

CAUSATIVE CONSTRUCTIONS AND ANIMACY CONFIGURATIONS

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Abstract

This paper investigates the semantics of causative constructions in Korean, German and English with regard to their force dynamic profiles à la Talmy (1988), i.e. distributions over animacy configurations of causer and causee. We investigate how the distributions of types of caused predicates are correlated with the (in)animacy criterion of the causer and the causee. We will be concerned with analytic, syntactic causatives in Korean, German and English in which there are separate predicates expressing the notions of causation and the predicate of the effect. This study reveals that contrary to English, the most directly causing event in Korean is part of the inductive causation (human on human). We also discuss German causative constructions which show relatively tighter argument selectional restrictions compared to English.

1 Introduction¹

This paper investigates the semantics of causative constructions in Korean, German and English with regard to their force dynamic profiles à la Talmy (1988), i.e. distributions over animacy configurations of causer and causee. We investigate here how the distributions of types of caused predicates are correlated with the (in)animacy criterion of the causer and the causee. Comrie (1981) draws three different types of causative typology: lexical, morphological and analytic (syntactic) causatives. However, we will be concerned only with analytic, syntactic causatives in Korean, German and English in which there are separate predicates expressing the notions of causation and the predicate of the effect (cf. 1).

- (1) I *made* John go. I *brought* it *about* that John went.
- (2) Na-nun John-ul ka-key hay-ss-ta (key ha causative)
I-TOP ACC go-AD do-PST-DC
(AD:adverbializer suffix; DC: declarative sentence-type suffix)
'I made John go.'

This causative type is the most productive of all the causative constructions in Korean in that it can combine with any kinds of verbs or adjectives except for the copular adjectives (cf. Sohn 1999).² In this paper, we compare the semantic aspects of the English 'make causative' with those of the Korean *key ha* construction and some corresponding German analytic causative constructions.

It is Leonard Talmy who elaborated on "force dynamics" as a semantic category - how entities interact with respect to force. Force dynamics can be understood as a "generalization over the traditional linguistic notion of "causative" (Talmy 1988: 49). Talmy (1976) identifies the following four causation types:

¹ The Yale romanization system is used in transcribing Korean language examples in this paper.

² For the analysis of *key ha* causative construction in this paper, I exclude examples with *key ha* such as the following, since such *key* has a purely adverbial function:

John-un yonku-lul chungsilha-key ha-ess-ta

John-top research-acc faithful-adv do-pst-decl. 'John conducted research faithfully.'

Physical causation: physical object acting on physical object;
 Volitional causation: volitional entity acting on physical object;
 Affective causation: physical object “acting on” entity with mental states;
 Inducive causation: volitional entity acting on entity with mental states.

With these four semantic categories Kemmer (2000) analyses the English *make* causative constructions.

2. The analysis of causer and causee in English *make* causative construction (Kemmer 2000)

Based on force dynamics of Talmy (1976, 1988), Kemmer came up with the following distributions from an English database with respect to *make* + NP + V causative construction.

Table 1. Distribution of Causer and Causee over animacy category in *make* + NP + V

	ANIMATE	INANIMATE	Total
CAUSERS	87 (43.3%)	114 (56.7%)	201 (100%)
CAUSEES	147 (73.1%)	54 (26.9%)	201 (100%)

Table 2. Detailed semantics of *make* causatives in various causer-causee configurations

Causer Animate			87	43%
Causee Animate	60	29.9%		
Causee Inanimate	27	13.4%		
Causer Inanimate			114	56.7%
Causee Animate	87	43.3%		
Causee Inanimate	27	13.4%		
Total		100%	201	100%

The figures on the tables 1 and 2 show that in the English *make* + NP + V causative constructions the inanimate causer constructions (56.7%) are far more productive than the animate causer constructions (43.3%). At the same time we note that the animate causee types occur far more frequently than the inanimate causee types. The predicate types in caused events in English are given as follows (English examples from 3 through 6 are taken from Kemmer 2000).

