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CAUSATIVE FORMATION IN TELUGU

Satya Harini Y, Ganesh Gupta S.and Rama Krishna Das P.

Abstract

The paper aims at explaining causative morphemes/verbs in Telugu based on the features of distinctive causativization. This only covers the usual instances of causativization and explains how different types of Telugu verbs, transitives and intransitives, have different types of causative forms. Primarily, the causative typology of Telugu and the aspect of verb incorporation based on Baker’s theory are discussed. An attempt to find the restrictions on the morphophonemic processes involved in causativization is dealt with. The significance of morphological and periphrastic causatives and on productivity of the same is focussed as it involves the interaction between phonology, morphology and syntax.

1. Introduction

Languages, in general, express the idea of causing someone to carry out a certain action. Causatives fall into three major categories based on their morpho-syntax: lexical, morphological and syntactic. Lexical causatives are those in which the effect of causativization is found at the lexical level. These are the verbs which can be paraphrased in the way in which we construct a causative sentence. There is no external causativization is required in this case.

Many languages form their causatives either morphologically i.e. using specific causative morpheme of the verb or periphrastically, i.e. using a specific verb of causation. If the causativization is grammatical rather than periphrastic, the causative device changes the grammatical status of the arguments in the predication. It has the effect of adding another participant or object to the sentence structure. Causative suffix may demote an agent to a patient or a recipient and add a new grammatical role for the causer (the new agent).

On the surface, structures with morphological causatives are believed to be monoclausal and those with periphrastic causatives appear to be biclausal.
Causatives in Telugu are either morphological or periphrastic. Some verbs make use of adjuncts too, to give the causative meaning. This paper mainly looks at the morphological and periphrastic causatives.

Morphological causatives are formed by the suffix -inc, which attaches to the transitive verb stem, with the causee marked with 'ceeta' ( = by means of, INST).

Eg: 1 a. rama paaTa
Rama-Nom song-Acc
Rama sang a song.

b. ravi rama-ceeta paaTa
Ravi-Nom Rama-INST song-Acc
Ravi made Rama sing a song.

Periphrastic causatives are formed with the help of the free-standing lexical verb cees (=make), which takes an infinitival complement (ending in -impa, the infinitival suffix). The object of the infinitive is ACC–marked.

Eg: 2 a. paapa pustakamu-nu
child-Nom book-Acc
caduvu-nu
read-agr
The child reads the book.

b. amma paapa-to pustakamu-nu
Mother-Nom child-Dat book-Acc
cadiv-impa cees-indi
read-Infin make-agr
Mother makes the child read the book.

Syntactic structures can also be formed periphrastically by making use of adjuncts such as eela (=like) to give the causative meaning. It is observed that the clitic -eela (derived from the adverbial 'alaaga' (=like that)) is attached to the lower verb stems

Eg: 3 a. paapa pustakamu-nu
child-Nom book-Acc caduvu-nu
read-agr
The child reads the book.

b. amma Papa pustakamu-nu cadiv-eela cees-indi
Mother- Nom Child book-Acc read-make-agr
Mother makes the child read the book.
In general, it may be observed from the list of verbs below that the lexical verb cees- attaches to the non-finite form of verb and the causative morpheme ‘-inc’ to the bare/transitive stem of the verb. The classes of verbs are as given in Krishnamurthy (1961).

<table>
<thead>
<tr>
<th>Class</th>
<th>Example (Eg)</th>
<th>Verb</th>
<th>(Verb + impa + ceeyu)</th>
<th>Verb + incu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>todugu ‘to wear’</td>
<td>todig impa ceeyu</td>
<td>odig-incu</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>pilucu ‘to call’</td>
<td>pilip impa ceeyu</td>
<td>pilip-incu</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>caccu ‘to die’</td>
<td>camp impa ceeyu</td>
<td>camp-incu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>teliyu ‘to know’</td>
<td>teliya ceeyu / teli impa ceeyu</td>
<td>*teli-incu</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>kuTTu ‘to sew’</td>
<td>kuTT impa ceeyu</td>
<td>kuTT-incu</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>tinu ‘to eat’</td>
<td>tinip impa ceeyu</td>
<td>tinip-incu</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>iccu ‘to give’</td>
<td>ipp impa ceeyu</td>
<td>ipp-incu</td>
<td></td>
</tr>
</tbody>
</table>

If the causatives formed from nouns are observed, it is observed that -inc, -ela and -cees occur together and in that order. But, -inc here acts as a verbaliser rather than a causative.

