or dependent. Regents govern other words, while dependents are governed by another word. Every group, phrase and clause can have only one regent, but several dependents [3]. Allerton [3] (ibid. p 307)

notes that most grammars include a concept of 'government' to refer to the relationship between words and / or word-classes, the regent is often termed 'head' in other grammars.

In order to mainly deal with the analysis of valency-changing verbal morphological devices, one assumption of this thesis is that the transitivity of verb classes (transitive and intransitive) and derivational typology of verbs play a pivotal role in change of valency and valency patterns [8]. Although the primary of focus of this study is the valency-changing morphological verb derivation, this research also targets valency patterns, which include syntactic structure and semantic function of arguments related to verb derivational patterns.

It is hypothesized that the individual word gains its specific suffix through its syntactic (and semantic) environments. So the approach in the valency analysis of this thesis is that the morphology of a word is about the smallest unit as a base stem of a word and its suffix. Thus, this approach supports the display of any possible interdependence of lexis and grammar in the morphosyntactic analysis.

2.1 Verbal Derivations

To discuss the Oromo verb morphological derivational patterns, the descriptive grammar and typological works by, Dixon and Aikhenvald [1], Payne [7]), Haspelmath [8], Hopper and Sandra [9], Kittila [10] are Shopen [11] are some of the literatures reviewed. The morphological typology and word formation in languages are reviewed; particularly, morphological verbal derivations as valency-changing devices are considered. For example, the transitivity of derived verbs may involve lexical or morphological derivations, alongside inflections of reference to person, gender, number and time/tense. Besides, a lexical typology is important for analytic or synthetic word roots.

2.1.1 Characteristics of Verbal Formation

We draw the evidence concerning morphological derivations presented in this section and place them in the context of morphological affixation, isolating the morphemic contribution of affixes from the base and derived stems. First, the formal characteristics of Oromo base stem (BS) pattern for verb formation is a root as base bound morpheme of verbal, nominal and adjectival word classes with a predominantly monosyllabic of the types CVC (*ban*-), VCC (*idd*-), CVCC (*kenn*-), and VCaCb (*arg*-) manifested with short or long vowels. Besides, a base stem of uncategorized word class is formed as an ideophone through reduplication of root-final onset part of the syllable; for example, the ideophone stems of *him-im-(im), did-id-(id), bar-ər-(ər)* are reduplicated with onset (-VC) of the syllable of final segment. Note that the root is a monosyllabic base stem of CVC type.

Second, the formal characteristics of Oromo derived verbal patterns are a root (bound base stem) plus a deriving morpheme (suffix) and a reduplication of root-initial syllable. While a verbal BS is suffixed with the causatives –*s*- and –*sis*-, the middle -at and the passive -am morphemes, a nominal or an adjectival BS is suffixed with the causative –*s*- and the inchoative middles –*at*-, *-ah*- and –*om*- morphemes and an ideophonic stem is a causative -s morpheme. In Oromo, a verbal derivation is not only from a stem but also from a conjugated verb; for example, the benefactive-applicative –*f* and the instrumental-applicative –*n* suffixes occur in conjugated verbs. Besides, different derivational suffixes can co-occur together; for instance, a single causative stem of –*s*- (CS1) pairs a causative stem of double –*sis*- (CS2), a middle stem of –at (MS) pairs stem -*sis*- (CS2), a middle -*at*- (MS) pairs a passive stem –*am*- (PS) as independent co-occurrences while dependently CS1 pairs inchoatives stem of -*at*- (ATIS), of -*ah*- (AHIS) and of -om (OMIS), the CS3 (triple causative stem with –*sisiis*-), MS and PS pair CS1, CS2, etc.

Simple verb derivatives are formed from base verbal, nominal, adjectival and ideophonic stems. When a base stem is suffixed with a single derivational morpheme, the verbal construction is said to be a simple derivations. Thus, it can be assumed that a simple verbal derivative is a combination of a root (bound base stem) and a derivational suffix. The morphological types of deriving morphemes are causative -*s*- and -*sis*-, the middle -*at*-, the passive -*am*-, the inchostive -*ah*- and –*om*- suffixes, and the applicative-benefactive -*f* and the applicative-instrumental -*n* suffixes. Note that the applicative derivation is not a stem derivation, but a conjugated verb derivation, i.e. it derives from a simple conjugated verb and makes a simple derived conjugated applicative verb.

2.1.1.1 The Simple Causative (BS-CS1 & BS-CS2 Pattern)

The causative -*s*- morpheme is usually a general causative derivational form. The number of -s's in a causative verb stem reflects the number of agents in the verb [12], [13] and [14]. However, Tolemariam [15] argues that the number of -s's does not always match the number of agents in the causative. Generally, in the causative verb deivational patterns, the single -s morpheme correlates with direct causative derivation while the double –*siis*- suffix is used to derive indirect causative. Usually, stative intransitive verbs and stative adjectival stems are derived as single causative verbs, and active/agentive intransitive and transitive verbs are derived as double causative verbs. Therefore, the Oromo verb cauastivization indicates a correlation between the underlying and the causativized stems, and a correlation between causative suffixes and the added arguments [14]. In the causative verb derivational patterns, we hence code the single causative stem category as the CS1 pattern and the double causative as the CS2 pattern. The CS1 and CS2 patterns are derived in simple and complex causative derivations.

During causativising some verbs and passivising the causatives, the /s/ morpheme will change morphophonemically into [č] and [f] allomorphic variants. When the causative –*s*- suffix occurs in verbs of stem-final /l/ and /t/ consonants, it is realized as –*č*-, and when a causative verb is passivised, (i.e. the causative –*s*- is followed by the passive marking m morpheme), it change into -f allomorph. However, we should note that it is not always the case that s changes into f in all passivised causatives; for example, the f allomorph is not realized in some causative verbs, like *č'ab-s-uu* 'to break' and *dab-s-uu* 'to mislead' passivised as *č'ab-s-am-uu* and *dab-s-am-uu*, so **č'ab-f-*

am-uu or **dab-f-am-uu* is weird to accept. Consider the following list of verbs in which *–č-* and *–f-* are used in their causativised and passivised forms in Table 1:

Base verbs		***Causatives***		***Passives***	
(1) a. *bul-uu*	'to pass a night'	*bul-č-uu*	'to make pass a night'	*bul-f-am-uu*	'to be made pass a night'
b. *ool-uu*	'to pass day'	*ool-č-uu*	'to make pass a day'	*ool-f-am-uu*	'to be made to pass a day'
c. *gal-uu*	'to go home'	*gal-č-uu*	'to make go home'	*gal-f-am-uu*	'to be made go home'
d. *bah-uu*	'to get out'	*baa-s-uu*	'to take out'	*baa-f-am-uu*	'to be made get out'
e. *deem-uu*	'to go'	*deem-sis-uu*	'to cause to go'	*deem-sif-am-uu*	'to be caued to go'
f. *arg-at-uu*	'to find'	*arg-ač-čiis-uu*	'to cause to find'	*arg-ač-čiif-am-uu*	'to be caused to find'

Table 1: The *-č* and *-f* allomorphs of the morpheme *–s* suffix in causative and passivized causative

The CS1 (single causative) verbs are derived from base and derived verbal stems, base adjectival stems and idiophone stems. The verbs used for single causative derivation are simple stative intransitives and inchoatives (derived stative intransitives). Some nominal, adjectival and uncategorized base stems (BS) which express a stative notion can occur with *-s-* suffix for causative derivation. However, most of the nominal and adjectival base stems are primarily derived as inchoative verbs. The ideophones are basically reduplicated base stems derived as CS1 to form usually de-transitivised ideophonic verbs. The following Table (2) shows the types underlying stems for CS1 derivation.

No.	**Types of underlying stems**	**Derived single causatives (CS1 pattern)**
1.	Verbal BS	*čab-s-uu*
2.	Nominal BS	*dubb-i-s-uu*
3.	Adjectival BS	*furd-i-s-uu*
4.	Frozen BS	*uff-i-s-uu*
5.	Idiophone BS	*himim-s-uu, barr-s-uu*
6.	Inchoative AHIS	*oll-oom-s-uu*
7.	Inchoative ATIS	*d'eer-es-s-uu*
8.	Inchoative OMIS	*beel-es-s-uu*
9.	Verbal BS	*čab-s-uu*

Table 2: Single causative verb stem derivational pattern CS1

Verbs that occur with *-s-* are predominantly stative (and some non-stative) intransitives and derived inchoatives. The non-verbal base stems used for CS1 derivation include word classes of stative adjective, nouns and uncategorized word-roots, and idiophone stems. Therefore, in the CS1 pattern, *-s-* suffix is not only a transitiviser of the intransitives but also a de-nominative, de-adjective and de-ideophonic agentive verbalizer.

2.1.1.2 Derived CS1 Causatives

Causative verbs in the category of CS1 pattern are derived with the single causative -s morpheme. They are derived from both verbal and non-verbal stems. Base stative intransitive verbs are totally derived as the CS1 pattern, but there are a few base non-stative intransitives that derive for the same pattern. The detail of the CS1 is discussed in-depth in Chapter 6. Consider the following list of the underlying intransitive base stems (BS) and the pairing CS1 of derived transitives of the –s-suffix (2):

	BS Stative intransitives		*Simple CS1 transitives*	
(2) a.	*č'ab-uu*	'to break (INTR)'	*č'ab-s-uu*	'to break' (TR)
b.	*dab-uu*	'to deviate'	*dab-s-uu*	'to cause to deviate'
c.	*doom-uu*	'to become blunt'	*doom-s-uu*	'to make blunt'

2.1.1.3 Denominal (and deadjectival) CS1 Causatives

Moreover, some adjective roots are directly suffixed with the causative -s to derive a transitive verb. The suffix *–s-* transitivizes a verb occurring on adjective stems. Consider the following chart of some adjectives and their derived bivalent transitive verbs suffixed with the causative *-s-* morpheme. So, this suffix functions as a denominative or a deadjective verbalizer as it derives a verb in the CS1 pattern from base adjectives and nouns, as shown in list (3) and (4).