(3) animate causer on animate causee

- a. How do you *make a witch itch*?
- b. They *make you feel* they're trying

(4) inanimate causer on animate causee: physical and mental predicates in caused events

- a. The humiliation made me shudder
- b. The inconvenience made her chuckle
- c. It made me feel an awful lot less isolated

(5) animate causer on inanimate causee: predicates of motion, mechanical function, and appearance

a. we promote each number, make it go higher, right then

b. those states which are committed to making European cooperation work:

The initiator of the event sets causee into motion or operation.

c. I'll probably make the headline look smaller:

External initiator creates a perception in the mind of experiencer relating to the causee. (subjectivized cause)

(6) inanimate causer on inanimate causee

Physiological response, but causee is a body part:

a. I see boys calling the girls fat and it makes my hair stand on end

b. a wide choice of restaurants make your mouth water

Motion (including by chemical reaction) and mechanical function

c. the the um, what do you call it *that made it rise*. Yeast...

d. the effort and planning which had gone into *making the whole program run*

As the semantic distributions of the force dynamics of the English *make* causative examples above show, the category of inanimate causer on animate causee seems to be the most frequently attested one among the four different configurations (cf. examples in [4]). Why is this so? What kind of explanations can we provide to account for these seemingly unbalanced semantic distributions in English *make* causative constructions?

Given the (in)animacy distribution of the causer and causee in the English causative constructions with *make* (56.7% inanimate causers over 43.3% animate causers), Kemmer (2000) argues that there are many inanimate causers attested because "the primary function of *make* is to describe causation events in which things in the world, external to human causes, act on and affect other things, either human or not" (e.g., Inanimate on Animate: *The humiliation made me shudder*; Inanimate on Inanimate: *A wide choice of restaurants makes your mouth water*). According to this version, the most directly causing event is part of the non-human world. On the other hand, she makes a further claim that there are as many animate causers (cf. 44.3%) as there are because i) humans are intrinsically more topical than inanimates, and ii) the use of *make* is construed to indicate compulsion of other animates (e.g. *He said they made him pay back five pounds*).

Despite the insightful observation of Kemmer, a careful study of Korean and German data leads to some contradictory findings in her argument. In section 3, we discuss Korean data primarily with respect to the (in)animacy configurations of causative constructions.

3. The analysis of causer and causee in Korean *key ha* causative construction

This analysis of Korean *key ha* causative construction is based on token frequency attested in four different Korean novels by four different contemporary writers (cf. www.sejong.or.kr for Korean corpora).³

Typically, *key ha* causative is used for indirect or distant causation, compared with the direct or immediate causation of suffixal and lexical causatives.⁴ This suggests that there is a degree

³ The four Korean novels are *Inkan mwuncey* (Human problem by K. E. Kang), *Pompom* (Spring, Spring by Y. C. Kim), *Yenghonuy miso* (Smile of Spirit by H. Shim) and *B Sakwan-kwa love letter* (B cadet and love letter by C. K. Hyun).

of causation along a continuum with respect to the different causative constructions. Thus, Comrie (1989: 173) states that “the construction closer to the analytic end is more appropriate for the distant (indirect) causative, while the one closer to the lexical end is more appropriate for the direct causative.” Although this seems to hold also true for Korean causative constructions in general, the detailed semantic nature of the Korean analytic causatives is far from clear. Let us consider the semantic distributions of the *key ha* causatives in Korean.

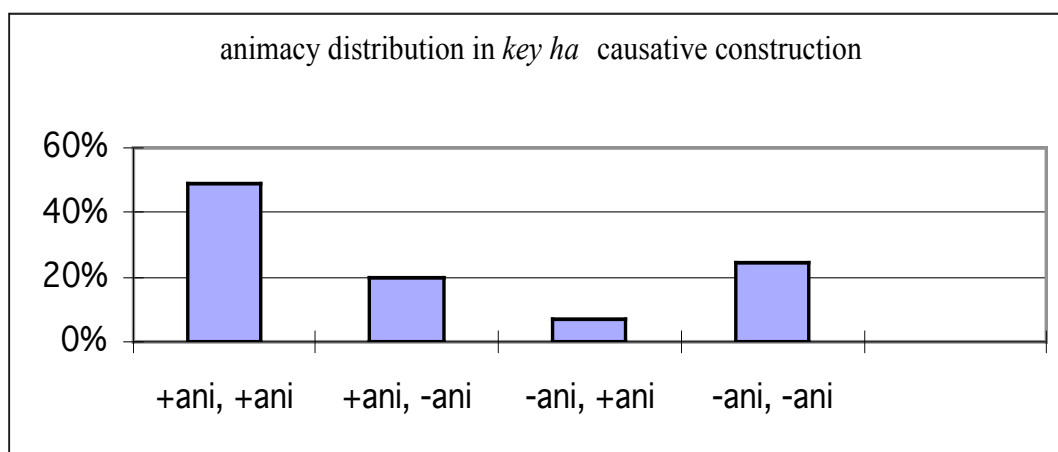
Table 3. Distribution of Causer and Causee over animacy category in Korean *key ha* causative construction