Causative: Verb+inc+ela+ceeyu

1. vaDDana ceeyu ‘to serve’ vaDD-inc-ela-ceeyu
2. puuja ceeyu ‘to pray’ puj-inc-ela-ceeyu
3. cuupu ‘sight’ cuup-inc-ela-ceeyu
4. ninda ‘blame’ nind-inc-ela-ceeyu

2. Causative Typology

Causative sentences are generally categorized into type 1 and type 2 causatives. The variation between these two constructions is said to be parametric that differs from language to language. In fact, Gibson (1980) argued for type 1 and type 2 for causativisation based on the embedded clause, the case marking properties and the passivization.

According to Gibson’s typology, Telugu falls under type 1 category in which the subject of the embedded clause (in D-structure) takes an Oblique case (in the S-structure) while the object of the embedded clause (in D-structure) becomes a direct object (in S-structure). In type 2 causatives,
Unlike type 1 causatives, it is the subject of the lower clause which surfaces as the object of the causative sentence and the whole causative clause does not function as a single binding domain.

To be precise, Telugu morphological causatives fall into type 1 causatives for the following reasons (cf. Amritavalli 1997).
- the object of the lower clause retains its status.
- the causee is optional.
- the whole clause functions as a single binding domain.

Baker (1988), in accordance with Gibson (1980), describes the typology of causativization on the basis of the functions of ‘case and causativization’. Instead of two, Baker (1988) proposed four types and the focus of his typology is mainly on the properties of case of the NP of the lower clause. But as per Baker’s typology, Telugu falls under the third category with no double objects.

Morphological causatives are considered to be a part of a general phenomenon called ‘Verb Incorporation’, which is an instance of ‘move-alpha’ applying between D-structure and S-structure leaving a trace. In Telugu, like in Chichewa (Baker 1985) and in Malayalam (Mohanan 1983), a single morphologically complex verb stands for two separate predicates. According to Baker (1988), morphologically complex verbs are syntactically derived from two independent verbs by movement and that the process of causativisation too is an example of verb incorporation, which is governed by certain syntactic principles causing a change in grammatical function.

2.1 Mono-transitive verbs
The following tree structures give the process of verb incorporation that is applicable to suffixal causativization of mono-transitive verbs in Telugu. Here, the suffix of the verb of higher clause should be attached to the lower verb to obey the rule of Stray Affix Filter (Baker 1988).

Eg., neenu tammudi - to uttaram - inc aani
I-Nom brother - Inst letter-Acc write – caus -past-agr
I made my brother write a letter.
V-C movement Ungrammatical  VP-CP movement accepted

The higher verb with the causative morpheme '-inc' has to satisfy the latter's morphological subcategorization properties, which stipulates that it
must attach to a verb in order to pass the stray affix filter. In order to incorporate into the higher verb, the lower verb has to move within the embedded clause to a position that is governed by the higher verb.

As there is no inherent case in Telugu, V-Comp movement is considered ungrammatical, where the verb trace cannot assign case to the object of embedded clause. Here, the lower verb that has left its NP will not be assigned any case as it violates the case filter thus, leading to ungrammaticality. However, VP-Comp movement is possible where the entire VP (V along with NP) moves into the specifier position of CP. Before incorporation, the lower verb governs the object of the embedded clause. But after incorporation, the complex verb assigns accusative case to the object. In Telugu, case is assigned to one NP only and the verb cannot assign case to the other NP (for instance, ‘tammudu = brother’ in given example). Here the case insertion rule applies. A post position is added to the NP, which takes an oblique case on the surface structure, to satisfy the case filter.

2.2 Di-transitive verbs
Causativization of di-transitive verbs is similar to mono-transitive verbs except that an additional NP is occurs. Here too V-Comp movement is ungrammatical and VP-Comp movement occurs to satisfy the case filter.