	Base stative adjectives		*CS1 causatives*	
(3) a.	*bal'-aa*	'wide'	*bal'-i-s-uu*	'to widen (TR)'
b.	*k'al'-aa*	'thin'	*k'al'-i-s-uu*	' to thin (TR'
c.	*d'ip'p'-aa*	'narrow'	*d'ip'p'-i-s-uu*	'to narrow (TR)'
d.	*furd-aa*	'fat'	*furd-i-s-uu*	'to fatten (TR)'

	Base stative nouns		*CS1 causatives*	
(4) a.	*dubb-ii*	'speech'	*dubb-i-s-uu*	'to talk to s.o'
b.	*irk-oo*	'support'	*irk-i-s-uu*	'to support s.th. with s.th'
c.	*k'alb-ii*	'cognition'	*k'alb-i-s-uu*	'to understand'
d.	*hark-a*	'hand'	*hark-i-s-uu*	'to pull'

2.1.1.4 Complex CS Causatives

In the causative CS1 pattern, we observe the co-occurrence of pairing derivational suffixes as */-at-s-/* ([*-es-s-*]), *-ah-s-* ([*-es-s-*]) and *-om-s-* in the ATIS-CS1, AHIS-CS1 and OMIS-CS1 pairing patterns respectively. The following list of complex middle derivations shows ATIS/AHIS & CS1 and OMIS & CS1 pairs:

	AHIS & ATIS pattern		***Causativised CS1 pattern***	
(5) a.	*bee-ah-uu*	'to become hungry'	*beel-es-s-uu*	'to make hungy'
b.	*haaf-ah-uu*	'to become greedy'	*haaf-es-s-uu*	'to make greedy'
c.	*d'eer-at-uu*	'to become long'	*d'eer-es-s-uu*	'to make long'
d.	*ǰab-aat-uu*	'to become strong'	*ǰab-ees-s-uu*	'to make strong'

	OMIS pattern		***Causativised CS1 pattern***	
(6) a.	*dull-oom-uu*	'to become old'	*oll-oom-s-uu*	'to make old'

b. *gabr-oom-uu*	'to become a slave'	*gabr-oom-s-uu*	'to enslave'
c. *dur-oom-uu*	'to become rich'	*dur-oom-s-uu*	'to make rich'

2.1.1.5 Complex CS2 Causatives

The causative CS2 can also be derived from the AMS middle. The following list of complex verb derivation shows the categories of the middles MS and the corresponding derived causatives CS2:

MS Middle pattern		***CS2 (Causativized MS middles) pattern***	
(7) a. *bit-at-uu*	'to buy for oneself'	*bit-ač-čiis-uu*	'to cause to buy for oneself'
b. *ban-at-uu*	'to open for oneself'	*ban- ač-čiis-uu*	'to cause to open for oneself'
c. *fid-at-uu*	'to bring for oneself'	*fid- ač-čiis-uu*	'to cause to bring for oneself'
d. *hid'-at-uu*	'to tie for oneself'	*hid'-ač-čiis-uu*	'to cause to tie for oneself'
e. *k'ab-at-uu*	'to hold for oneself'	*k'ab-ač-čiis-uu*	'to cause to hold for oneself'
f. *erg-at-uu*	'to send for oneself'	*erg-ač-čiis-uu*	'to cause to send for oneself'
g. *kenn-at-uu*	'to give for oneself'	*kenn-ač-čiis-uu*	'to cause to give for oneself'
h. *darb-at-uu*	'to throw for oneself'	*darb-ač-čiis-uu*	'to cause to throw for oneself'

A causativization of various complex autobenefactive derivations is also usual in Oromo complex causative production. For example, complex autobenefactive middles derived from causative CS1 and CS2 patterns, in CS1-MS & CS2-MS pairs, are further causativized for CS2, co-occurring as CS1-AMS-CS2 & CS2-MS-CS2. Besides, a triple derived autobenefactive middle (in MS-CS2-MS derivations is causativized as AMS-CS2-MS-CS2, and a triple derived autobenefactive stem with CS1-CS2-AMS is causativized as CS1-CS2-MS-CS2 derivational orders, as shown in the charts (8), (9), (10):

Complex Autobenefative [CAUS-MIDD]		***Complex Causativized Autobenefactive [CAUS-MIDD-CAUS]***	
(8) a. *kor-siif-at-uu*	'to cause to climb for oneself'	*kor-siif-ač-čiis-uu*	'to cause s/b to climb s/th for their own benefit'
b. *tum-siif-at-uu*	'to cause to beat for oneself'	*tum- siif-ač-čiis-uu*	'to cause s/b to beat s/th for their own benefit'
c. *č'uf-siif-at-uu*	'to cause to close for oneself'	*č'uf- siif-ač-čiis-uu*	'to cause s/b to close s/th for their own benefit'
d. *seen-sif-at-uu*	'to cause to enter for oneself'	*seen-sif-ač-čiis-uu*	'to cause s/b to enter s/th for their own benefit'
e. *waam-sif-at-uu*	'to cause to call for oneself'	*waam-sif-ač-čiis-uu*	'to cause s/b to call s/b for their own benefit'
f. *k'ab-siif-at-uu*	'to cause to catch for oneself'	*k'ab-sif-ač-čiis-uu*	'to cause s/b to catch s/th for their own benefit'

Complex Middle of Causativized Middle [MS-CS2-MS]		***Causativized Comlex Middlee [MS-CS2- MS-CS2]***	
(9) a. *kad'-ač-čiif-at-uu*	'to cause to beg for oneself'	*kad'-ač-čiif-ač-čiis-uu*	'to cause s/b to beg s/th for their own benefit'
b. *arg-ač-čiif-at-uu*	'to cause to find for oneself'	*arg-ač-čiif-ač-čiis-uu*	'to cause s/b to find s/th for their own benefit'
c. *god'-ač-čiif-at-uu*	'to cause to dress for oneself'	*god'-ač-čiif-ač-čiis-uu*	'to cause s/b to dress s/th for their benefit'
d. *uff-ač-čiif-at-uu*	'to cause to wear for oneself	*tuff- ač-čiif-ač-čiis-uu*	'to cause s/b to wear s/th for their benefit'
e. *ba'-ač-čiif-at-uu*	'to cause to carry for oneself'	*bit- ač-čiif-ač-čiis-uu*	'to cause s/b to carry s/th for their benefit'

Complex Middle Derivation in CS3-MS pattern [V-si-siis-at-]		***Complex causativization in CS3-MS-CS2 pattern [V-si-siis-at-siis-]***	
(10)a. *kor-si-siif-at-uu*	to cause (for oneself) s/b to cause s/b else to climb s/th'	*kor-si-siif-ač-čiis-uu*	'to cause s/b to cause s/b else to climb s/th for their own benefit'
b. *tum-si-siif-at-uu*	'to cause (for oneself) s/b to cause s/b else to beat s/th or s/b'	*tum-si-siif-ač-čiis-uu*	'to cause s/b to cause s/b else to beat s/th for their benefit'
c. *č'uf-si-siif-at-uu*	'to cause (for oneself) s/b to cause s/b else to close s/th'	*č'uf-si-siif-ač-čiis-uu*	'to cause s/b to cause s/b else to close s/th for their benefit'
d. *seen-si-siif-at-uu*	'to cause (for oneself) s/b to cause s/b else to enter s/th'	*seen-si-siif-ač-čiis-uu*	'to cause s/b to cause s/b else to enter s/th for their benefit'
e. *ban-si-siif-at-uu*	'to cause (for oneself) s/b to cause s/b	*ban-si-siif-ač-čiis-uu*	'to cause s/b to cause s/b else to open s/th

	else to open s/th'	for their benefit'

2.1.1.6 Complex Causativization of CS3 Pattern (with *-sisiis-* Suffix)

The causative stem of CS3 pattern (with *-sisiis-* suffix) derivation is the most complex causativization which engages a combination of *–s-* and *–siis-* suffixes as a tripled si-siis causative to derive a causative of 3 s's, which is used here as the CS3 pattern. According to Owens [14], this causative derivational pattern is the causative of causative. It is assumed that double causative, CS2, is derived as CS3. Here are examples in the list below:

	CS2 causatives		***CS3 causatives***	
(11) a.	*ban-siis-uu*	'to cause to open'	*ban-sisiis-uu*	'to cause sb to order sb to open sth'
b.	*kor-siis-uu*	'to cause to climb'	*kor-sisiis-uu*	'to cause sb to order sb to climb'
c.	*č'aal-čis-uu*	'to cause to be more'	*č'aal-čisiis-uu*	'to cause sb to order sb to be more'
d.	*seen-sis-uu*	'to cause to enter'	*seen-sisiis-uu*	'to cause sb to order sb to enter'
e.	*deem-sis-uu*	'to cause to go'	*deem-sisiis-uu*	'to cause sb to order sb to go'
f.	*hor-siis-uu*	'to cause to breed sth'	*hor-sisiis-uu*	'to cause sb to order sb to breed'
g.	*č'uf-siis-uu*	'to cause to close'	*č'uf-sisiis-uu*	'to cause sb to order sb to close sth'

2.1.2 The Applicative

The applicative is defined as a "construction in which an oblique element is promoted to the role of an object, with the verb inflected to show that it has that status" [16]. The hallmark of the construction is the 'promotion' of an oblique argument into a core syntactic role, often as a direct object. "For verbs that already have one direct object, the applicative either results in a three-argument (ditransitive) verb, or the 'original' direct object ceases to be exposed" [7].

2.1.2.1 The Benefactive-Applicative

Although different authors have different terms the verb suffixing *–f* morpheme, for example Owens [17] terms it the dative suffix. The morphological benefactive applicative is marked through *-f* suffix to the conjugated verb final. Griefenow-Mewis [18] describes *–f* suffix on a verb as the dative marker if the object is normally not expressed in the sentence. However, I argue that the *–f* suffix is a benefactive applicative marker whether or not the object is mentioned in the clause. It marks the benefactive applicative derivation when it is suffixed to the verb, but a dative marker when suffixing the nominals (noun, adjective or pronoun).

