Causers as derived Subjects – An unaccusative view from Finnish

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Abstract

This paper revisits causative morphosyntax in Finnish. A fine-grained semantic investigation provides preliminary evidence of two types of predicates, which both qualify as causatives from a morphological perspective, but only one of which turns out to be genuinely causative semantically. In light of these previously unnoticed facts, the paper revisits, adopts and adapts the idea that agentive and causative predications are fundamentally distinct. The differences are not captured by positing multiple semantic flavors for *v*, but by instead base-generating Agents and Causers in different positions. This paper provides *prima facie* support for an unaccusative derivation of causative constructions, where the Causer is a derived Subject.

1. Introduction

Several studies posit that syntactic causativization, a productive word formation process in many typologically unrelated languages, involves layered event structure, i.e. biclausal syntax (Comrie 1976, Aissen 1979, Marantz 1984, Burzio 1986 and much subsequent non-lexicalist work; Marantz 1997, Hale & Keyser 2002, Ramchand 2008). Assuming that the causing event, denoted as *v*P, dominates VPs, Causers and Agents end up overlapping configurationally (and

conceptually), the general assumption being that Agents, too, are introduced by *v* (see also Chomsky 1995, Kratzer 1996 and related work).

In this report, I present preliminary remarks which call the configurational identity of Causers and Agents, typically referred to as "external arguments", into question, while at the same time defending the constructionalist ideology where lexical conceptual structure does not monopolize argument realization. Based on data from Finnish, an otherwise well-documented causative language, I argue that a fundamental distinction needs to be established between Causers and Agents. The idea is not new, but its implementation in the present paper departs radically from previous accounts. Crucially, *v* is disambiguated semantically: its putative agentive and causative properties (as recently discussed in Folli & Harley 2005, among others) are teased apart and the causative component is relocated to VP-internal structure. Under this view, *v* is always agentive and only Agents can be external arguments. Causers, on the other hand, are derived Subjects of (dyadic) unaccusative predicates subcategorizing for a Small Clause complement (see also Alsina 1992 and Davis & Demirdache 2000). The syntactic derivation of causatives adopted in this paper mirrors the one proposed in Pesetsky (1995), although the two analyses differ in details (see also Belletti & Rizzi 1988 for the causative psych derivation).

2. Finnish causatives – a morphological note

In languages like Finnish, causativization is a productive morphosyntactic process. The causative infix is realized as /ttA/ and it is known to be compatible with both unaccusative and agentive bases (Pylkkänen 1999 and others):

(1) a. jää sulaa

    ice.NOM melts

    'the ice melts'

  b. Liisa sulattaa jäätä/jään

    Liisa.NOM melt.CAUS ice.PART/GEN

    'Liisa causes the ice to melt/Liisa melts the ice'

  c. Liisa nauraa

    Liisa.NOM laughs

  d. Liisa naurattaa Maria

    Liisa.NOM laugh-CAUS Mari.PART

   'Liisa is making Mari laugh'

In this paper, I adhere to Shibatani's (1976) early definition of causative constructions, according to which causativization brings about a new state and that, consequently, denying a causative construction yields a contradiction (e.g. *John opened the door, but the door didn't open*). Shibatani's definition adequately captures the telic nature of causatives, as well as the well-known fact that causatives are typically Vendler's accomplishments in aspectual terms.

      On closer examination, it turns out that causative affixes in Finnish sporadically lack causative force under Shibatani's definition. In other words,

not all -ttA- affixed verbs qualify as *bona fide* causative predicates, misleading morphological (and semantic) appearances notwithstanding. If this conclusion is accurate, the Finnish data highlight that (morpho)syntactic properties are *not* uniformly semantically predictable (cf. Levin & Rappaport Hovav 1995). The semantics and the morphological form of a predicate do *not* necessarily reflect (nor predict) its argument structure.

