

I.e., if there is a SVC for the case role X, then there is one for all case roles to the left of X.

The above hierarchy is rooted in the distinction between inherence and predicativity and therefore in the degree of closeness between participants and participee. The inherence of a given function with regard to the main verb is inversely proportional to the predicativity of the means which characterizes that function. With decreasing inherence of a relation there is an increasing need to establish it, hence special means to do so. Verbs, in contrast to prepositions, are such special means. That is why the relations INSTR/COMIT are introduced by Quasi Full Verbs whereas those arguments which stand in the relation PAT to the participee are introduced by function verbs or prepositions. Between both extreme points, INSTR/COMIT and PAT, there is a continuum (shown in (103)) in which verbs (which correlate with INSTR/COMIT) lead into prepositions (which correlate with PAT).

6. Causativization

6.1 The concept of causativization

At the most abstract level causativity is a relation between two propositions - the cause and its effect, or $[P_c(\text{ause})]$ and $[P_e(\text{ffect})]$ to use Givón's symbols (1975b). As a matter of fact, the order of the terms yields two inverse

relations - the relation of causation and the relation of result:

(104) [P_c] R [P_e] : [P_e] R' [P_c]

Causativity in this sense is not equivalent to causality in the real world. The sentence

(105) Water is dripping out of the container

certainly designates an event which is part of the causal nexus constituted by the totality of all physical phenomena. Thus, it is gravity which is responsible for the water's dripping out of the container. But such a relation between the event and gravity is not linguistically expressed in (105), i.e. (105) specifies an "autonomous" event (Talmy 1976:48).

Again, linguistic form does not always decide whether there is causativity. Thus the following sentences have the same morphosyntactic surface structure, regardless of whether there is causality or not (cf. Talmy 1976:48).

| (106) | Non-causative | Causative |
|-------|------------------------------------|-----------------------------------|
| a. | The icecream melted from the stick | The icecream melted from the heat |
| b. | I watched the icecream melt | I made the icecream melt |
| c. | I grew a wart in my ear | I grew a wart in my pot |

Causation is no simple concept, as demonstrated by a selection from the list of "different types

of semantic situations" which play a role in connexion with causativity (Talmy 1976:44ff.). Starting from basic causative types (cf. (107b)) in combination with the different specifications of fundamental semantic parameters we come to complex causative types:¹⁰

(107) Parameters of foregrounding

- a. The vase broke - "autonomous event"
- b. The vase broke from (as a result of) a ball('s) rolling into it - "resulting-event causative (basic causative)"
- c. A ball's rolling into it broke the vase - "causing event causative"
- d. A ball broke the vase in (by) rolling into it - "instrument causative"
- e. I broke the vase in (with my/by) rolling a ball into it - "author causative (i.e. with unintentional action)"
- f. I broke the vase by rolling a ball into it - "agent causative (i.e. with intentional action)"

(108) Parameter of overcoming a resistance vs. eliminating a blockage

- a. I emptied the tub by dipping out the water/with a dipper - "effectuate causation"
- b. I emptied the tub by pulling out the plug/*with a plug - "enabling causation"

¹⁰ The next parameters and examples were taken from Talmy (1976); numbers (107), (108) and (109) correspond to Talmy's (1), (5) and (6).

(109) Parameter of intentionality

- a. I hid the pen somewhere in the kitchen - "agent causation"
- b. I mislaid the pen somewhere in the kitchen - "author causation"
- c. I lost the pen somewhere in the kitchen - "undergoer situation (not causative)"

Talmy (1976) has taught us to see causativity as a multifactorial concept. As shown in (104), either the cause (the "causing event") may appear as the first argument of a sort of CAUSE operator or else the effect (the "resulting event") may appear as the first argument of kind of RESULT FROM operator:

- (110) a. S (event) CAUSE S (event)
- b. S (event) RESULT FROM S (event)

According to Talmy there is - at least in English, which is the only language from which he quotes examples - syntactic evidence suggesting that version (110b) is prior to (110a). This fact is explained in terms of gestalt psychology by saying that the "resulting event" is the figure against the ground of a "causing event".