The benefactive applicative verb derivation applies on all kinds of predicative verbs, such as simple (or basic) intransitive and transitive verbs and simple or complex extended (or derived) verbs. Consider the following basic and simple and complex derived verbs and their derived benefactive-applicative verbs in (12), (13):

	Simple verbs		*Benefactive Applicative*	
(12) a.	*bit-uu*	'to buy'	*bit-uu-f-ii*	'to buy for'
b.	*ban-uu*	'open'	ban-uu-f-ii	'to open for'
c.	*fid-uu*	'to bring'	fid-uu-f-ii	'to bring for'
d.	d*eem-uu*	'to go'	*deem-uu-f-ii*	'to go for'
e.	*ka'-uu*	'to stand'	*ka'-uu-f-ii*	'to stand for'
f.	*bah-uu*	'to go out'	*bah-uu-f-ii*	'to go out for'
g.	*kenn-uu*	'to give'	*kenn-uu-f-ii*	'to give for'
h.	*erg-uu*	'to send'	*erg-uu-f-ii*	'to send for'
i.	*gargaar-uu*	'to help'	*gargaar-uu-f-ii*	'to help for'

2.1.2.2. Instrumental-Applicative

The affixation of instrumental applicative phrasal verbs of the locative *-tti* are instrumental-applicative where the instrumental-applicative suffix *-n* occurs with the locative as *ittii-n*. However, suffixing some conjugational verbs with the instrumental *–n* is contextually applicable, or the verbal suffix with *–n* indicates an accusative verb, as shown in the list in (13). Consider the following verbs and their corresponding instrumental-applicative locative phrasal verbs:

	Simple (in)transitive		*Instrumental Applicative*	
(13) a.	*bit-uu*	'to buy'	*bit-uu-n-ii*	'to buy with'
b.	*ban-uu*	'open'	*ban-uu-n-ii*	'to open with'
c.	*fid-uu*	'to bring'	*fid-uu-n-ii*	'to bring with'
d.	*deem-uu*	'to betray'	*deem-uu-n-ii*	'to go with'
e.	*ka'-uu*	'to stand'	*ka'-uu-nii*	'to stand with'
f.	*bah-uu*	'to go out'	*bah-uu-nii*	'to go out with'

3. INCREASE OF VALENCY

Oromo language is remarkably rich in morphological valency-changing in general and valency-increasing derivations in particular. While a valency argument as a subject is added with the causative suffixes, a valency argument as a direct object is added and realized with the applicative suffixes (cf. [14], [15]). Thus, those derivational devices are namely the causative -s-, -si(i)s- & *-sisiis-* suffixes and the applicative: benefactive-applicative *-f* and instrumental-applicative *-n* suffixes.

3.1 The Causative

A causative construction can be symbolised as CAUSE(x, P) = 'x causes P', where x is the argument introduced by the causative derivation, and P the caused predicate [7]. Causative predicates involve one more standard argument than the caused predicate. Therefore, if a caused event is intransitive, the causative is transitive; for example, 'John made Ahmad laugh' indicates that the the causativised clause is derived

from the underlined intransitive clause of intransitive verb 'laugh'. If a caused event is transitive, the causative is ditransitive; for instance, 'Berhan made Amina eat fish' is a causative sentence derived from the underlined transitive clause of the transitive verb 'eat'.

In this thesis, it is assumed that Oromo has three morphological causative constructions which increase transitivity of the clause. These morphological causative suffixes are *–s-, -sis-* and *–sisiis-* morphemes; they are the only focus of this study. The periphrastic causative is also present as an optional syntactic causative; it is only touched here for the sake of being part of the Oromo causative. The following examples illustrate clauses involving causative constructions: (1) shows a verb with the suffix *–s-* 'direct causative', (2) shows a verb with the suffix,*-sis-* 'indirect causative', (3) shows a verb with suffix combination *–sisiis-* (or *-si-siis-*) 'indirect effector causative' and (4) uses periphrastic causative of the caused action as subjunctive plus the verb *god-uu* 'to make/do'.

(1) *namičč-i* *muka* *č'ab-s-e*
man-NOM tree:ABS break-CAUS1-3SG:M:PERF
'The man broke the tree.'

(2) *inni* *gurbaa* *balbala* *ban-siis-e*
he boy:ABS door:ABS open-CAUS2-3SG:M:PRF
'He caused the boy to open the door'

(3) *ani* *namičča* *muka* *č'ab-sisiis-e*
I man:ABS tree:ABS break-CAUS3-1SG:PERF
'I caused the man to break the tree.'

(4) *namičč-i* *muka* *akka* *č'ab-u* *god'-e*
man-NOM tree:ABS to break-3SG:M make-3SG:M:PERF
'The man made the tree break.'

The hierarchial valency structure increase corresponds to the number of *s* segment in these causative suffixes *–s-, -sis-* and *-sisiis-*. A causative stem with single *–s-* suffix is labeled as CS1 pattern derived from base and derived stative intransitive verb stems, base nominal and adjectival stems and idiophones. A causative stem with double -sis suffix labeled as CS2 pattern is derived from base and derived stems of active intransitive and transitive verbs (including CS1). With the causative *–sisiis-* suffix, a CS3 causative pattern (a causative of causative) is derived from single and double causative stems of CS1 and CS2 respectively. The hierarchical increase starts with the pattern CS1 of the least valency structure code, follows with pattern CS2 and ends with the pattern CS3 of the highest hierarchy, which involves multiple direct objects.

Causatives with patterns CS1, CS2 and CS3	Valency-minimizing with CS1	Valency-increasing with CS1	Valency-increasing with CS2	Valency-increasing with CS3	**Total**
Percentage (%)	35 (2%)	701 (38.4%)	989 (54.2%)	99 (5.4%)	**1824**

Table 3: A hierarchical valency-decreasing and valency-increasing in causative CS1, CS2 and CS3 Patterns

The basic semantic distinction between the three Oromo morphological causatives can be explained in terms of direct versus indirect causation where the semantic role of added subject is an agent or a causer. Thus, the formal and semantic mechanisms of each morphological causative derivation along with its valency structure are discussed in-depth; therefore, we analyze formal and semantic mechanisms of the causative *–s-* suffix (in section 6.1.1.), the causative *–sis-* suffix (section 6.1.2.) and the causative *–sisiis-* suffix (section 6.1.3.).

3.1.1 Valenvcy and the -s- suffix

The *–s-* suffix is formally known as a single causative and semantically a direct causative [14] & [15]. Thus, verbs marked with the -s suffix are generally considered to have an agent instigating a direct causation. , an agent is described as "a willful, purposeful instigator of an action or event" [19]. Many Cushitic (and Semitic) languages have a morphological causative, and a few have this same distinction between two or more morphological causatives. In addition, the Ethio-Semitic Amharic has a- and as- prefixes as direct and indirect causatives repectively [20]. Thus, the Oromo single *–s-* suffix is parallel to the Amharic prefix a-, whereas the Oromo double causative -sis suffix is parallel to Amharic *as-* causative prefix (p.44). Now, we examine how the causative *–s-* suffix is used as valency-increasing device since causative verbs in the CS1 pattern (derived with *–s-* suffix), as the data shows in Table (3), are quantitatively 40% of the total 1824 morphological causatives, of which at least 38% is valency-increasing.

3.1.1.1. The VBS and CS1 Patterns Valency

In principle, base stative intransitive verbs are derived with causative -s suffix even thuogh some non-stative/active intransitives also derive with -s suffix [14] & [21]. The stative intransitives are usually monovalent verbs of [1A] valency structure while the non-stative intransitives are predominantly bivalent and at the same time monovalent classified in 1A/2A/2B valency structure. The verbal base stem (VBS) pattern of these stative and non-stative intransitive morphologically derives for causative CS1 pattern with *–s-* suffix, as a transitivising device. The valency increase and structure code between intransitive VBS and causative CS1 patterns. The added causative subject of CS1 pattern is a direct agent/causer [DCAUS] participating explicitly in the caused event to act upon the patient in the CS1 direct object, but an unaccusative subject (S) of the pairing BS intransitive.

(5) a. *čab-uu* **[VBS] [INTR] [1A]**
'to break'
b. *čab-s-uu* (+ d.o.) **[CS1] [DCAUS] [TR] [2B]**
'to break (s.th.)'

(6) a. *gal-uu* (+ i.o.) / (g.o) **[VBS] [INTR] [1A/2A/2B]**
'to go home (from s.w)'
b. *gal-č-uu* (d.o.) (+i.o.) / (+d.o.) **[CS1] [DCAU][TR] [1A/3B/3C]**
'to make (s.th/s.o.) return home / (from somewhere)'

(7) a. ool-uu (+ i.o.) / (g.o) **[BS] [INTR] [2A/2B]**
'to spend day at (s.w)'
b. ool-č-uu (d.o.) (+ i.o.) / (+ d.o.) **[CS1] [DCAU] [TR] [3B/3C]**
'to cause to spend day at (s.w)'

According to Dixon [2], bivalent intransitives are positional verbs indicating source, goal or location since they intail indirect object of core adpositional argument. Oromo base non-stative/active intransitives in (6) and (7) are bivalent positional verbs which have postpositional object argument. In fact the same positional verb for the same goal or location can have different syntactic cases, such as the locative, the ablative and the absolutive. NOTE: positional intransitives can allow absolutive object in valency structure, i.e. although the indirect object is adpositional, it can also occur in the absolutive case. Thus, a single positional intransitive verb can have one or two core arguments in three valency structures. It can have only a subject [1A], a subject and an indirect object [2A] and a subject and absolutive object [2B].

The added or introduced argument (the causer) is the agentive subject of the causative construction. The subject of the intransitive is the direct object in the causative construction. Examples (8a) below is intransitive clause, while (8b) is corresponding transitive causative clause construction.

(8) a. *killee-n* *šam-te*
egg-NOM rot-3SG:F:PERF
'The egg rotted'
b. *ɔoɾɾ-i* *killee* *šam-s-e*
heat-NOM egg: ABS rot-CUAS1-3SG:M:PERF
'The heat rotted the egg (lit., caused the egg remain)'

In (9) and (10), the same base intransitive verb bul-uu 'to spend night' involves different valency structures of positional arguments mana 'house' in the absolutive case in (9) and siree 'bed' in postpositional locative in (10), but both positional entities as semantically the same as location. The underlying intransitive clauses in (9a) and (10a) have same bivalent intransitive verb involving intransitive subject (S) and but different positional objects: in (9a) an absolutive object is entailed in the NP forming [2B] valency structure, and (10a) a locative POSP is involved to make [2B]. The derived CS1 causative *bul-č-uu* 'to cause to spend night' in transitive clauses in (9b) and (10b) involve three arguments including an introduced agentive subject and a patientive direct absolutive object and a positional absolutive in (9) and postpositional object in (10) in the [3C] and [3B] valency structures respectively. In general, when a causer is introduced as a subject of the CS1 verb, the subject of the underlying clause becomes an absolutive object (or takes a direct object slot), the valency structure increases by one.

(9) a. *ani* *mana* *bul-e*
I house: ABS spend night-1SG:PERF
'I spend the night at home.'
b. *inni* *mana* *na* *bul-č-e*
he house:ABS me:ABS spend night-CAUS-3SG:M:PERF
'He made me spend the night at home'

(10) a. *ani* *sire-rra* *bul-e*
I bed- LOC spent night-1SG:PERF
'I spend the night in the bed.'
b. *inni* *sire-rra* *na* *bul-č-e*
he bed- LOC me: ABS spent night-CAUS-3SG:M:PERF
'He caused me to spend the night in the bed.'