2.1. Agents are not Causers – the role of intentionality revisited

A striking property in a subclass of – seemingly causativized – verbs is that they are emphatically Agent-oriented. Consider the examples in (2); as illustrated by adverbial modification, these verbs only allow an intentional and deliberate interpretation on the Subject:

(2) a. Liisa rakennutti talon (tarkoituksella/*vahingossa)

      Liisa.NOM build-CAUS house.GEN (deliberately/*by accident)

    'Liisa built a house'

   b. Liisa kasvatti tomaatteja/tomaatit (tarkoituksella/*vahingossa)

      Liisa.NOM grow-CAUS tomatoes.PART/GEN (deliberately/*by accident)

    'Liisa grows tomatoes'

  c. Liisa nauratti Maria (tarkoituksella/*vahingossa)

     Liisa laugh-CAUS Mari.PART (deliberately/*by accident)

    'Liisa made Mari laugh'

A relevant question to ask is whether the agentive Subject 'Liisa' in (2) also could be interpreted as a Causer. While a spontaneous answer to this question might be affirmative – Jackendoff's (1990) famous "actor test" and the morphological makeup of the verb certainly encourage this conclusion – Shibatani's definition of causatives (see above) suggests otherwise. After all, denying the constructions in (2) repeatedly fails to produce a contradiction; the typical "change of state" associated with causatives is not implicated with this particular set of "causative" verbs:

(3) a. Liisa rakennutti talon, mutta talo ei tullut koskaan valmiiksi

    Liisa build.CAUS house.GEN but house NEG came never ready

    'Liisa built a house, but the house was never finished'

  b. Liisa kasvatti tomaatteja/tomaatit, mutta tomaatit eivät kasvaneet

    Liisa.NOM grow.CAUS tomatoes.ACC but tomatoes.NOM NEG grow

    'Liisa grew tomatoes, but the tomatoes didn't grow'

  c. Liisa nauratti Maria, mutta Mari ei nauranut

    Liisa laugh-CAUS Mari.PART but Mari.NOM NEG laugh

   'Liisa made Mari laugh, but Mari didn't laugh'

The absence of contradiction in (3) appears to correlate (negatively) with another semantic property known to be of syntactic relevance, namely affectedness of the DO.[1] Observe that the Causee in (2) (*the house* and *the tomatoes*) is not affected in any clear sense. In (2c), '*Mari*' is affected only if interpreted as Experiencer.

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[1] The notion of "affectedness" has been given various definitions in the literature and is here intended in a non-aspectual sense (cf. Tenny 1994 and others).

If Liisa's actions are agentive and deliberate, the most natural interpretation for *Mari* is not that of Experiencer, but merely a Theme (I return to this below).

Assuming that affectedness is a typical "proto-Patient" property associated with Causees (Dowty 1991, Alsina 1992, among others), the lack of Patient-oriented affectedness suggests that the DOs in (2) are not Causees. Consequently, the Subject would not be a Causer. Observe that the critical distinction does not transpire with Jackendoff's (1990) [+/- actor] parameter (see also Randall *et al.* 2004). In sum, absence of contradiction under negation and lack of proto-Patient properties on the DO suggest that the constructions in (2) are not well-behaved causatives, despite morphological appearances.

Another set of verbs, likewise affixed with -ttA-, exhibit markedly different behavior in terms of contradiction and affectedness. Consider the following examples:

(4) a. Liisa hajotti ikkunan
         Liisa break-CAUS the window
         'Liisa broke the window'
     b. Liisa sulatti jään
         Liisa melt-CAUS the ice
         'Liisa caused the ice to melt'
     c. Liisa nauratti Maria_Experiencer   (see also 2c)
         Liisa laugh-CAUS Mari.PART
         'Liisa made Mari laugh'

It is uncontroversial that in (4), the DO (*window* and *ice*) is an affected argument and thus patterns with proto-Patients/Causees. The example in (4c) is particularly interesting. Here, as opposed to (2c), *Mari* is an Experiencer and therefore psychologically affected by Liisa's actions, just like proto-Patients. Liisa's actions, however, could be non-intentional and it seems to me that it is precisely potential non-intentionality that renders possible the Experiencer reading on *Mari*.