	ANIMATE	INANIMATE	TOTAL
CAUSERS	70 (68.6%)	32 (31.4%)	102 (100%)
CAUSEES	57 (55.9%)	45 (44.1%)	102 (100%)

Table 4 Distribution of Korean syntactic causative *key ha* in various causer-causee configurations

Causer Animate			70	68.6%
Causee Animate	50	49%		
Causee Inanimate	20	19.6%		
Causer Inanimate			32	31.4%
Causee Animate	7	6.9%		
Causee Inanimate	25	24.5%		
Total		100%	102	100%

Table 5. Distribution of Causer and Causee over animacy in Korean *key ha* construction



⁴ Song (2002:123) demonstrates that the syntactic *key ha* causative in Korean can potentially be interpreted in such a way that no causation on the part of the subject NP takes place. This discussion goes beyond the scope of the current paper.

As the tables 3-5 on Korean corpus data show, the constructions with the causer animate (68.6%) predominate over those with the causer inanimate (31.4%). This result is shown to be the direct opposite of the English analyses on *make* causative construction. Furthermore, the most preferred construction type among the four different force dynamic configurations adduced from the given Korean database turns out to be the semantic category of causer animate over causee animate. In fact, this category of causer animate over causee animate is analysed as a significantly lower profile in the English corpus as compared to the corresponding Korean one. In the following, we present the detailed predicate types in caused events in Korean *key ha* causative constructions.

3.1. The following predicates are attested for causer animate on causee animate (inductive causation: volitional entity acting on entity with mental states, cf. Talmy 1988, Croft 1991):

cap-a-kata (arrest), mekta (eat), cata (sleep), issta (exist for human), cwuta (give), ota (come), kyelceng-hata (decide), mos-hata (cannot do), omkita (move to another place), phalta (sell), nakata (go out), pwuluta (call someone) cwukta (die), mannata (meet), nulta (age) tephta (cover), mwungchita (gather together), masita (drink or inhale) etc.

Compared to English inductive causation, the kinds of Korean verbs identified in this category include not only intransitive motion verbs but also typical transitive action verbs. The following sentences (7) and (8) are the representative examples for this category.

- (7) chemci-nun kwanka-ey kosocang-ul tulye i kunche
 old man-top a district office-goal a written accusation-acc file nearby
 nongmin-dul-ul motwu capaka-key hay-ss-ta
 farmer-pl.-acc all arrest-causative-pst-decl.
 Lit. ‘An old man, by filing an accusation to a district office, made [police officers] arrest all farmers in the vicinity.’ (animate causee is contextually identifiable: police officers)
- (8) senpi-nun alay-cip kase ca *key ha* ye la
 private scholar-top/acc. lower cabin go sleep-causative-imperative
 ‘Make the private scholar go to the lower cabin and sleep (there).’

3.2. The category of animate causer on inanimate causee (volitional causation: volitional entity acting on physical object): This category signifies motion and change of state. The initiator in causative event possesses and exercises his mental capacity acting on a physical object. Thus, this semantic category inherently blocks the participation of the causee in the effected event :

cakta (be small), kanulta (be thin), aphuta (ache, be sick), tule-ota (enter), ppita (sprain), poita (look like), kwulekata (roll over), phikonhata (be tired), caymi-issta (be interesting):

The predicate types in the caused events of this category involve mostly intransitive and stative verbs.

- (9) Chelsoo-uy maum-ul aphu-*key* *ha*-tu-ni
 Chulsoo-genitive heart-acc. ache-causative do-pret-conjunctive
 ‘You made Chelsoo’s heart ache and ...’
- (10) senpi-nun say-mwul-i tule-o-*key* hay-ss-go
 private scholar-top/subj. fresh-water-nom. enter-come-causative-pret-conjun.
 ‘The private scholar made the fresh water enter and then ...’

3.3. The category of inanimate causer on animate causee (affective causation): This category is not productive at all in Korean (6.9%). In one of the four novels investigated, no instance of

this type is found. The kinds of caused predicates are non-actional. Cognitive verbs of mental response and processing are attested as in the English instances (cf. examples in [4]). Recall that in table (2) above the English data collected by Kemmer show the highest percentage of occurrence (43.3%) in this semantic configuration. Unlike the category of animate causer on inanimate causee in 3.2., this semantic configuration allows the participation of the causee in the event of causation. The predicates of the effect for this category are given as follows:

silcungnata (get distasteful), salta (live), sayngkaknata (occur to one's mind), ca-a-nayta (evoke [one's feeling]), nolata (be surprised), moluta (do not know).