A syntactic structure and its semantic notion of the clauses is partly the same as causer or external agent (nominative) and secondary agent causee (absolutive), the semantic-syntactic interfaces of the locational arguments are in each examples. The causativized clauses in (11) involve trivalent causative verbs, which hold three arguments. Causativization introduces an external agent (nominative) to cause a secondary agent, the causee (absolutive) to act against locational arguments. In (11a), the locational argument is semantically assigned a goal in a zero marked (absolutive) case, but in (11b) and (11c), the expressed locational arguments are postpositional phrases. The postpositional object in (11b) is semantically assigned a location and marked with *–rra* suffix (locative), and the postpositional object in (11c) is realized semantically as a source marked with a lower pitch of last syllable and a long vowel word-finally (ablative).

(11) a. *inni* *mana* *na* *bul-č-e*
he house: ABS me: ABS spent night-CAUS-3SG:M:PERF
'He made me spend the night at home'
b. *inni* *huji-rra* *na* *ool-č-e*
he bed-LOC me:ABS spend night-CAUS-3SG:M:PERF
'He made me spend working whole day'
c. *namičč-i* *hintaloo* *lafa-â* *kaa-s-e*
man-NOM woman:ABS ground-ABL stand-CAUS:3SG:M-PERF
'The man made the woman stand up from the ground'

3.1.1.2. The NBS-CS1 Pattern and Valency

Nevertheless, as I observed from the data, some nominal, adjectival and frozen base stems as non-verbal base stems (NBS) to derive causative verbs with *–s-* suffix. According to [17] Owens, such nouns and adjectives occur with *–s-* suffix for causative derivation express a stative notion. In the concept of labeling a verb derived from frozen base stem, I simply use the term 'deponent' used by Mous [22] for middle derivational affix occurring with frozen base stem. The deponent causative *uff-i-s-uu* 'to dress s.o.' derived from a frozen base stem *uff-* with causative *–s-* suffix is also a transitive verb. This causative suffix is deponent, denominative and deadjective transitivising verbaliser since its corresponding CS1 causatives are transitive verbs, similar to transitivised base intransitive verbs. For example, verbs such as *bal'-i-s-uu* 'to make wide', *furd-i-s-uu* 'to make thick' and *k'al'-i-s-uu* 'to make thin' are deadjectival causatives. The denominal CS1 causatives include verbs such as *dubb-i-s-uu* 'to talk to s.o., to read' and *irk-i-s-uu* 'to make supported with something'. Thus, these causatives are directly derived from non-verbal base stems of respective adjectives.

In case of numerical valency, most nominal and adjectival predicates, are mono-valent, except relational nouns [11], but most locative and possessive predicates are bivalent rela-

tional. For instance, *bal'-aa* 'wide', *furd-aa* 'thick' and *k'al'-aa* 'thin' are monovalent adjectival predicates, but *dubb-ii* 'talk / speech' and *irk-oo* 'support' are bivalent relational predicative nouns. Consider the following clauses, as shown in (11) and (11):

(12) *soofaa-n* *irkoo* *duuydaa* *ti*
this-NOM support back:GEN COP
'Sofa is a back support'

(13) **soofaa-n* *irkoo* *d'a*
sofa-NOM support: ABS COP
'*This is a support'

In example (12), we observe a possessive clause of the noun irkoo 'support' which is a relational as it occurs in the genitive case, as it involves two nominal arguments: 'sofa' and 'back'. Thus irkoo is syntactically a bivalent verb, of which a trivalent CS1 causative *irk-i-s-uu* 'to have support (of s.o/s.th.)'. However, in (13) the clause seems somewhat odd since it involves only a noun 'support as a monovalent nominal predicate. Therefore, denominal and deadjectival CS1 causatives are transitivised verbs of [3B] which occur with an agentive/causative subject and a direct object and indirect object, *dubbisuu* 'to talk to(s.o)' which the same numerical valency {2}for both the nominal predicate and denominal CS1 causative verb. Consider the valency structure codes of the following nominal predicates and their denominal causatives.

(14) a. *irk-oo* [NBS] [N] [GEN] [2A]
'support'
b. *irk-s-uu* (+ d.o.) (i.o.) [CS1] [DCAUS] [TR] [3B]
'to support (s.th./ s.o.) (to s.th/s.o. '

(15) a. *dubb-ii* [NBS] [N] [GEN] [2A]
'speech (of s.o.)'
b. dubb-s-uu (+d.o.) (+ d.o.) [CS1] [DCAU] [TR] [2B]
'to make (s.th/s.o.) return home / (from somewhere)'

(16) a. *furd-aa* [NBS] ADJ] [ABS] [1A]
'fat / thick'
b. *furd-i-s-uu* (d.o.) [CS1] [DCAU] [TR] [2B]
'to make (sb.) fat / thick'

The majority of adjectives are one-place predicates. When verbalizing these one-place predicate adjectives, a transitive clause involves transitivised verbs suffixed with *–s-* morpheme. The underlying relational sentence structure of the adjective is the attributive. The deadjective and denominative *–s-* suffix increases a valency of the monovalent basic adjective and the bivalent basic noun into bivalent and trivalent derived verb respectively, as shown in (19) and (20):

(19) a. *man-ni* *bal'aa* *d'a*
house-NOM wide COP
'The house is wide.'
b. *aloo-n* *mana* *bal'-i-s-e*
Aloo-NOM house:ABS wide-CAUS-3SG:M:PERF
'Aloo widened the house.'

(20) a. *tun* *dubbii* *namičč-aa* *ti*
this:F:NOM speech man:GEN COP
'This is his speech.'
b. *muč'aa-n* *na* *dubb-i-s-e*
child-NOM me:ABS speech-CAUS-3SG:M:PERF
'The child spoke to me.'

In (19a) and (20a), the underlying attributive clauses are expressed with the copulas d'a and ti. The predicative adjective in (19a) is syntactically absolutive. It is a monovalent attributive since it entails only a subject manni 'house' in the nominative argument. The predicative noun in (20a) is syntactically in genitive case. It is a bivalent attributive as involves two nominal arguments, a possessed *dubbii* 'speech' and a possessor *namiččaa* 'of man'. The examples (19b) and (20b) demonstrate transitive clauses involving deadjectival and denominal verbs *bal'isuu* 'to make (s.th.) wide' and *dubbisuu* 'to speak (to s.o.)' respectively. These transitivised verbs are derived from base stems (BS), *bal'-* and *dubb-* of coreresponding adjective bal'aa 'wide' and noun '*dubbii* 'speech' through the verb formative causative *–s-* suffix. Thus, the basic numerical valency of the adjective and the noun increases by one in the corresponding deadjectival and denominal verbs because a subject is introduced as a direct causative agent. Therefore, the monovalent adjective *bal'-aa* 'wide' in (19a) advances its valency to two in its bivalent deadjectival verb *bal'-i-s-uu* 'to make wide' in (19b), and the bivalent noun *dubbii* 'speech' in (20a) increases its valency to three in its trivalent denominal verb *dub-i-s-uu* 'to speak to (s.o)' in (20b). As a result, the verbal *–s-* morphology made here is more intending primarily to code agentivization or transitivization than to code causativization since Oromo true causative marking is the double causative *–sis-* morpheme.

3.1.1.3. De-ideophonic CS1 Valency

The *-s-* suffix is verbalizer in ideophone verbs. According to my hypothesis, it is rather agentivizer than transitivizer. Both transitive and intransitive ideophone stems are verbalized with *–s-*, but they are lexically identified as intransitive marked with *ǰed'-uu* 'to say' and transitive with *god'-uu* 'to make'. Very few ideophone verbs are found to be transitive; for example, verbs such as *k'irk'ir-s-uu* (or *k'irk'ir god'-uu)* 'to tickle' and *firfir-s-uu* (or *firfir god'-uu)* 'to intensely move apart' are transitive ideophone verbs formed through the causative *–s-* suffix as a transitivising de-ideophonic verbalizer. They are derived from stems of ideophones of visual concepts *k'irk'ir-* 'intensive act of tickling somebody' and *firfir-* 'intensive act of moving (sb/sth) apart. Of course, these ideophone stems are formally slightly different from the intransitive ideophonic stems.

(21) a. *k'irk'ir-* ideophone BS
'Sounding intensive thunder storm'
b. *k'irk'ir-s-uu* (+ d.o.) [CS1] [INTS] [TR] [2B]
'to tickle (s.o.)'

As we observe from examples (21) mentioned above, the ideophone stem of the transitive is totally reduplicated while the syllable of intransitive ideophne stems is partially reduplicated root-finally (see also section 2.3.1). The intensive causative *k'irk'ir-s-uu* is a bivalent 'transitivised' de-ideophonic verb. In fact, all de-ideophonic intensive causatives are agentive verbs since the *-s-* suffix occurs in them. The transitivising CS1 de-ideophonic verb is valency-increasing, as it involves an agentive subject and a patient. The following example of transitive

sentence involves a de-ideophonic transitivised verb in the pattern.

(22) *gurbaa-n* *muč'aa* *k'irk'ir-s-a*
boy-NOM baby:ABS tickle-CS-3SG:M:IMPRF
'The boy tickles the baby'

The subject argument is realized as a direct agent of the intensive action in a transitivising notion in (21). A transitive verb *k'irk'ir-s-uu* 'to tickle' involves two arguments, a transitive subject (*gurbaa* 'boy') in the nominative and an affected direct object (*muč'aa* 'baby') in the absolutive. While the subject does the intensive action of tickling, the direct object undergoes that action made of a visually-ideophone.

3.1.1.4 The Causative ATIS-CS1, AHIS-CS1 & OMIS-CS1 Patterns and Valency

In the assumption of many scholars, including Tolemariam [15], a geminated -ss in –e*ss*- suffix is another form in the Oromo causative, which they assume a denominative and deadjective verbaliser, and semantically a direct causative. Here, it is interesting to consider Tolemariam's justification for that attempting to justify his argument, he provides some examples of verbs such as *diriir-s-uu* 'to spread' and *dab-s-uu* 'to bend', and he says, "They optionally geminate their causative morpheme to increase the number of -s's to two with no change of meaning as in *diriir-ss-uu* and *dab-ss-uu*".