The so-called basic causatives show the following features:

- A. The cause must have something in common with the effect:

(111) *Das Gegackere des Huhns bewirkte den Absturz des Flugzeugs

(112) Weil ein Raubvogel sich in (seinen_i) Triebwerken verding, stürzte das Flugzeug_i ab.

The figure of the "resulting event" in (112), viz. *Flugzeug*, must re-appear as the ground of the "causing event", so that the figure of the latter, viz. *Raubvogel*, may act upon it.

B. The figure of the "causing event" is used as the INSTR of the causative proposition. Instrument relation and causative relation touch one another here.

C. Basic causatives are opposed to processes (i.e. to the conceptualization and expression of processes) in that the latter "take place by themselves". In other words, the figure of the "resulting event" must have the natural tendency to be in a state of motion contrary to the motion of causation. The figure of the "causing event" has the effect of overcoming such a tendency. That is why (113) is not a causative whereas (114) is:

(113) The ball rolled along the green

(114) The ball rolled along the green from the wind blowing on it

6.2 How language expresses causativity

A distinction analogous to Talmy's 'causing event' vs. 'resulting event' is Givón's [P_c] vs. [P_e], or 'cause proposition' vs. 'event proposition' (Givón 1975b). The extent to which

the connexion between both propositions may be condensed leads to a scale, which shall be presented below.

6.21 Causative versions

The scale we are looking for has two poles. On the one end of the scale we have a predicate [CAUSE] taking two explicit propositions as its arguments. Its extreme alternative on the other end of the scale is a causative construction whose SUBJ is the AG/SUBJ of [P_c] and whose OBJ is the SUBJ of [P_e]. Processes of 'raising/foregrounding' are responsible for a development which attains its goal in the form of one lexical verb:¹¹

- (115) George shot the gun at the elephant, *and as a result* the elephant died. (1)
- (116) George shot the gun at the elephant and *thus caused* the elephant to die. (2)
- (117) George's shooting the gun at the elephant *caused* the elephant to die. (3)
- (118) George *caused* the elephant to die by shooting the gun at it. (4)
- (119) George *caused* the elephant's death by shooting it with a gun. (5)
- (120) George *killed* the elephant by shooting it with a gun. (6)
- (121) George *killed* the elephant with a gun. (7)

¹¹ The numbers following the examples given below refer to the original numbers of the sentences in Givón (1975b).

The constructions (115)-(121) do not mean the same thing; they are more or less approximate paraphrases of each other.

[P_c] and [P_e] appear as two independent sentences connected by *cause* and *result* in (115) and (116). In (117) [P_c] is nominalized and functions as the SUBJ of *cause* whereas [P_e] is an infinitival complement and thus subordinated. In (118) the process of 'Ag-raising' is rounded up: the SUBJ of [P_c] is the sole SUBJ of *cause* whereas the nominalized VP of [P_c] has been degraded to the INSTR of the whole sentence. In (119) it is the turn for [P_e] to become nominalized (lexically) as the SUBJ of *cause*. Through 'predicate-raising' the verb *die* contained up to now in [P_e] combines with the main verb *cause* to yield *kill* in (120): the SUBJ of [P_e] appears as the OBJ of *kill*. Finally, in (121) the rest of [P_c] is reduced to an INSTR phrase.