The possibility of a non-intentional reading on the Subject turns out to be a general property of (4), one that differentiates these constructions from the ones in (2). All of the constructions in (4) above freely allow the presence of non-intentional adverbs like 'by accident':

(5) a. Liisa hajotti ikkunan (tarkoituksella/vahingossa)
   Liisa break-CAUS the window (deliberately/by accident)
   'Liisa broke the window'
 b. Liisa sulatti jään (tarkoituksella/vahingossa)
   Liisa melt-CAUS the ice (deliberately/by accident)
   'Liisa caused the ice to melt'
 c. Liisa nauratti Maria$_{Experiencer}$ (tarkoituksella/vahingossa)
   Liisa laugh-CAUS Mari.PART (deliberately/by accident)
   'Liisa made Mari laugh deliberately/by accident'

Secondly, as the examples in (6) make clear, denying constructions like (4) *does* result in a contradiction, a fact that confirms their (telic) causative status. Psychological causatives also fall into this category, as illustrated in (6c):

(6) a. Lisa broke the window, but the window didn't break   **(contradiction)**
   b. Lisa melted the ice, but the ice didn't melt   **(contradiction)**
   c. Lisa made Mary laugh, but Mary didn't laugh   **(contradiction)**

Assuming that telicity is also one of the central properties associated with unaccusatives (Levin & Rappaport Hovav 1995, Randall *et al*. 2004, Roberts 2010, among others), the data in (6) and the differences between (5) and (3) implicate that predicates like (5) might be unaccusatives (the relevant auxiliary selection tests are inapplicable in Finnish). I return to discuss this issue in more detail in the following section.

      In sum, the facts illustrated in (5)-(6) suggest that the Subject in (4) is semantically distinct from intentional Agents: it is a *Causer*.

2.2. Agentive nominalizations and passivization

Having established two different types of causative predicates (only one of which patterns with genuine causatives), it is interesting to note that the two verb classes consistently differ also in terms of other morphosyntactic phenomena. In particular, the two types also differ regarding the formation of agentive nominalizations and passivization. Agentive nominalizations, productively

formed in Finnish with the affix –*ja*, are expectedly only felicitous with the verbs in (2).

(7) a. Liisa kasvattaa tomaatteja → Liisa on tomaattien kasvattaja

     Liisa grows tomatoes   Liisa is tomatoes.GEN grower

     'Liisa grows tomatoes'   'Liisa is a tomato-grower'

  b. Liisa rakennutti talon →   Liisa on talon rakennuttaja

     Liisa built a house   Liisa is house.GEN builder

     'Liisa built a house'   'Liisa is a house-builder'

The nominalizations in (8) are well-formed only under the highly unnatural reading where Liisa is interpreted as an intentional Agent (i.e. Liisa habitually breaks windows knowingly):

(8) a. Liisa hajotti ikkunan → ?*Liisa on ikkunan hajottaja

     Liisa broke the window   Liisa is window.GEN breaker

     'Liisa broke the window' 'Liisa is a window-breaker'

  b. Liisa sulatti jään →   ?*Liisa on jään sulattaja

    Liisa melt the ice   Liisa is ice.GEN melter

    'Liisa melted the ice'   'Liisa is an ice-melter'

Secondly, while both types of verbs can undergo passivization, the examples in (9) illustrate that the output is always implicitly agentive. The non-intentional interpretation associated with Causers is typically not recovered in passives (see also Veenstra 2004):

(9) a. ikkuna rikottiin tarkoituksella/?vahingossa

     window.NOM break-CAUS.PASS deliberately/by accident

    'the window was broken on purpose/by accident'

  b. jää sulatettiin tarkoituksella/?vahingossa

     ice.NOM melt-CAUS.PASS deliberately/by accident

    'the ice was melted on purpose/by accident'

Restrictions concerning causative passivization turn out to be typologically more widespread. Alalou & Farrel (1993) report similar constraints regarding passivization in Berber. Restrictions of similar sort are also attested in Modern Greek and Romance (Aissen 1979). In fact, sometimes non-active morphology is used in the causative verb itself (see Guasti 1993:77 for discussion on the San Nicola dialect of Italian). These restrictions are not universal, however. The Swedish counterparts to (9) are impeccable also under the non-intentional reading (Christer Platzack, p.c.):

(10) fönstret krossades av misstag

     window break.PASS by mistake

   'the window was broken by mistake'

Based on the data presented in this section, I now proceed to a syntactic analysis of Finnish causatives, which I assume to be constructions lacking external arguments. Causers, as opposed to Agents, are treated as derived Subjects.