However, I disagree with his statement and justification, as I suggest following three points of view: (1) his optional examples of geminated –ss morpheme do not work to justify because they are weird and unusual to have three (more than two) consecutive consonants whether geminated or different (i.e., geminated –ss cannot occur as suffix in such verb stems diriir- or dab- unless the epenthesis vowel i is inserted between the stem and the suffix he calls "geminated –ss" causative) (2) I think there is no such articulation or pronunciation geminating –s- suffix of the mentioned verbs in the spoken Oromo as far I have confirmed even from his Maccaa Oromo dialect (3) There is no reason to geminate the -s morpheme where there is no indication as morphophonemic change like the allomorph -č of the –s morpheme because of the stem-final glide consonants /l/ and /r/ the precede the -s suffix (cf. section 2.2.1.1). Hence, the number of -s morpheme correlates with number of agents in Oromo causative verbs.

A germinated -ss is traditionally connected with –*e(e)ss*- as a denominative or deadjective transitivizing causative verbalizer. This causative suffixal form is a variant of the –s- morpheme (cf. [13], [15], [16]). However, I argue that there is no a geminated *ess* causative variant because the traditional –*ess*- suffix is not really a single suffix, rather two combined suffixes *(-es-s-)* that result from the derivational ATIS & CS1 patterns and AHIS & CS1 patterns of *-at-s-* and *–ah-s-* suffixes respectively, co-occurring as inchoative-causative pairs. For example, in verbs such as *diim-at-uu* 'to become red' and *beel-ah-uu* 'to become hungry', the denominative or deadjective inchoative –*at*- and –*ah*- morphemes take a form of an allomorph [-es] in their respective derived *diim-es-s-uu* 'to make red' and *beel-es-s-uu* 'to make hungry' when they are followed by asingle –s- in CS1 causative. So, how does this happen?

According to Llore [13], a non-glottalized coronal /t/ which occurs stem-finally plus /s/ of causative suffix becomes [čč]; a laryngeal /h/ and glides /y, w/ are deleted and replaced as [s] when they are followed by /s/, and a preceding short /a/ in the *–at-* and *–ah-/-aw-/-ay-* suffixes may be affected by vowel harmony as it becomes [e]. for example, the inchoative verb stem *d'eer-at-* 'be long/tall' is causativized with *–s-* in order to form a verb */d'eer-at-s-uu/* 'to lengthen (s.th)' but with morphophonemic changes, the verb is pronounced as [*d'eer-es-s-uu*] (in the A-B dialect) or [*d'eer-eč-č-uu*] (in the Tuulama variety). So, palato-affrication and/or alveofricativization take place in the morphophonemic changes [13]. As a result, I categorize causative verbs derived with *–es-s-* (traditionally –ess-) suffix under pattern CS1 (with single -s causative suffix).

Furthermore, we have also two clues to evidence that '*-ess-*' is not a variant or allomorph of the *–s-* causative morpheme: (1) like causative verbs derived with *–s-* suffix, a causative verb derived with *–ess-* morpheme is semantically a direct causative. (2) A single causative can be extended from –om pattern derived inchoative verb stem. For example, the -om pattern inchoative, *k'ar-oom-uu* 'to be wise', is causativized as *k'ar-oom-s-uu* 'to make wise', likewise, the *–at-* pattern inchoative and the *–ah-* pattern inchoative are also derived with single causative for direct causation, where we can observe *–es-s-* form of ATIS-CS1 and AHIS-CS1 pairs from morphemic *–at-s-* and *-ah-s-* co-occurrences or combinations.

Therefore, I argue that it is a wrong assumption to see -ess is a single suffix of which ss geminated (doubled) as a variant or allomorph of the –s- causative morpheme. Rather, it may be right to assume that a composite pattern of two consecutive suffixes is distinctively considered as *–es-s- (or -eč-č-)* and that *–es- (-eč-)* is the allomorph of the *–at* or *–ah-* inchoative morphemes when their stems are causativized with the single –s- suffix, a short /a/ is affected by vowel harmony and becomes [e]. Thus, the germinated ss comes from a sequence of changed allophone [s] and changing phoneme /s/ in the derct causativization of inchoative middle stems of the *–at-* and *–ah-* patterns. The inchoatives in ATIS, AHIS and OMIS patterns are derived stative verbs. A CS1 form of causative derivation with *-s-* suffix from these stative inchoative verbs is transitivising and increasing valency by one, as it introduces a direct causative [DCAUS], while the denominative and the deadjective *-at-*, *-ah-*, and *–om-* suffixes in the ATIS, AHIS and OMIS inchoatives respectively are generally hypothesized detransitivising. Thus, this causation is transitivising a detransitivised stative inchoative. Consider the following CS1 causativised inchoative verbs of [1A] and their derived CS1 verbs of [2B]:

(23) a. *diim-at-uu* [ATIS] [INTR] [1A]
red-ATIS-INFV
'to become red'
b. *diim-es-s-uu* (+ d.o.) [CS1] [DCAUS] [TR] [2B]
red-ATIS-CS1-INFV
'to make (s.th/sb.) red'

(24) a. *beel-ah-uu* [AHIS] [INTR] [1A]
hunger-AHIS-INFV
'to become hungry'

b. *beel-es-s-uu* (+ d.o.) [CS1] [DCAUS] [TR] [2B]
hunger-AHIS-CS1-INFV
'to make (s.th/sb.) hungry'

(25) a. *dull-oom-uu* [OMIS] [INTR] [1A]
old-OMIS-INFV
'to become old'

b. *dull-oom-s-uu* (+ d.o.) [CS1] [DCAUS] [TR] [2B]
old-OMIS-CS1-INFV
'to make (s.th/sb.) old'

Examples in (23), (24) and (25) show the examples of causativised CS1 verbs from the inchoative forms of the ATIS, AHIS and OMIS patterns respectively. While the inchoative deriving -at and -ah morphemic forms in (23) and (24) are morphophonemically changed to -es allomorph as they are causativized with –s-, inchoative -om morpheme in the causativised CS1 is clearly apparent as shown in (25b). The inchoatives in a illustrate that they are intransitive verbs of [1A] valency structure while their counterpart CS1 causatives are transitive verbs (transitivised with -s suffix) classified in [2B] valency structure codes. The agent introduced in CS1 is a direct causer [DCAUS] in the transitivising event. Therefore, the inchoative-middle of ATIS AHIS and OMIS patterns and the causative of CS1 pairing stems indicate that the increase of valency by one.

3.1.2. Valency and the –*sis*- Suffix

In Oromo, the –*sis*- suffix is the default causative suffix with the broadest usage. It is formally known as double causative because we observe two/double s's in the –*sis*- suffix. Like Oromo, double causative suffixes of Agaw languages (except Kemant) can appear on the same verbs, so it is not a case of complementary distribution, double causatives are also common in Konso [22], and there are several combinations of reconstructed causative suffixes in Eastern Cushitic [23]. the simplest and most productive causative can be referred to as a "first (primary) causative" [24]. Other more complex causatives which can be applied to the same verbs as the first causative are considered 'second causatives'.

Verb stems marked with -sis are labeled in this research as a CS2 pattern because it implies a causative stem derived with double causative –*sis*- suffix (i.e. -*sis*- is formed from two s's inserted with i to indicate clearly separate 2 s's). Kulikov [24] has written in detail about a phenomenon he calls "second causative" – a notion in which a language has at least two different causative verbal derivations which can both be applied to the same verbs (as opposed to different suffixes for different verb classes). Kulikov [24] also describes five morphological options that languages employ for their second causative. The -siis suffix fits his fifth option in which the second causative does not share any common part with the first causative.

The causative -sis derivation also indicates an indirect (but intentional) causation by an agent. Therefore, CS2 is a 'second' causative if we infer from the number of causative marking s morpheme and the degree of direct causation. Therefore, as seen in (1)-(3), all three Oromo causative suffixes can be applied to the same verbs, using Kulikov's terminology, -*sis*- can be described as the true or first causative, while -s is more inclined to be a 'transitive' than 'causative' marker and -sisiis is more to be an 'effective' causative.

In the second hierarchy of valency increase, the direct causative derived with single causative has the valency code 2B or 3B, where it contains one direct object. The third hierarchy of valency increase in the causative derivation is the double causative derived with –*si(i)s*- suffix. It derives a causative from active intransitive and transitive verbs. The valency structure codes of this type of causative are 2B, 3B, 3C and 4C. The number of valency of the majority of these indirect causative verbs exceeds the number of valency of direct causatives.

3.1.2.1. The BS-CS2 Pattern and Valency

We investigate here the valency of CS2 causativisation in the base verbal stem pairing CS2 causative stem pattern derivation. Consider the valency structure and the numerical valency in the cuasativisation of the following verbs.

(29) a. *deem-uu* (+ i.o.) / (d.o.) [BS] [INTR] [1A/2A/2B]
'to go (to s.w.) / (s.w)'

b. *deem-sis-uu* (d.o.) (+ i.o.)/(+d.o.) [CS2] [ICAUS][TR] [2B/3B/3C]
'to cause (s.o.) to go (to s.w) / (s.w.)'

(30) a. *ban-uu* (+ d.o.) [BS] [TR] [2B]
'to open (s.th.)'

b. *ban-siis-uu* (+ d.o.) (+ d.o.) [MS] [ICAUS] [TR] [3C]
'to cause (s.o.) to open (s.th.)'

(31) a. *erg-uu* (d.o.) (i.o.) [BS] [DTR] [3B]
'to send (s.o) (to/for s.o. / s.th.)'

b. *ergi-siis-uu* (+ d.o.) (+ d.o) (i.o.) [CS2] [ICAUS] [TR] [4C]
'to cause (s.o.) to send (s.o./s.th.) (to/for s.o./s.th.)

3.1.2.2. The CS1-MS-CS2 Pattern and Valency

This section discusses the valency of CS2 causativisation in the 'CS1 causative-MS middle-CS2 causative syncretism' stem pattern derivation (i.e., the co-occurrence of -*s-at-siis*- derivational morphemes in the same verbal stem). Consider the valency characteristics of the following causative verbal derivation.

(32) a. *čab-s-at-uu* (+ d.o.) [MS] [AUTOB] [TR] [2B]
'to break for oneself'

b. *čab-s-ač-čiis-uu* (+ d.o.) (+d.o.) [CS2] [ICAUS] [TR] [2C]
'to break for oneself'

3.1.2.3. The CS2-MS-CS2 Pattern and Valency

This section discusses the valency of CS2 causativisation in the 'CS2 causative-AMS middle-CS2 causative syncretism' stem pattern derivation (i.e., the co-occurrence of -sif-ač-čiis- derivational morphemes in the same verbal stem). Consider the valency characteristics of the following causative verbal derivation.