This development can be viewed the other way round--not as a reduction but as an expansion. From the standpoint of universals, Comrie (1981a:159ff.) proposes a continuum from analytic constructions to lexical items (see also I, 6.23):

| analytic | morphological | lexical |
|--|------------------------------|---|
| <i>cause,</i> <i>bring about,</i> <i>faire, lassen</i> | affixation, Germanic -ja- | <i>kill,</i> Russian <i>ubit'</i> <i>'erschlagen'</i> <i>umeret', 'sterben'</i> |

6.22 Control

The importance of the concept of control to explain the ungrammaticality or the function of certain causative constructions has been brought to light by Givón (1975b). By means of periphrastic versions I shall try to explicate this concept and to answer the question of which of the two Subjects—that of [P_c] or that of [P_e]—retains the control of the event:

- (122) a. John accidentally/inadvertently *caused* Mary to drop her books. (13a)
- b. *John accidentally/inadvertently *made* Mary drop her books. (13b)
- c. *John accidentally/inadvertently *had* Mary drop her books. (13c)
- (123) a. *John deliberately *caused* Mary to do the dishes. (17a)
- b. John deliberately *made* Mary do the dishes. (17b)
- c. John deliberately *had* Mary do the dishes. (17c)

It follows from the prototypical examples (122) and (123) that *cause* is a nonintentional causative, whereas *make* and *have* are intentional causatives. In the latter it is the SUBJ of the [P_c] which controls; in the former it is the OBJ of the [P_c], i.e. the *causee*.

The following examples are evidence supporting the position that "control" ("deliberateness" in Givón 1975b) and "action" are not identical:

- (124) a. John caused Mary to pick up her books deliberately. (18a)
- b. John made Mary pick up her books deliberately. (18b)
- c. John had Mary pick up her books deliberately. (18c)

To be able to add *deliberately* is a general indication of control—Mary's in (124a), John's in (124b,c).

In the majority of cases [P_e] is a result or a state. Since the nominal of a state is a PAT and a PAT cannot control, it must be the SUBJ of [P_c] which controls. To answer the question of who controls may become difficult if both "causator" and "causee" are specified as [+human] and [P_e] is not a state. In periphrastic causative constructions both nominals are prototypically specified as [+human]. These constructions thus constitute the basics of how language represents interpersonal manipulation.

The above-described conflict is solved according to the following principles:

1. If [P_c] is accidental, i.e. if the SUBJ has no control, then either [P_e] is a state or it is an action. If it is an action, then the SUBJ of [P_e] has control.
2. In a causative chain the nominals are hierarchically ordered—only one of them can control, viz. the prominent nominal of [P_e] has control only if the subject nominal of [P_c], i.e.

the highest ranking nominal of the whole construction, has no control.

The hierarchy is therefore a "control gradient". Normally the "causator" controls. The alternative appears to be the case only in periphrastic constructions.

We must further distinguish between direct (e.g. in (122), (123) and (124) and mediated causation. The next example is an instance of mediated inter-personal manipulation:

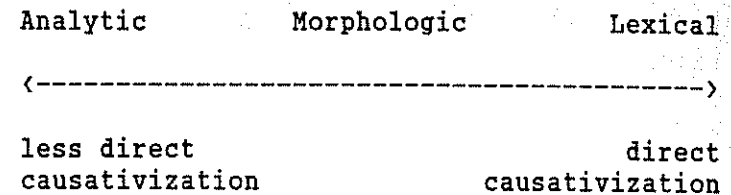
- (125) a. ?I caused her to pick up her books by sending John over to tell her (26a)
 b. ?I made her pick up her books by sending John over to tell her (26b)
 c. I had her pick up her books by sending John over to tell her (26c)

We can make the following generalizations on the strength of (125):

cause is a "non-control causative verb"
make is a "direct control causative verb"
have is a "mediated control causative verb"

6.23 The causative continuum

The following causative ideal types can be postulated and characterized:



A typical analytical construction would be *John brought it about that the stick broke*, a typical lexical one simply *John broke the stick*. Between both ideal types there are various transitions. Thus the transition between a purely analytical causativization and a morphologic one can be exemplified by the French *faire-cum-Infinitive* construction:

- (126) J'ai fait courir Paul

This is apparently analytical, but the fact that nothing can be placed between *fait* and *courir* is clear evidence of their closeness. Thus (127a) is ungrammatical whereas (127b) is not:

- (127) a.. ?Je ferai le jardinier planter les choux
 b. Je ferai planter les choux au jardinier

As opposed to *faire-cum-Infinitive*, *laisser* incarnates both versions--analytical vs. fusional or morphologic--and is thus evidence for another transition:

- (128) a. Je laisserai le jardinier planter les choux
 b. Je laisserai planter les choux au jardinier

We have a fully morphologic productive causativization in Sanskrit and a no longer

productive and therefore rather lexicalized transition between morphologic and lexical causativization in Present German (New High German).

A. Productive causativization

| | | |
|-------|------------------|-----------------------|
| (129) | <i>vid-</i> | 'know' |
| SANS | <i>vedayāmi</i> | 'I let someone know' |
| | <i>dṛś-</i> | 'see' |
| | <i>darṣayāmi</i> | 'I show' |
| | <i>vṛt-</i> | 'turn' (intransitive) |
| | <i>vartayāmi</i> | 'I turn something' |

Causativization takes place by adding the suffix *-(a)ya-* to the full grade of a verb. The same suffix is also employed in passivization and in intensive constructions.

| | | | |
|-------|----|---------------------|----------------------------|
| (130) | a. | <i>tarṣ-āyā-mi</i> | 'I let someone go thirsty' |
| SANS | | Latin <i>torreo</i> | 'roast' |

b. Passivization

| | | |
|--|-------------------|-------------|
| | <i>kṛp-</i> | 'throw' |
| | <i>kṣip-ya-te</i> | 'be thrown' |

There are therefore affinities between causativization and passivization.

B. Non-productive Umlaut constructions in German:

| | | | | |
|-------|-----------------|---------------|-----------------|--------------|
| (131) | <i>trinken</i> | 'drink' | <i>tränken</i> | 'soak' |
| GER | <i>sinken</i> | 'sink' (itr.) | <i>senken</i> | 'sink' (tr.) |
| | <i>springen</i> | 'jump' | <i>sprengen</i> | 'blow up' |
| | <i>singen</i> | 'sing' | <i>sengen</i> | 'singe' |
| | <i>rinnt</i> | '(it) flows' | <i>rennt</i> | '(he) runs' |

These Umlaut forms stem from Old Germanic causative constructions. The Affix *-ja-* produced first a vowel alternation and then disappeared in Old High German.

| | | | | | | |
|-------|-----|-----------------|---|-----|---------------|-------------------|
| (132) | GOT | <i>sat-ja-n</i> | > | AHD | <i>sezzen</i> | 'set, put' |
| | * | <i>sod-éy-o</i> | | | | 'make sit (= set) |
| | GOT | <i>sitan</i> | > | AHD | <i>sizzen</i> | 'sit' |
| | * | <i>séd-ō</i> | | | | |

Since the meaning of *tränken* can be paraphrased by 'bring to drink', one could still interpret the corresponding Umlaut as morphologic causativization; but this gets less and less transparent as one examines the other cases in (131), the Umlaut in *rennen* being felt as totally lexical.

Given that this derivational procedure is not productive any more, umlaut causativization should be placed between morphologic and lexical causativization.

6.24 On the syntax of participant NPs

Causativity presupposes an opposition between a caused event and an autonomous event. This has a syntactic consequence: the valency of the causative predicate--insofar as there is one, i.e. insofar as there is no clearly analytic construction--arises out of the corresponding noncausative predicate being increased by one PARTICIPANT, the "causator". The "causee" cannot play the role of a SUBJ any more, since this

function is now assumed by the "causator". Thus the question arises: in how many typological ways can the "causee" be "manipulated"? The answer is based on Comrie (1976, 1981a: ch. 8).