- (11) phyoceng-i Shinchel-lo hayekum tewuk silcungna *-key ha-yess-ta*
 countenance-nom Shinchul-agentive more get distasteful-causative-pret-decl.
 'The countenance made Shinchel get distasteful all the more.'
- (12) ku-uy cwulyang-i na-lul nola-*key ha-ess-ta*
 he-gen. drinking capacity-nom I-acc be surprised-causative-pret-decl.
 'The alcohol amount he drinks surprised me.'

3.4. The category of inanimate causer on inanimate causee (physical causation: physical object acting on physical object): As in English, physiological responses are attested in Korean. However, this category alone is productive in Korean compared to the category of inanimate on animate type causation. 12 tokens out of 25 cases involve 'affected causee as a body part'. This causation type involves the effected predicates representing the mechanical and metaphorical functions. The effected events are independent of the will or intention of the experiencer or human patients involved. This category also includes appearance and interaction of two non-volitional entities. In (13) and (15) we find that the external stimuli evoke a certain feeling or perception unto experiencer relating to the state of the affairs. The effected predicates are:

palkahta (be red), (ohan-i) nata ([cold] come to exist), ttuupta (be hot), tangkita (appeal to one's appetite), ttwita ([one's heart] beat), pekchata (be beyond one's power or capacity), ca-a-nayta (evoke [one's thought]), koyohata (be quiet).

- (13) kwangsen-un ku-uy sonkalak-ul palkah-*key ha-yess-ta*
 beam-top/subj. he-gen. finger-acc red-causative-pret-decl.
 'The beam made his finger look red.'
- (14) etten kyelsim-i ku-uy censin-ul ttukep-*ke hay-ss-ta*.
 a certain decision-nom he-gen. whole body-acc. hot-causative-pret-decl.
 'A certain decision made his whole body be hot.'
- (15) ku soli-nun koyohan sup-ul te koyoha-*key ha-yess-ta*
 the sound-top/subj quiet forest-acc more quiet-causative-pret-decl.
 'The sound made the quiet forest be more quiet.' [appearance]

4. The semantic nature of syntactic causative construction: a cross-linguistic view

Judging from the discussions so far, it is clear that the analyses of causer and causee in English *make* causative construction in section 2 provided by Kemmer do not suffice to account for the cross-linguistic differences attested in section 3. The present author finds some logical inconsistencies in her argument, because a cross-linguistic lexical semantics of the causative constructions with *make* does not corroborate its syntactic compatibility with

inanimate causers which act upon humans as we have seen in Korean data. We have clearly noticed that in Korean data, the cases of schematic *make* are far more restricted.⁵

Croft (1991: 169) also observes that among the four causation types by Talmy, the most marked type is the inversion of volitional causation, namely, affective causation (inanimate on animate) and that the behavior of the marked causation types is “based on” or “derived from” that of the unmarked types. According to this view and our analyses on Korean data, then, contrary to Kemmer, *the compulsion make (animate on animate) is shown to be not an extension of schematic make.*

The problems of Kemmer’s version on causatives crop up further, when we consider the following observation. Kemmer attempts to provide an answer as to why there are so many animate causees (cf. Kemmer 2000: 5):

(16) animates can have two types of responses to direct external causation, physical or mental, whereas inanimates can have only one; so there are more types of events that will occur with animates (raising their frequency)

The problem with this interpretation is that whereas we can confirm this generalization in the analyses of English *make* force dynamic profiles in section 2, this is not the case in the Korean data in section 3. Recall that in table 2 for English data, in the case of causer inanimate, causee animate (43.3%) has much higher frequency than causee inanimate (13.4%). For the same category, however, Korean shows the opposite proportion (6.9% for causer inanimate on causee animate vs. 24.5% for causer inanimate on causee inanimate). If Kemmer’s universal interpretation (16) is right, we would expect the higher frequency rate for the category of causer inanimate on causee animate in Korean. We also need to note that English shows the highest frequency rate for this category among the four different force dynamic profiles.

How do we explain these semantic distribution differences in the analytic causative constructions?

What interests us in an attempt to establish a more convincing and coherent account for these linguistic differences is not the research tradition that seeks to explain away the instances as mere deviations from the central proto-typicality. Rather, in order to provide a better balanced and inviting account for the constructions at issue, we want to establish a coherent relevance among typologically different types of languages that allow or disallow those deviations in a regular fashion.