(33) a. *seen-sif-at-uu* (+ d.o.) [AMS] [AUTOB] [TR] [3C]
'to cause (s.o/s.th.) to enter (s.th.) for oneself'

b. *seen-sif-ač-čiis-uu* (+d.o.) (+d.o.) [CS2] [ICAUS] [TR] [4D]
'to cause (s.o) to cause for oneself (s.o/s.th.) to enter (s.th.)'

3.1.2.4. Causative ATIS-CS2, AHIS-CS2 & OMIS-CS2 Patterns and Valency

This double causative derivation denotes the inchoative-causative syncretism. Although it is ambiguous that whether a CS2 (double) causative verb is directly derived from inchoative verbs or from CS1 causativised inchoatives, we treat it here as a direct CS2 causativisation from inchoative forms in the ATIS, AHIS and OMIS patterns. Consider the following CS2 causativised inchoative verbs of [1A] and their derived CS2 verbs of [2B]:

(34) a. *diim-at-uu* [ATIS] [INTR] [1A]
red-ATIS-INFV
'to become red'
b. *diim-ač-čiis-uu* (+ d.o.) [CS1] [ICAUS] [TR] [2B]
red-ATIS-CS2-INFV
'to make (s.th/sb.) red'

(35) a. *beel-ah-uu* [AHIS] [INTR] [1A]
hunger-AHIS-INFV
'to become hungry'
b. *beel-oy-siis-uu* (+ d.o.) [CS1] [ICAUS] [TR] [2B]
hunger-AHIS-CS2-INFV
'to make (s.th/sb.) hungry'

(36) a. *dull-oom-uu* [OMIS] [INTR] [1A]
old-OMIS-INFV
'to become old'
b. *dull-oom-sis-uu* (+ d.o.) [CS1] [ICAUS] [TR] [2B]
old-OMIS-CS2-INFV
'to make (s.th/sb.) old'

The agentive subject introduced in the CS2 causativised verb, unlike CS1 causative, is an indirect causer of the caused patient, which is spontaneously affected of the event, as shown in (37):

(37) a. *hintal-ti* *diim-at-te*
girl-F:NOM red-ATIS-3SG:M:PERF
'The girl became red'
b. *k'illens-ihintala* *diim-ač-čiis-e*
weather-NOM girl:ABS red-ATIS-CS2-3SG:M:PERF
'The weather caused the girl to become red'
c. **č'aalaa-n* *hintala* *diim-ač-čiis-e*
Č'aalaa-NOM girl: ABS red-ATIS-CS2-3SG:M:PERF
'Caalaa caused the girl to become red'

The example (37) illustrates a transitive clause derived from intransitive clause of the ATIS-CS2 causative derivational pattern in the inchoative-causative syncretism. In (37a), the intransitive clause involves a monovalent detransitivised inchoative stative verb of the ATIS pattern derived with deadjective *–at-* suffix. This verb is a monovalent of [1A] code since it entails on a subject semantically realized as spontaneously affected patient. In (37b), the transitive clause, involving a bivalent CS2 causative verb, has two arguments in the nominative and absolutive cases. The subject argument *k'illens-i* 'weather-NOM' is inanimate indirect agent which participates to affect the spontaneous patient. However, when the introduced indirect causer is a human agent of the affected patient, the sentence looks incomplete, as shown in (37c), because for the involvement of indirect causer, there should be a caused direct agent as a causee of the event. Therefore, the causativisation in the morphological ATIS-CS2, AHIS-CS2 and OMIS-CS2 patterns, the introduced indirect causer is inanimate agent.

In general, the Table 4 consists of a comprehensive example with some listed verbs to illustrate a hierarchical approach to the numerical valency structures in the causative CS2 pattern (with *–siis-* suffix).

Underlying stem	Valency codes	Derived CS2 stem	Valency codes
deem-uu	[1A/2A/2B]	*deem-sis-uu*	[2B/3B/3C]
ban-uu	[2B]	*ban-siis-uu*	[3C]
nak'-uu	[2B/3B]	*nak'-siis-uu*	[3C/4C]
dib-uu	[3C]	*dib-siis-uu*	[4D]
yar-at-uu	[1A]	*yar-ač-čiis-uu*	[2B]
diim-at-uu	[1A/2B]	*diim-ač-čiis-uu*	[2B/3C]
ban-at-uu	[2B]	*ban-ač-čiis-uu*	[3C]
rif-at-uu	[1A/2A/2B]	*rif-ač-čiis-uu*	[2B/3B/3C]
diim-es-s-uu	[2B/3B]	*diim-es-siis-uu*	[3C/4C]
č'ab-s-uu	[2B]	*č'ab -siis-uu*	[3C]
bubb-s-uu	[1A/2A]	*bubb-siis-uu*	[2B/3B]

Table 4: Valency structures in the causative CS2 pattern (with –siis suffix)

3.1.3. Valency and the *–sisiis-* Suffix

The suffix *–sisiis-* on the other hand, is similar to the option he describes as doubling with alternation: Y[second causative] = X1 + X2 whereas both X1 and X2 serve as first causative markers but obligatorily alternate when deriving double causatives, since two identical morphemes cannot be repeated immediately" [7]. The *–sisiis-* suffix is a combination of two causative markers (*-s-* and *–siis-*), but it differs from the Kulikov's description in that only *–s-* is a first causative.

A verb marked with *–sisiis-* should first be a derived causative because it is a causative of causative derivation [15]. The hypothesis of this study first assumed that a causative in CS3 is extended from CS2, but the current analysis indicates CS3 derives from both CS1 and CS2 patterns. In Van Valin and LaPolla [19], an Effector is described as "…the participant that brings something about, but there is no implication of its being volitional or the original instigator. It is simply the effecting participant. It is simply the effecting participant. It can be human, animate or inanimate".

Semantically, CS3 indicates that a causer has the least degree of agentivization in comparison with CS1 and CS2 in the causative event. Thus, it would be better to say the subject of CS3 is semanticaly an effector than a causer because the impact of the subject is an effect of the caused event or very limited causative participation. This fits with Kulikov's [24] iconicity principle which states that within a language having two or more causatives, smaller constructions are more direct and larger constructions are less direct.

3.1.3.1. The BS-CS1-CS3 Pattern and Valency

The highest causative hierarchical valency increase is the pattern CS3 is derived from the pattern CS2 through *–si-siis* suffix in order to form the most complex causative as a multi-

transitive verb. The valency structure codes in this causative are 4D, involving three direct objects, or up to 5D valency codes adding obligatory indirect object for basically di-transitive verbs. This indicates the largest numerical valency increase.

(39) a. *č'ab-uu* (+ d.o) [BS] [INTR] [1A]
'to break (s.th.)'
b. *č'ab-s-uu* (+ d.o) [CS1] [DCAUS] [TR] [2B]
'to break (s.th.)'
c. *č'ab-sisiis-uu* (+ d.o) (+ d.o) [CS3] [ICAUS] [TR] [3C]
'to cause (s.o.) to break (s.th.)'
c'. *č'ab-sisiis-uu* (+ d.o) (+ d.o) [CS3] [EFFEC] [TR] [4D]
'to cause (s.o.) to break (s.th.)'

The causativisation step, according to the derivation in (39), has jumped the formal hierarchical CS2 (-sis) pattern, the numerical valency step is consistent because in (39a) the structural code is [1A], in (39b) the code is [2B] and in (39c) it is [3C]. However, in (39d), is according to my hypothesis which assumes that three s's in the causative morpheme represent equivalent three agents in the causation classified in the [4D] code. Thus, from the causative CS1 pattern, the CS3 pattern, like CS2 pattern, can derive as an independent variable. Consider the syntactic clauses in (40) which illustrate the valency patterns in the BS-CS1-CS3 causation pattern:

(40) a. *Tolaa-n* *muka* *č'ab-s-e*
Tolaa-NOM wood:ABS break-CS1-3SG:M:PERF
'Tolaa broke the tree'
b. *Tolaa-n* *gurbaa* *muka* *č'ab-sisiis-e*
Tolaa-NOM boy:ABS wood:ABS break-CS3-3SG:M:PERF
'Tolaa broke the tree'

3.1.3.2. The BS-CS2-CS3 Pattern Valency

Note! I left the below (41) for editor to draw for me a chart for words in list

CS2 Pattern Causative ***CS3 Pattern Causative***

(41) a. *č'ab-siis-uu* 'to cause to break sth' *č'ab-sisiis-uu* 'to cause sb to cause to break sth'
b. *dab-siis-uu* 'to cause to divert sth.' *dab-sisiis-uu* 'to cause sb to cause to divert (s.th)'
c. *ban-siiis-uu* 'to cause to open (sth.)' *ban-sisiis-uu* 'to cause sb to cause to lengthen (s.th.)'
d. *deem-sis-uu* 'to cause to go' *deem-sisiis-uu* 'to cause to cause(sb) to go (s.w.)'
e. *kaa-sis-uu* 'to cause to make stand' *kaa-sisiis-uu* 'to cause sb to cause to stand (s.th.)

(42) a. *ban-siis-uu* (+ d.o) (+ d.o) [CS2] [ICAUS] [TR] [3C]
'to cause (s.o.) to open (s.th.)'
b. *ban-si-siis-uu* (+d.o) (+d.o) (+d.o.) [CS3][FACT][TR][4D]
'to cause (s.o.) to cause (s.o.) to open (s.th.)'

(43) a. *nay-siis-uu* (+ d.o) (+ d.o) (+ i.o.) [CS2][ICAUS][TR] [4C]
'to cause (s.o.) to add (s.th.) (into s.th.)'
b. *nay-si-siis-uu* (+ d.o) (+ d.o) (+ d.o.) (+ i.o.)
[CS3] [FACT] [TR] [5D]
'to cause (s.o.) to cause (s.o.) to add (s.th.) (into s.th.)'