Eg., neenu tammudi – to aame-ku Uttaram vraay – inc - aanu
I-Nom brother – Inst her- Dat letter-Acc write – caus -past-a

I made my brother write a letter.

Like in mono-transitive verbs, the lower verb moves. The entire VP moves instead of V. The matrix verb assigns accusative case to the first NP (‘uttaram’ = letter) and oblique case to the second NP (‘tammudu’ = brother). The third NP (‘aame’ = her) is inherently marked with dative case. It moves along with its case intact. The case insertion rule applies here too.

Eg., neenu tammudi – to aame-ku Uttaram vraay – inc - aanu
I-Nom brother – Inst her- Dat letter-Acc write – caus -past-agr

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I made my brother write a letter.

VP-Comp movement

2.3 Intransitive verbs
Intransitive verbs are the verbs with single argument that can be further divided into two categories: unaccusatives and unergatives. Transitive verbs have language specific case marking properties and so have to account for whether the movement is V-Comp or VP-COMP. However, verb incorporation of intransitive verbs does not show any typological (cross-linguistic) variation or issues regarding case assignment due to the absence of NP in the embedded clause.

2.4 Unaccusatives
An unaccusative verb is a verb with an underlying internal argument that originates at the object position but surfaces as the subject of the sentence. These verbs do not assign agent theta role and can have transitive counterparts. In Telugu, two morphemes -imp and -inc are attached to the base verb stem in order to transitize the unaccusative verb stems.

In transitive form of the unaccusative ~ transitive pairs, V-Comp movement is ungrammatical and so VP-Comp movement takes place before the incorporation of the verb.

Eg., neenu atani – ceeta bassu – aap – inc – aunu nu
I-Nom him – Inst bus -Acc stop – caus -past-agr

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I made/cause him stop the bus.

V-Comp movement is ungrammatical as there is no case assigned to the NP of the lower clause, either structurally or inherently, thus affecting the case-filter. Whereas in the other case, the entire VP (maximal projection) moves into the specifier position of CP. Due to adjacency of NP with the matrix verb, the lower NP gets accusative case from the matrix verb. Here too, a case insertion rule is applied to assign oblique case to the causee. A post position (e.g. ‘ceeta’ = by) is inserted next to the NP (e.g. ‘atanu’ = He). As per Baker (1988), these verbs are similar to mono-transitive verbs, which are accounted for causativization without applying an explicit rule of causativization.

2.4.1 Verb Incorporation of unaccusative verbs

```
neenu atani-ceeta bassu Aap -inc -aa -nu.
I him - Acc bus Stop -caus - past - agr.
```

I made him stop the bus.

Case 1: Some unaccusative verbs allow both the morphemes, -imp and -inc, to transitivize unaccusative verbs. The morphemes -imp and -inc are actually transitivizers but function as causativizers as well.

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Eg. digu ‘to get’ di(g) + imp = dimp di(g) + inc = dinc
tegu ‘to cut’ te(g) + imp = temp te(g) + inc = tenc

The -imp suffixation to an unaccusative verb stem feeds further affixation of causative -inc at the second level of causativization. An instrumental NP appears with this construction.

Eg: a. aame dig - in -di
    She-Nom get down - past-agr
    She got down.
b. nenu aame - ni di - imp - aa - nu
    I-Nom she - acc get down - trans - past - agr
    I made/cause her to get down.
c. Ravi naa - ceeta aame - ni ap - inc - aa - Du
    Ravi-Nom I - Inst she - Acc get down - caus - past - agr
    Ravi made/cause me to get her down.

The morpheme -inc can be suffixed to the unaccusative verb to transitivize it, but the resultant stem does not allow for further causativization.

Case 2: Some unaccusative verbs are listed, with which only -imp or -inc suffixation possible but not both.

Eg. tirugu ‘to revolve’ tirg + imp = tipp tipp + inc *tirg + inc *tic
    pelu ‘to blow’ pel + inc = pelcu pelp + inc *pel + imp *pelp

If a verb stem takes the transitive morpheme -inc, a morphophonemic process takes place at the second level causativization, which converts the ending c sound either with p or y.