We argue that the schematic senses of *make* in English are analogical modeling of more inclusive transitive constructions [actor-action-goal model] where inanimate subjects can control the state of affairs, whereas Korean causer in the causing events is subject to an animacy constraint broadly applicable to the transitivity phenomena. In English, it is also the case that, with respect to the subject category, the semantic scope to fill in the subject slot is highly liberal. Thus, we find the following unagent-like entities as grammatical subjects in English.

- (17) a. The room seats 500.
 b. *De kamer zetelt 500. (Dutch)
 c. De kamer heeft 500 zitplaatsen. (Dutch: The room has 500 seats)
 d. The fifth day saw our departure.

⁵ Kemmer (2000: 4) defines the general sense of *make* (Schematic *make*) as follows:

To affect an entity so as to cause it to be an initiator participant in a caused event: the initiator carries out some action/undergoes some reaction, independently of any will it might have. The most directly causing event is part of the non-human world.

e. *De vijfde dag zag ons vertrek.

In English, the subjecthood has a grammatical status that does not tolerate complete reduction to semantic and pragmatic notions, in the sense that it is grammaticalized to the extent where an expletive grammatical subject is required (cf. Van Oosten 1986, Seong 2001). In this case, the English expletive subjects (e.g., *it* or *there*) contract no semantic relationship with predicates. We can extend this line of reasoning to the analyses and interpretation of the analytic causative constructions at issue.

In Talmy's terms, energy transfer does not take place in the examples in (17), because these subjects actually do nothing to execute the unfolding of the events denoted by the predicates. The fact that these unagent-like noun phrases can appear as syntactic subjects in English does not pose serious problems in cognitive grammar since they are considered mere deviations from the central semantic specification of prototypical transitivity (Taylor 1995: 214). Compared to typical transitive constructions like *John killed a snake*, the semantic relation between subject and each event involved in (17a, 17d) is less intense. In the transitive constructions the relation between the subject that initiates the event and the process it triggers and the relation between this process and the affected entity (object) can have different degrees of intensity. The present author assumes that these relations also hold for the analytic causative constructions that we are investigating.

The following causative constructions also help clarifying our explanation.

- (18) a. The terrorist threats close US embassy in Bosnia. (CNN)
 b. *De terroristische bedreigingen zorgen voor sluiting van de Amerikaanse ambassade in Bosnië (Dutch).
 c. *Die terroristischen Bedrohungen schließen die US Botschaft in Bosnien. (German)
 d. Wegen der Terrorbedrohungen wurde die US Botschaft in Bosnien geschlossen.
 'Because of the terrorist threats the US embassy in Bosnia was closed'

In the event of closing an embassy we usually expect an agent (*Ger.* Handlungsträger) to appear as a grammatical subject. In this sentence, however, 'threats' as an indirect source or cause can function as subject in the English sentence. The corresponding German and Dutch constructions are ungrammatical. The same kind of grammatical relation holds true for the verb 'buy'.

- (19) a. That job bought him a house in Berkeley.
 b. *Die baan kocht een huis voor hem in Berkeley.
 c. Door die baan kon hij een huis in Berkeley kopen.
 d. *Die Arbeit hat ihm ein Haus in Berkeley gekauft.
 e. Wegen der Arbeit konnte er in Berkeley ein Haus kaufen.
 'Because of the work he could buy a house in Berkeley.'

Money and job in these cases are seen as performing an instrumental function in the act of buying a meal and a house respectively. Even though this function is not directly relevant to the act of purchasing, money and job can indeed appear as subjects in the English constructions. This rule can be applied to a more complex German causative sentence type which shows relatively tighter argument selectional restrictions compared to English:

- (20) (Doherty, 1993)
 a. The drug encourages the heart to beat more regularly.
 b. ?Das Medikament ermutigt das Herz regelmäßiger zu schlagen

In English we find many transitive constructions in which the grammatical differentiations available in overtly case-marking systems such as German and Korean are simply neutralized (*G.* *Peter braucht eine Frau* 'Peter needs a wife' vs *Peter fehlt eine Frau* 'Peter is lacking a

wife'). With respect to these differences in grammatical relations, we can conclude that there is cross-linguistic regularity as regards the semantic intensity between the subject and the verb on the one hand, and between the verb and the object on the other, when it comes to the transitive causative constructions. In this respect, it is also clear that traditional primitive notions of grammatical relations, such as subject and object, do not suffice to adequately describe the grammars of German and Korean as opposed to English. Thus, Korean and German transitive causative constructions show a relatively transparent semantic encoding system of subject and object selection, while in English these constructions are opaque. This comparative perspective provides a better explanation as to why there are cross-linguistic differences of causative constructions with respect to the force dynamic profiles.

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