(44) a. *Tomas* *balbala* *ban-e*
Toman:NOM door :ABS open-3SG:M:PERF
'Tolaa broke the tree'
b. *Tolaa-n* *Tomas-iin* *balbala* *ban-siis-e*
Tolaa-NOM Tomas-ACC door:ABS open-CS2-3SG:M:PERF
'Tolaa broke the tree'
c. *inni* *Tolaa* *Tomas-iin* *balbala* *ban-sisiis-e*
he:NOM Tolaa:ABS Tomas-ACC door:ABS open-CS3-3SG:M:PERF
'Tolaa broke the tree'

The sentences in (44) illustrate valency increase in the hierarchical three verbal stems, of which two are causative derivations. In (44a), the base transitive verb involves an agentive subject in the nominative case and a patient direct object in the absolutive of the [2B] valency structure. In (44b), the CS2 causative verb adds or introduces an indirect causer1 Tolaa as a subject that causes an direct agent/ causee Tomas to directly participate in the act of 'opening door'. Thus, the valency increases by one as the clause of CS2 causative involves three arguments: one subject and two direct objects in the valency structure [3C]. In (44c), a causer2 inni 'he' is introduced as an indirect agentive subject in the CS3 causative to cause causer1 Tolaa to cause Tomas, a direct agentive to act in the event. Therefore, again, the valency has increased by one hence the CS3 causative engages four arguments: one subject and three absolutive objects in the [4D] code.

In general, the hierarchical valency structural codes of causative derivation in the set of CS1, CS2 and CS3 verbal stem patterns include 1A, 2B, 3B, 3C, 4C, 4D, 5D and 5E codes. Consider a comprehensive map of valency increase of the causative derivations in the hierarchical valency structural codes in the table (5):

BS	Valency codes	CS1/CS2	Valency codes	CS1-CS2 (CS3)	Valency codes
barrr-	-	*barr-i-s-uu / barr-i-siis-uu*	[1A/2B]	*barr-i-si-siis-uu*	[3C]
č'ab-uu	[1A]	*č'ab-s-uu / č'ab-siis-uu*	[2B/3C]	*čab-si-siis-uu*	[3C/4D]
deem-uu	[1A/2A/2B]	*deem-sis-uu*	[2B/3B/3C]	*deem-si-siis-uu*	[3C/4C/4D]
ban-uu	[2B]	*ban-siis-uu*	[3C]	*ban-si-siis-uu*	[3C/4D]
nak'-uu	[2B/3B]	*nak'-siis-uu*	[3C/4C]	*nak'-si-siis-uu*	[4D/5D]
dib-uu	[3C]	*dib-siis-uu*	[4D]	*dib-si-siis-uu*	[5E]

Table 5: A hierarchical approach to valency structures of pattern BS, CS2 and CS3 (with –si-siis-)

3.1.4. Lexical (Suppletive) Causativisation

So far, we have acknowledged that single causativisation is simple transitivisation; however, there is still a distinct transitivising mechanism in Oromo, which is referred to as lexical

causative. A base intransitive verb may have a corresponding transitive form, of which stem is different from that of intransitive [7]. It is impossible for base of the intransitive verbs to derive with any of the causative suffixes (-s- and –sis-); for example, base intransitive verbs such as *d'uf-uu* 'to come' and *č'it-uu* 'to get cut' are transitivised only as *fid-uu* 'to bring' and *kut-uu* 'to cut' respectively, so derived causative forms as **č'ič-čiis-uu* and **d'uf-siis-uu* are impossible. These intransitive verbs are active or non-active monovalent verbs; for instance, *d'ufuu* 'to come' is an active monovalent verb while *č'ituu* 'to get cut' is a non-active/unaccusative monovalent verb. Thus, the supletive causative denotes transitivity relations with its corresponding intransitive, and thereby increasing valency by one.

However, other derived suppletive transitive causative forms such as *ball-eess-uu* 'to make disappear, to destroy', *dabar-s-uu* 'to pass (TR.)' and *ajjee-s-uu* 'to kill' are distinct from their basic forms of the intransitives *bad-uu* 'to disappear', *tar-uu* 'to pass (INTR.)' and *du'-uu* 'to die' are lexically and mophologically distinct respectively. Consider the following list of intransitive verbs and their supletive causatives:

	Intransitives		***Lexical/Suppletive Causatives***	
(44) a.	*deem-uu*	'to go'	*oof-uu*	'to drive'
b.	*d'uf-uu*	'to come'	*fid-uu*	'to bring'
c.	*č'it-uu*	'to be cut'	*kut-uu*	'to cut'
d.	*haf-uu*	'to remain'	*hamb-i-s-uu*	'to leave s.th'
e.	*du'-uu*	'to die'	*ajj-ees-uu*	'to kill'
f.	*bad-uu*	'to get destroyed'	*ball-es-s-uu*	'to cut'

(45) a. *haad-ni* *č'it-e*
rope-NOM be cut-3SG:M:PERF
'The rope got cut'

b. *in-ni* *haada* *kut-e*
him-NOM rope: ABS cut-3SG:M:PERF
'He cut the rope.'

c. *buddeen-ni* *haf-e*
bread-NOM remain-3SG:M:PERF
'The bread remained'

d. *awwal* *buddeena* *hamb-s-e*
Awwal: NOM bread:ABS remain-CAUS-3SG:M:PERF
'Awwal left some bread (lit., made the bread remain)'

Examples in (45) illustrate underlying intransitive clauses and their derived transitive involving causativizations through suppletive derivation. In (45a) and (45c), the non-agentive (stative) subject of the underlying intransitive clauses is a patient argument. The involved stative intransitive verbs are monovalent that they assign only a patient (NOM) in the subject position. In (45b) and (45d), the causativized clause construction involves a derived suppletive verb. The verb introduces a direct agent to the event, and thereby increasing the valency to two. In the causative construction, the agent (NOM) takes a subject slot while the patient (ABS) shifts to the object position, which was once syntactically a subject (NOM) in the underlying intransitive clause.

In conclusion, it seems clear that the default –s- suffix generally indicates direct causation carried out by an agent causer, *-sis-* indicates indirect causation by an agent causer, and *–sisiis-* indicates indirect causation by an effector causer. The syntactic causatives formed with *god'-uu* 'to make/do' is both direct and indirect, and it retains more control over the action.

3.2. The Applicative

An applicative derivation is a valency-increasing operation. It adds an object argument that is (in the canonical case) semantically a Goal (Beneficiary, Recipient and Location) (Payne 1997: 257). For example, 'arrive' > arrive-APP the airport 'arrive at the airport > dance-APP the teacher 'dance for the teacher'. For example, in the underlying sentence, ani gurbaâ-f mana bane 'I opened the door for the boy' and the derived sentence *ani gurbaa mana bane-f* 'I opened the door for the boy', the peripheral indirect object *gurbaa-f* 'for boy' in the dative is brought to center as a beneficiary/recipient direct object *gurbaa* in the absolutive case.

Oromo applicative verb derivational mechanism is both synthetic and analytic (i.e., through morphological affixation and compounding). The synthetic applicative verb deriving morphemes are the benefactive-applicative *-f* suffix, which semantically realizes beneficiary or recipient and the instrumental *-n* suffix which represents instrument. The analytic applicative verb deriving morphemes are preverbally combining postpositions. These postpositions include case clitics the locatives (Location) *(i)tti* 'to/into/at' and *(i)rra* 'on', the locative (Source) *irraâ* 'of/from', are either bound morphemes (suffixes) when occur in the NP or free (analytic) morphemes when combine with verbs. The rest (many other) postpositions, such as *gubbaa* 'on/over', *jala* 'under/beneath', *dura* '(in)front/ahead', *duuba* 'back/behind' and *moggaa* 'beside', are all free (or analytic) morphemes in both NP and derived verbs as locatives for location derivation. Since location indicates various positions, different forms of adpositions, such as 'on', 'in', 'to', 'over', 'under', 'back', and 'behind' are used.

The derivation adds valency of the majority verbs but upgrades the inherent indirect object of ditransitive verb to be a direct object of the applicative verb. Consider the valency structure of following applicative verbal derivation:

(51) a. *ban-uu* (+d.o.) [TR] [2B]
'to open (s.th.)'
b. *ban-uu-f-ii* (+d.o.) (+d.o.) [BENAPL][BENEF][TR][3C]
'to open (s.th.) (for s.o./s.th)'

(52) a. *erg-uu* (+d.o.) (+i.o) [TR] [3B]
'to open (s.th.)'
b. *erg-uu-f-ii* (+d.o.) (+d.o.) [BENAPL][BENEF][TR][3C]
'to send (s.th.) (for s.o./s.th)'

3.2.1. The Benefactive-Applicative *-f* Suffix

The applicative is defined as a "construction in which an oblique element is promoted to the role of an object, with the verb inflected to show that it has that status" [25]. The hallmark of the construction is the 'promotion' of an oblique argument into a core syntactic role, often as a direct object. "For verbs that already have one direct object, the applicative either

results in a three-argument (ditransitive) verb, or the 'original' direct object ceases to be exposed" [7].

Different authors have different terms for the verbal suffixing *–f* morpheme, for example Owens [14] terms it the dative suffix. The morphological benefactive applicative is marked through –f suffix to the conjugated verb final. Griefenow-Mewis [18] describes *–f* suffix on a verb as the dative marker if the object is normally not expressed in the sentence. However, I argue that the *–f* suffix is a benefactive applicative marker whether or not the object is mentioned in the clause. It marks the benefactive applicative derivation when it is suffixed to the verb, but a dative marker when suffixing the nominals (noun, adjective or pronoun).

The applicative construction is found in a number of genetically diverse Cushitic and Semitic languages including Oromo [22]. Besides, according to Amberber [20], Amharic, an Ethio-Semitic language, has the applicative derivation though it is not traditionally usual towards Amharic grammarians. Consider the following examples from Amharic (Semitic):

(53) a. *aster bə-mət'rəgja-w dəjj̆ t'ərrəg-ačč*
Aster with-broom-DEF doorway sweep-3F:PERF
'Aster swept a doorway with the broom'
b. *aster mət'rəgja-w-n dəjj̆ t'ərrəg-ačč-ibb-ət*
Aster with-broom-DEF-ACC doorway sweep-3F:PERF-with-3MO
'Aster swept a doorway with the broom'
(lit., 'Aster, the broom, she swept a doorway with it')

In (53a), the instrument occurs in a prepositional phrase, whereas in (53b), it occurs without the preposition, furthermore, in (53b) the verb is more complex than the verb in (53a): it includes a unit of affixes *-bb-ət*, the suffix *-bb-* is refered to as an instrument-applicative suffix, and the following pair *–at-* suffix is an object agreement marking form.