There are three fundamental alternatives:

- A. The already available position is doubled up, i.e. the "causee" is treated as an indirect object (IO), notwithstanding the fact that the original sentence already has one.
- B. A new position is created, i.e. the "causee" occupies the IO position which was not available in the original sentence.
- C. The "causee" is omitted.

Procedure A is as follows. The starting point is the valency of the original noncausative verb, which is embedded in the causative construction:

- | | | |
|-------|----------------|---------------------|
| (i) | intransitive | without DO |
| (ii) | monotransitive | with DO, without IO |
| (iii) | ditransitive | with DO, with IO |

The surface realization of the "causee" in the causative sentence, i.e. of the embedded SUBJ (ES), obeys the argument structure of the embedded verb. ES appears in the above cases as

- (i) DO
- (ii) IO
- (iii) OBL

The following hierarchy results:

- (133) SUBJ < DO < IO < OBL

ES moves along this hierarchy: it gets displaced to the leftmost position which is still unoccupied. (133) had already been established as an hierarchy of accessibility to relativization (see above 4.22)--although one should instead speak of a similarity and not a strict identity relation between both hierarchies, given the uncertain status of IO. One should also remember that in this hierarchy an increase in grammaticalization goes hand in hand with a decrease in concrete meaning (semantic content). The functional connection which embraces this hierarchy is the closeness of the NPs (participants) to the verb (participee).

The above-mentioned displacements (i)-(iii) need some further illustration and inspection.

- (i) Consider the French pattern (126):

(134) J'ai fait courir Paul

The ES of an intransitive verb appears as the DO in the causative construction.

- (ii) In those cases in which a monotransitive verb is causativized the ES is demoted to IO:

(135) a. Je ferai manger une pomme à Claude

b. Je ferai manger une pomme par Claude

Variant (b) is an example of "too great" a displacement: ES as OBL. Such sentences invite the passive analysis of causative constructions: the "causee" is expressed exactly as a passive

agent. (The fact is that when the hierarchy leads to OBL marking, i.e. in the case of bitransitive verbs, it is not any OBL marking that ensues but precisely the same which represents the passive agent.) The derivation of (b) is, therefore, as follows:

(136) Je ferai [Claude manger un pomme]

Je ferai [une pomme manger par Claude]

Je ferai manger une pomme par Claude

As will be shown below, the choice of a passive agent marking for the "causee" is also conditioned by the degree of control the causee exerts upon the action.

(iii): If the argument structure of the embedded verb already contains an IO, then the "causee" appears as OBL in the causative construction:

(137) a. J'ai fait donner une pomme au professeur par
Claude

b. J'ai fait donner à Claude une pomme au
professeur

Although variant (a) is preferred over (b), the latter shows that the "displacement" may also "fall too short". The "causee" ought to appear as OBL, given that the IO position is already occupied. Instead, the IO position is doubled up (the above mentioned procedure B). This is not quite a counterexample against the hierarchy hypothesis, for the doubling-up alternative also depends on (133). The IO

position is frequently doubled up, whereas the DO position is more restricted. In general, this is only possible if the language also admits of two DO positions in noncausative sentences (cf. Comrie 1981a:171), e.g. in German:

(138) Ich lehre ihn den Katechismus
GER I teach him the catechism

Again: doubling-up of the SUBJ position is almost impossible (e.g. in Japanese and Korean, where a different interpretation might be more adequate), whereas this is practically unrestricted for the OBL position:

(139) Er ließ seinen Sohn den Brief im Schreibzimmer in
seiner Wohnung in München abtippen

'He had his son type the letter in the studio in
his own house in Munich'

The freedom to double up a position follows the inverse case hierarchy:

(140) OBL > IO > DO > SUBJ

When one looks for an explanation of the hierarchy, one comes across a semantic analysis of the grammatical coding of the "causee" (cf. Comrie 1981a:174ff.), i.e. the degree of control which it exerts.