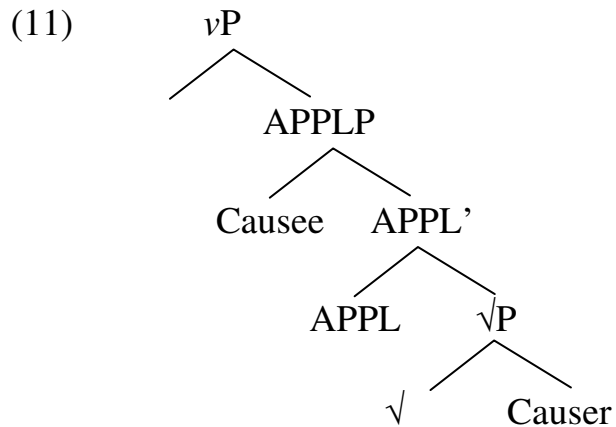## 3. The syntactic structure of causative vs. agentive predication

A central aspect in the syntactic analysis proposed below is the semantic disambiguation of *v*: the analysis departs from recent views where (non)-intentional properties of Subjects are captured by postulating different semantic flavors for *v* (see Folli & Harley 2005 for recent discussion). Here, *v* is consistently underspecified semantically and exclusively introduces Agents. Non-intentional Subjects (here: Causers) are not introduced by semantically different *v*s; they are not introduced by *v*s at all, but rather VP-internally. In other words, as I mentioned above, Causers are not external arguments, but derived Subjects of configurationally unaccusative predicates. The unaccusative approach to causatives also provides an immediate explanation for the restrictions on passivization discussed in 2.2: constructions with derived Subjects generally resist passivization (Perlmutter & Postal 1984, Pylkkänen 2002, Kupula 2010, among others).

Following Den Dikken (1995), Kupula (2008), among others, I assume that affectedness can be represented syntactically and that it is a property of Small Clause Specifiers. Under this assumption, Causees – as affected arguments – are base-generated as Small Clause Specifiers. This view is also in line with Marantz's (1989) observations on causative constructions in Georgian, specifically the idea that Causees might be Small Clause Subjects (see also Guasti 1993:42). The proposal differs from Marantz's approach in that I assume
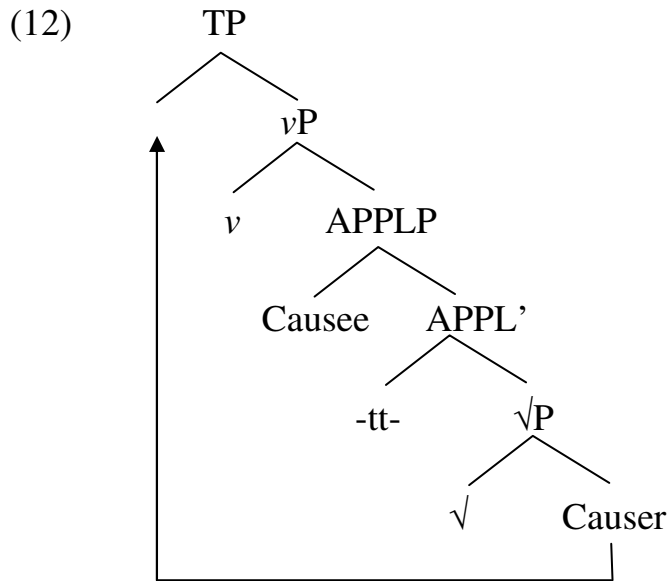
that also the Causer originates internally to the Small Clause (cf. Pesetsky 1995:202-210).

Following Marantz (1993), Pylkkänen (1999, 2002), among others, I assume that causatives are applicative constructions. This assumption is supported by the functional similarity of applicative and causative morphemes, as well as the typological fact that these morphemes are frequently syncretic (see Baker 1988 and, more recently, Peterson 2007).[2] In Finnish causatives, APPL must be "high" in Pylkkänen's (2002) sense, if the Mirror Principle on morphological linearizarion is valid (see the derivation in 12). The high applicative approach is also fully compatible with the generally accepted idea that causatives denote a relationship between Causers and the caused event (Pustejovsky 1995, Pylkkänen 2002, among many others). The Causer is projected as the complement of an acategorial root and the applicative phrase is topped with an unaccusative *v*P.