Eg. kaalu ‘to burn’ kaal + inc Kaalc kaalp + inc
tuugu ‘to weigh’ toog + inc Tooc tooy + inc

Case 3: Some unaccusative verb stems are transitivized by suffxing few morphemes such as koTT (=beat), peTT (=put) and ves (=put). These
morphemes are, in fact, separate lexical verbs in the language. It can be said that they form a kind of serial verb construction where the causative morpheme -inc is suffixed to the final verb in the series at the second level causativization.

Eg. paD ‘to fall’  paD + ves/koTT  paDvey + inc or paDkoTT + inc  *paD + inc = *paDine
egar ‘to fly’  egar + koTT/ves  egarkoTT + inc or egarvey + inc  *egar + inc = *egarine

2.5 Unergatives

Unergative verbs assign an agent theta role to the argument which is external even at the deep structure. In Telugu, transitive counterparts to these verbs are possible but only one level of causativization, i.e. -ine suffixation but not -imp, is allowed.

According to Baker (1988), unergative verbs across languages take either

Eg. dooku ‘to jump’  *dook + imp  dook + inc
tuDucu ‘to sweep’  *tuDuc + imp  tuDp + inc
paaku ‘to creep’  paak + imp  paak + inc

V-Comp movement or VP-CP movement without any difference. Only one NP occurs in the sentence in the subject position of the embedded clause. After the verb is incorporated into the matrix verb, the matrix verb governs the subject of embedded clause and then either the GTC(Government Transparancy Corollary) rule (Baker 1988a) applies or the complementizer deletion (C-deletion) happens. After C-deletion, as it has no head distinction from verb, the lower clause will be transparent for government.
2.5.1 Verb Incorporation in unergative verbs

Case 1: Some unergative verbs are listed, with which inc/imp suffixation is not possible. However, all these verbs can be causativized using a bi-clausal construction.

Eg. vaccu ‘to come’
   giccu ‘to prick’
   *vacc + imp
   *gicc + imp

Case 2: The morpheme -inc can be suffixed to noun stems, derived from Sanskrit, functions as a verbalizer. The verb stems thus formed do not allow for causativization.

Eg. sparsa ‘touch’
   raksha ‘protection’
   sparsa + inc
   raksh + inc
   Sparsinc
   Rakshinc
   *sparsinc + inc
   *rakshinc + inc
Case 3: Some morphemes like pad (=fall) and av (=happen) also carry out a verbalizing function. They are added to noun stems, derived from Dravidian, to turn them into verbs. For these resultant verbs, transitive counterparts are possible and in which case a transitive morpheme pa'TT (=to put) is suffixed to the base stem. So it can be said that the second level causativization is possible with these transitive verb stems by suffixing -inc.

Eg. kəstəm ‘suffering’ kəstəm + paDu kəstə-paTTu kəstə-paTT + inc
    khərcu ‘spending’ khərc + avu khərc-peTTu khərc-peTT + inc

Iteration of the infinitive clause:
It is interesting to note that in Telugu, the infinite clause seems to iterate any number of times without any restriction. The by-clause generally takes a post position and will be embedded in the clause.

[addam [pagilindi]]
    Mirror broke
[neenu 1[addam [pagala-goTT -aana]]]
    I mirror break -agr
[neenu 2[Ravi ceeta 1[addam [pagala-goTT -inc -aana]]]]
    I Ravi by mirror break -caus -agr
[neenu 3[Rama dwaaraa 2[Ravi ceeta 1[addam [pagala-goTT -inc -aana]]]]]
    I Rama through Ravi by mirror break -caus -agr
[neenu 4[Raju valana 3[Rama dwaaraa 2[Ravi ceeta 1[addam [pagala-goTT -inc -aana]]]]]]
    I Raju because Rama through Ravi by mirror break -caus -agr

2.6 Periphrastic Causativization of bicausal construction
Periphrastic causativization is not an instance of Verb Incorporation both in case of transitive and intransitive verbs. But Baker’s theory does not account for this kind of causativization. Unlike English, in which verb incorporation is possible, Telugu does not allow this process. The process of causativization based on ‘Verb Incorporation’ leaves some issues unsolved due to the inadequacy of syntactic properties of these causatives.