Insofar as participants sharing the feature [+human] are involved, the DO denotes an entity having a small amount of control and the OBL (especially the INSTR) a person with a lot of

control. The IO falls somewhere in between. This is another instance of the same hierarchy:

(141) INSTR DAT ACC
 > >
 OBL IO DO

This hierarchy lacks the SUBJ. The SUBJ normally has less control in intransitive sentences than in transitive ones. Thus the embedded SUBJ functioning as "causee" becomes a DO, with less control, when an intransitive sentence undergoes causativization. It becomes an IO, with more control, in the case of causativized monotransitive verbs.

This helps explain those alternative "causee" realizations which do not agree with the predictions of (132). For instance, the "causee" may sometimes appear as INSTR (= OBL) and not as ACC (= DO) or DAT (=IO), thus bringing into focus the greater degree of control (Comrie 1981a, ch. 8, ex. 8):

(142) a. én köhögtettem a gyerek-et
 I caused-to-cough the child-ACC

'I forced the child to cough (e.g. by slapping him on the back)'

b. én köhögtettem a gyerek-kel
 INSTR

'I got the child to cough (e.g. by asking him to)'

What happens with displacements involving a "causee" specified as [-human] and [-animate]?

The all-embracing principle is, I submit, the closeness of association between participee and participants--it decreases from SUBJ to OBL and increases from OBL to SUBJ. Since the SUBJ, i.e. the most grammaticalized case function, is most closely associated with the participee, there is no doubling up (not even in noncausative sentences).

6.25 Lexical vs. periphrastic (analytic) causatives

As expounded above, the degree of control exerted by the "causee" decreases from left to right in (141). If there is an alternative to a French *faire* construction--which follows the hierarchy (133)--and this alternative realizes the "causee" by doubling up a syntactic position and thus assigning the "causee" less control, then such an alternative must be considered less analytic. In (143) and (144) both "causator" and "causee" exert control upon the action, but in (144) the control exerted by "causator" is crucially greater:

(143) Les raisons ont fait donner à Claude une pomme par le professeur

(144) Les raisons ont fait donner à Claude une pomme au professeur

The morphosyntactic fusion to a certain extent mirrors the conceptual-semantic one. In purely periphrastic causative there are two propositions, in lexical constructions there is only one.

Historically, we can assume two counteracting tendencies, which together constitute a cyclic process: on the one hand we have the grammaticalization of lexical causatives (cf. Latin *ficāre*, French *-fier*, English *-fy*), on the other hand there appear new periphrases (cf. French *faire*). The question therefore arises as to the boundaries of causativity. This question faces in two directions:

A. Should one still speak of the causation of an event (i.e. CAUS + embedded verb) for those lexical forms which have a non-causative counterpart?

| | | | |
|-------|---------|-----|------------------------|
| (145) | brechen | vs. | gebrochen sein |
| GER | break | | be broken |
| | zeigen | vs. | sehen / sichtbar sein? |
| | show | | see be visible |
| | geben | vs. | erhalten? |
| | give | | get |
| | lehren | vs. | wissen? |
| | teach | | know |
| | töten | vs. | tot sein? / sterben? |
| | kill | | be dead die |

B. In complex sentences, may one still speak of a (linguistically represented) causal connexion between the proposition of the main clause and that of the subordinate one:

| | | |
|-------|------------|------------|
| (146) | zwingen | 'force' |
| GER | verhindern | 'prevent' |
| | überreden | 'persuade' |
| | anordnen | 'order' |
| | bitten | 'ask to' |
| | erlauben | 'permit' |
| | verbieten | 'forbid' |
| | abraten | 'dissuade' |

Givón (1980) assigns *force* to the group of implicative verbs (function: CAUSE), *prevent* to that of the nonimplicative verbs (function: CAUSE NEG). Implicativity would thus require resultativity. This would be a criterium of causativity: where there is no result, there would be no causativity. In such a domain we would have to deal with all sorts of subordinate sentences, i.e. desiderative, declarative, consecutive, and conditional.