A similar applicative derivation is found in Yagua (Austronesian). According to Payne [7], the suffix *-ta* indicates that an instrumental or locative participant is in the direct object position. Consider the following examples in (54):

(54) a. *sa-duu rá-viimú*
3SG-blow INAN-into
'He blows into it' (valency = 1)
b. *sa-duu-tá-ra*
3SG-blow-TA-INAN:OBJ
'He blows into it' (valency = 2)

Oromo has also an applicative voice construction as a morphological verb derivational mechanism of valency increase. However, this term has not been traditionally used in the description of verb derivational typology of Oromo. Consider the examples of benefactive-applicative derived from base transitive verb bit-uu 'to buy' in (55):

(55) a. *ani Ahmadii-f surree bit-e*
I Ahmad-DAT trousers:ABS buy-3SG:M:PERF
'I bought a trouser suit for Ahmad'
b. *ani ahmad-iin surree bit-ee-f*
I Ahmad-ACC trousers:ABS buy-3SG:M:PERF-BEN
'I bought a trouser suit for Ahmad'

The applicative derivation can both 'upgrade' a participant in the event structure of the verb and 'add' a participant. When a verb occurs with these postpositional clitics, it is referred to as a 'derived applicative', which changes the object in the canonical case (postpositional phrase) into the absolutive case. The applicative derivation upgrades an optional oblique object in the canonical case to an obligatory object, and thereby increases an object argument without semantic change.

Furthermore, there is a change in syntactic order in the clauses of unaccusative verbs derived with benefactive-applicative. The beneficiary object argument in the absolutive case which is realized by the benefactive-applicative –f morpheme comes before the subject as O-S-V order, conversely with the usual Oromo S-O-V syntactic order, as shown in the examples (56) and (57):

(56) a. *muk-ni č'ab-e*
boy-NOM break INTR-3SG:M:PERF
'The tree broke'
b. *namičča muk-ni č'ab-ee-f*
man:ABS boy-NOM breakINTR-3SG:M:PERF-APPL
'The tree broke for the man' (maybe the tree is too strong to break)

(57) a. *muk-ni mur-am-e*
tree-NOM cut-PASS-3SG:M:PERF
'The tree was cut'
b. *namičča muk-ni mur-am-ee-f*
man:ABS tree-NOM cut-PASS-3SG:M:PERF-APPL
'The tree was cut for the man'

3.2.2. Instrumental-Applicative Verb Derivation

The affixation of instrumental applicative phrasal verbs of the locative *-itti* are instrumental-applicative where the instrumental-applicative suffix *-n* occurs with the locative as *ittii-n*. However, suffixing some conjugational verbs with the instrumental *–n* is contextually applicable, or the verbal suffix with *–n* indicates an accusative verb, as shown in the chart in (7). Consider the following verbs and their corresponding instrumental-applicative locative phrasal verbs:

	Simple (in)transitive		***Instrumental Applicative***	
(58) a.	*bit-uu*	'to buy'	*bit-uu-nii*	'to buy with'
b.	*ban-uu*	'open'	*ban-uu-nii*	'to open with'
c.	*fid-uu*	'to bring'	*fid-uu-nii*	'to bring with'

The combination of instrumental-applicative marking *ittii-n* and a verb is used to form an instrumental-applicative phrasal verb. The instrumental-applicative *-n* does usually suffix the postpositional locative itti to be *ittii-n*. When deriving instrumental-applicative, suffixing the locative is more common than suffixing the verb. Hence, the locative *itti* is a free morpheme combined with verb preverbally, as it is suffixed with the instrumental *-n*, and then the instrument-applicative is derived as a phrasal verb. It can derive from transitive or intransitive and from simple or derived verbs (see the detail in section 5.2.2). Consider the following verbs and their corresponding derived combinations with preverbal instrumental-applicative:

Base verbs ***Instrumental-applicative***

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(59) a. *bit-uu* 'to buy' *ittii-n bit-uu* 'to buy with'
b. *ban-uu* 'open' *ittii-n ban-uu* 'to open with'
c. *hid'-uu* 'to tie' *ittii-n hid'-uu* 'to tie with'

To indicate the instrument as a core argument, there should be both syntactic and morphological structures. Morphologically, the suffix –n occurs with the verb, with the verb combining locative itti or with the direct object in the absolutive form, as shown in (60):

(60) a. *an-i* *balbala* *ban-e*
me-NOM door: ABS open-1SG:PERF
'I opened the door.'

b. *an-i* *k'ulfii* *balbala* *ban-ee-n*
me-NOM key:ABS door: ABS open-1SG:PERF-INST
'I opened the door with a key (lit., I used a key for opening the door).'

c. *an-i* *k'ulfii* *balbala* *ittii-n* *ban-e*
me-NOM key: ABS door: ABS by-INST open-1SG:PERF
'I opened the door with a key.'

d. *an-i* *k'ulfii* *balbala-n* *ban-e*
me-NOM key:ABS door-INST open-1SG:PERF
'I opened the door with a key.'

3.2.3. The Preverbal Locative *tti* and *rra*

These postpositional clitics are locative *itti/tti* 'to/into/at', *irra* / *rra* 'on/ over' and locative-ablative *irraa* / *rraa* 'from/of' which are free morphemes used to combine with verbs preverbally to derive locative-applicative (hereafter, LOCAPL) and ablative-applicative (hereafter, ABLAPL) verbs. They are postpositions .Only the clitics with vowel i word-initially, such as *irra, itti* and *irraa*, usually occur as suffixes after nominal objects, all clitics when combine preverbally with verbs they are all free morphemes [18]. A nominal phrase in which a clitic occurs after a nominal object, it is a postpositional phrase (POSP) whose object is an indirect object, while a verb combined with the clitic is referred to as a verbal phrase whose entailed object is a direct object in the absolutive case [22].

(61) a. *sinbirree-n* *muka-rra* *teet-te*
bird-NOM tree-on:LOC sit-3SG:F:PERF [INTR]
'The bird sat on the tree'
b. *sinbirree-n* *muka* *irra* *teet-te*
bird-NOM tree:ABS on sit-3SG:F:PERF [TR]
'The bird sat on the tree'

In examples above, the sentences show intransitive and transitive sentences. The intransitive verb *taa'uu* 'to sit' syntactically marks locative case *-rra* suffix after the nominal object in the obligatory postpositional phrase, and the same clitic preverbally combines with the same verb, as shifts its suffixing nominal postposition to free preverbal combination, in order to be a transitive *irra taa'uu* 'to sit on, and thereby constructing the transitive sentence.

Oromo grammarians recognize verbs are transitivized by governing their object indirectly through something other than themselves (through a postposition). The combinations of postposition with certain verbs preverbally can express transitivization; here both transitive and intransitive verbs will be transitivized through such combinations [18].

(62) a. *ani waaree namicha-tti bite* 'I bought a lunch for the man'
b. *ani namicha waaree itti bite* 'I bought a lunch for the man'

The indirect object namicha-tti 'for man' in example (40a) is an adjunct, in which the the postpositional case clitic –*tti* suffix occurs in the noun namičča 'man'. In the underlined phrasal verb, the case clitic preverbally combine with verb as in (40b) *itti bituu* 'to buy for (s.o / s.th.). Thus, this combinational derivation has transformed an adjunct in the indirect object slot into an argument in the direct object position: hence the direct object appears in the absolutive case.

There is clearly a semantic requirement in Oromo for the verb in these examples to have an obligatory object / patient argument. The locative *-tti* postpositional clitic suffix is attached to the optional indirect object; thus the locative object is an aptional recipient entity as shown in (62a); however, the following example in (63) illustrated an obligatory indirect object argument suffixed with the same locative –*tti* postposition in the underlined lexically specified postpositional phrase. Therefore, it should be noted that there are same postpositional phrases obligatorily entailed by the verb or optionally used independent of the verb, i.e. the obligatory POSP in (63) is an argument while the optional one in (62) is an adjunct.

(63) *ani namičča-tti kitaaba erge* 'I sent a book to the man'

3.2.4. Preverbal Ablative-Applicative *irraâ*

The locative irra is a preverbal stem from which the ablative-applicative is derived. This happens through lengthening the word-final vowel of the locative irra as *irraâ*, in a high-low pitch tone. The process is through combining the preverbal postpositional clitic *irraâ* with the verb. Here is a list of some verbs and their ablative-applicative derivatives.

Underlying Verbs		*Ablative-Applicative*	
(64) a. *bit-uu*	'to buy'	*irraâ bit-uu*	'to buy from (sb)'
b. *dubb-at-uu*	'to speak'	*irraâ ban-uu*	'to speak of (s.th.)'
c. *č'it-uu*	'to be cut'	*irraâ č'it-uu*	'to be cut of (s.th.)'

In conclusion, the derivational strategies include root-syllable reduplication, inchoative, middle, causative, passive, benefactive-applicative, and instrumental-applicative morphemes. Due to historical phonological changes, according to my assumption, some morphology has become fusional, for example, the middle -t and the 1SG *-ʔ* are fused as *-tʔ* and involves glottalization and gemination [*-d'd'*]; the inchoative-middle -t and -h with the causative -s are fused as -ts and -hs and involves fricativization and gemination [-ss], and involves and stem alternations; for example, a base *bad-* in *bad-uu* 'to disappear' is alternated in causative derivation to be *ball-* as in *ball-ees-s-uu* 'to distroy'.

4 Conclusion

In this article, Oromo verb derivational processes that result in the valency increase are investigated. Two main subsections are projected as the causative, the applicative as well as middle derivations in accordance with valency-increasing device. For each of the processes it is important to distinguish between morphological derivations and analytic/periphrastic derivations. In the latter case, there may be an overlap with serial verb constructions and/or clause combining strategies such as complementation. It may probably lead us too far away to discuss the non-morphological constructions in detail, especially because it is not the aim of this thesis to focus on the analytic derivations. Indeed, Oromo employs periphrastic constructions as valency changing mechanisms, so it would be good to note this and to provide some illustrations, plus an indication of how frequently that type of construction is sometimes used. Hence, Oromo is a little bit isolating language and employs lexical substitution to express, for instance, causative and middle derivations.

A single causative with pattern CS1 (with -s suffix) is derived from underlying idiophone roots and from stative nominal base stems and stative base and derived intransitive verb stems. A double causative pattern CS2 (with -si(i)s suffix) is derived from underlying active intransitive and transitive (and bi-transitive) base stems and from derived MS (including inchoatives) and CS1. A factitive (a causative of causative) of the CS3pattern (CS1-CS2 (with –si-siis suffix)) is derived from double causative stem CS2. The hierarchical increase starts with the pattern CS1 of the least valency structure code, follows with pattern CS2 and ends with the pattern CS1-CS2 of the highest hierarchy, which involves multiple direct objects.

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