So a morpho-syntactic account of Telugu causative formation based on Julien’s (2000) analysis of word formation is presented here. If two or more morphemes, syntactically represented as heads, are realized as constituents of one single word, the heads in question must be adjacent in some sense. Based on the analysis of Baker (1985, 1988a), it is understood that causative constructions are a result of syntactic head movement operations.
In case of head movement, it is always the next head down that will be attracted to any given head, according to the Head Movement Constraint of Travis (1984). Head movement, as per Julien (2000), is driven by a strong feature of the host that induces the host to incorporate the head of its complement. Head movement operations, according to Koopman (1994), can either be overt or covert.

Thus, in case of morphological causatives, the strong features of $T^e$ and $I^e$ trigger an overt movement of $V^e$ so that these strong features can be checked off before the derivation reaches PF. The overt inflectional markers, according to Julien, must be seen as reflexes of the features of the inflectional heads and not of the features of the verb itself. Whereas in case of periphrastic causatives, the relevant features are weak so the verb stays in VP. In these constructions, the features of non-finite main verb seem to be incompatible with the morphological selection properties of $T^e$ and so a finite verb is inserted. Julien argues that these constructions are biclausal, with a finite verb as the $V^e$ of the matrix clause and a non-finite main verb as the $V^e$ of the embedded clause. Thus, it can be concluded that in case of Telugu causatives, in order to incorporate the causativized verb into V-caus and form the verbal complex, the head movement is either overt or covert. That is to say, in morphological causatives, the verb incorporates into V-caus by overt head movement while in periphrastic causatives, the incorporation is covert.

3. A note on Productivity
Processes of word formation that can be used by native speakers to form new words are called productive. Productivity is a question of how productive an affix is when attached to words of a particular morphological class (Aronoff 1976). An example of Telugu causative sentence with borrowed (English) word and a few observations are listed below

a. nenu        uttaramu-nu        Post       cees-aanu
1-Nom         letter-Acc        make-Tns-agr
I posted the letter.
b. naanna      naa-to          uttaramu-nu        Post       ceey-inc-aaru
Father-Nom    me-Dat          letter-Acc        make-caus-Tns-agr
Father made me post the letter.
At the first level, -inc is never attached to a borrowed (for instance, an English) word.

Borrowed words

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Noun/Verb + ceeyu</th>
<th>Noun/Verb + incu</th>
</tr>
</thead>
<tbody>
<tr>
<td>post</td>
<td>post ceeyu</td>
<td>*post incu</td>
</tr>
<tr>
<td>work</td>
<td>work ceeyu</td>
<td>*work incu</td>
</tr>
<tr>
<td>injection</td>
<td>poster ceeyu</td>
<td>*poster incu</td>
</tr>
<tr>
<td></td>
<td>injection ceeyu</td>
<td>*injection incu</td>
</tr>
</tbody>
</table>

In the causative form, cees performs the role of a verbaliser while –inc acts as the causative.

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Causative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>apply ceeyu</td>
<td>apply ceey-incu</td>
</tr>
<tr>
<td>ready ceeyu</td>
<td>ready ceey-incu</td>
</tr>
<tr>
<td>poster ceeyu</td>
<td>poster ceey-incu</td>
</tr>
<tr>
<td>workshop ceeyu</td>
<td>workshop ceey-incu</td>
</tr>
</tbody>
</table>

4. Conclusion

Telugu morphological causatives fall into type 1 causatives because the object of the lower clause retains its status, the causee is optional and the whole clause functions as a single binding domain. In general, most of the causatives in Telugu are either morphological (-inc) or periphrastic (cees). Some verbs neither take cees nor –inc to form the causative, but use an adjunct. As a rule, the causative verb ‘cees’ attaches to the infinitive form of the verb and ‘-inc’ to the bare/transitive stem of the verb. The causatives formed from nouns have -inc, -eela and –cees together and in that order. In these cases, -inc acts as a verbaliser and –cees as the causative. In terms of productivity, -inc is never attached to a borrowed word at the first level of causativization while at the second level, ‘cees’ acts as a verbaliser and –inc as a causative. Also in Telugu, the infinite clause seems to iterate any number of times without any restriction.