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[2] In fact, Kemmer & Verhagen (1994) point out the verb "give" is a causative form of a possessive predicate (kor-e) in Ainu. They also point out that in some languages the causative marker is synchronically or diachronically the word "give" (see also Peterson 2007).

(11)

```
            vP
           /  \
         APPLP
         /    \
     Causee   APPL'
             /    \
          APPL    √P
                 /   \
                √    Causer
```

The high applicative structure is equally compatible with Alsina's (1992) insight regarding causative morphemes as three-place predicates, which not only establish a relation between Causers and the caused event, but also Causers and Causees (the Patient), i.e. two individuals. While the relationship between two individuals could be mediated by a different type of APPL (Pylkkänen's "low" APPL), it can also be assumed that high APPL mediates a relationship between two individuals (here: the Causer and the Causee) because the acategorial root has no argument structure of its own. As a result of being category-neutral and void of argument structure, I also assume that bare roots lack Case assigning properties. The Causer therefore needs to undergo Case-driven movement to Spec-TP (see also Pesetsky 1995:202-210 who proposes a virtually identical movement dependency for Causers). Prominence relations (Grimshaw 1990) are satisfied in the post-movement configuration:

(12)

```
              TP
             /  \
            /    vP
           /    /  \
          ↑    v    APPLP
          |        /    \
          |    Causee    APPL'
          |             /    \
          |          -tt-     √P
          |                  /   \
          |                 √     Causer
          |_____|
```

In this view, Causers are derived Subjects. While psychological causatives have been analyzed along similar lines, (Belletti & Rizzi 1988, Pesetsky 1995 among many others), the idea has not, to my knowledge, been explored in the realm of non-psych causatives. The data in (5)-(6), however, indicate that psychological causatives behave on a par with non-psych causatives (cf. Pesetsky 1995).

Observe that the derivation in (12) also explains the familiar backward binding effects in languages like English and Finnish which are both negative in terms of the V2 parameter (Platzack 2008 argues, based on Germanic, that backward binding of this sort might be restricted to V2-negative languages):

(13) a. each other's remarks made John and Mary angry (Pesetsky 1995:218)

    b. toistensa huonot arvosanat huolestuttivat Jukkaa ja Mattia

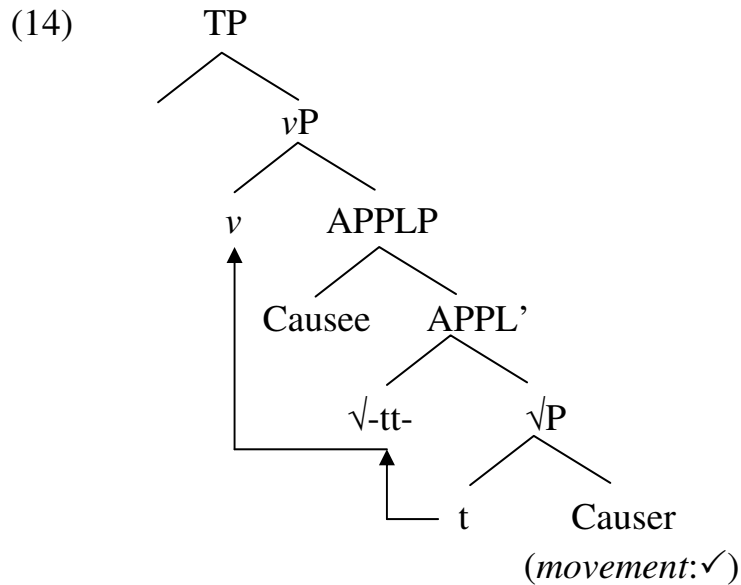   each other.GEN bad grades preoccupy Jukka.PART and Matti.PART

       'each other's bad grades preoccupied Jukka and Matti'

The problematic aspects regarding the derivation in (11) are evident, however. First of all, the movement of the Causer violates the MLC; intervention effects are therefore expected. Additional problems arise in terms of the Phase Impenetrability Condition (PIC), if the applicative phrase (or Small Clauses in general) is treated as a phase (for arguments that high APPL heads a phase, see McGinnis 2001).

    As a solution to the first problem, I adopt Belletti & Rizzi's (1988) original argument based on Italian: the Causer and the Causee are not equally good candidates for Case-driven movement in (11), because the Causee bears inherent Case and therefore cannot enter into Case checking operations. McFadden (2006) presents convincing additional evidence for this view from a Germanic perspective. This way of reasoning also solves the well-known dilemma regarding the compatibility of Burzio's Generalization with unaccusative syntax. Alternatively, it can be assumed that the Causee checks its Case features under agreement with *v*. The Causer, on the other hand, can only check its features via movement (irrespective of Burzio's Generalization), under the assumption that roots are not proper Case licensers. The displacement of the Causer is also required for EPP-reasons.

As for the related concern, i.e. the potential PIC-violation mentioned above, I propose a phase extension analysis as a solution (see Den Dikken 2006, 2007; Kupula 2008 and *to appear*). This solution also contributes beneficially to the locality issue discussed above. First of all, morphological causativization in Finnish reflects left-adjoining of the root to APPL. APPLP being a phase, further head movement of the √-APPL compound triggers phase extension in Den Dikken's (2006, 2007) sense. Phase extension has locality-relaxing consequences for the domain of the phase (locus of the Causer). The syntactic consequences of phase extension are thus very similar to Chomsky's (1995) "equidistance", here due to phase restructuring as a result of, arguably narrow-syntactic, head movement (see also a re-application of the mechanism in Modern Greek in Kupula 2008, 2010 and *to appear*):[3]

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[3] As a matter of fact, the overtness of applicative/causative morphology in Finnish causatives might provide an additional piece of support for the unaccusative approach suggested above. I have argued extensively in Kupula (2010), based on Modern Greek and other languages, that overt applicative morphology is systematically triggered in the absence of external arguments (Spec,vP) due to the generalized Doubly Filled Comp Filter. A similar line of reasoning would be compatible also in Finnish "genuine" causatives.

(14)

```
        TP
       /  \
          vP
         /  \
        v    APPLP
        ↑   /    \
       /  Causee  APPL'
      |        /      \
      |     √-tt-      √P
      |       ↑       /  \
      |_____|      t    Causer
                   (movement:✓)
```

In sum, the difference between agentive and causative predications is that only Agents are projected as external arguments. Also, while a "Causer" can be interpreted as intentional, the "Causer" becomes an "Agent", when this reading obtains. The distinction I propose is that Causers are always non-intentional while Agents are always intentional. As a result of expressing this distinction by base-generating the arguments in different positions, for which Finnish provides good motivation, the possible semantic flavors of *v* are sharply constrained: *v* only comes with agentive properties (cf. Folli & Harley 2005).

As for the syntactic structure of *agentive* predication, these structures have a monoclausal base without Small Clause complements (here: applicative phrases). The external argument (Agent) is merged to the familiar designated position for these arguments (Spec,*v*P or Voice). Lack of affectedness observed

in connection with (2) is clearly consistent with lack of Small Clause complements.

4. Summary and conclusion

In this paper, I have discussed causative affixation in Finnish and concluded that causative morphemes sporadically lack causative force, a fact that gives rise to a misleading sort of a "pseudo-causative", assuming that Shibatani's definition of causatives is appropriate. The pseudo-causative variant seems to resist contradiction under negation and appears not to be associated with affectedness of the DO. The issue evidently awaits further research, but these facts, combined with diverging data regarding agentive nominalizations and passivization, provide initial plausibility for the existence of two verb groups, only one of which is genuinely causative, despite morphological appearances.

More specifically, the Finnish data clearly illustrates that a verb can be morphologically (and semantically) causative without introducing a Causer argument. Therefore, assuming that morphological properties are part of the lexical semantic representation of a predicate, the interaction between lexical semantic structure and syntax appears to be constrained and argument realization appears not to be fully "semantically determined" (as argued in lexicalist frameworks like Levin & Rappaport 1995).

I have treated causatives as dyadic unaccusatives, assuming that Causers and Patients originate in a Small Clause structure headed by a (high)

applicative head. Under this view, causative constructions are basically very similar to double object constructions (see also Baker 1988 among others). Spec,APPL is thematically underspecified and can be associated with various thematic labels, Causees being one of them.

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