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On the Pragmatics of Control

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Several languages exhibit an interesting pattern in the formation of their morphological causatives. Namely the verbs, which according to the philosophers of action and linguists denote volitional events such as drink, walk, save money, leave cannot occur with non-human subjects. They take only human subjects in the morphological causatives of these verbs. However, verbs denoting necessarily non-volitional events such as get thirsty, forget, faint can take non-human subjects (Wachowicz 1976).

There is a third group of verbs denoting events that are normally non-volitional but can be volitional as well, for example: cough or break. Cough denotes anything from a coughing fit to a volitional clearing of one's throat, or to a pretended cough. Breaking a plate means either doing so intentionally or dropping it accidentally. This third group can occur either with human subjects if the event is understood to have been carried out volitionally, or with non-human subjects if the event is understood to have happened non-volitionally to a person.

Thus, a verb classification along these lines, classifying verbs according to their ability to be used to denote volitional events, necessarily non-volitional events or events that can be either volitional or non-volitional, allows for a formulation of the principles for the usage of human or non-human subjects in the morphological causatives formed from these verbs.

Tests for the verb classification or rather for verb uses have been developed by Brennenstuhl (1975), or less elaborately by Vendler (1967). These tests were a prerequisite for the verb use classification used in our analysis of morphological causatives.

As a result, the following picture emerges for the subject selection in morphological causatives:

<table>
<thead>
<tr>
<th>Subject denoting the cause of the event</th>
<th>Volitional events (Actions)</th>
<th>Necessarily non-volitional events (Non-actions₁)</th>
<th>Non-volitional events that are not necessarily non-volitional (Non-actions₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td>human</td>
<td>+</td>
<td>(+)</td>
<td>(+)</td>
</tr>
<tr>
<td>non-human (e.g., forces of nature, environmental conditions)</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
A morphological causative involves the following roles:

causer or controller

a person (group of persons)
or a causal factor denoted
by the subject of a morpho-
logical causative

causee

in the data presented here a
person denoted by the direct
object of a morphological
causative

and the following relations:

the causer affects the causee: by an action in case of
human causer or by causation
in the case of a causal
factor; denoted by the causa-
tive morpheme

the causee brings about an
event:
either an action or non-
action; denoted by the
predicate.

Although the principle we are considering here seems to
hold for a number of languages we will limit ourselves to three
languages in this paper: Hungarian, Finnish and Turkish since
these languages turned out to be the most regular in this respect
and since we had a number of native informants and linguists-native
speakers of these languages. We had, therefore, an opportunity
to check the data several times. Since grammars are usually silent on
the subject we prepared a questionnaire of 30 sentences which were
filled out by native speakers.

The following morphological causatives from Hungarian
illustrate our principle:

(1) Hungarian: Az apa spóroltatott vele pénzt
the father save-cause with him money acc.
'Father made him save money'

(2) *az inflacio spóroltatott vele penzt
the inflation save-cause with him money
'Inflation made him save money'

If we want to use a non-human noun in a morphological
causative from a verb denoting a volitional event, a construction with a causal connective similar to the English: because must be used in Hungarian as shown in (3):

(3) az inflacio következményeképen pénzt spórolt
    the inflation as-a result-of money-acc. saved
    'Because of inflation he saved money'
    'Inflation made him save money'

Similarly to Hungarian other languages must use either periphrastic causatives in these sentence types or other causal constructions as shown by the examples from Finnish and Turkish: Sentences (4) and (5) are the Finnish and Turkish translations of the English sentence: The smoke made the girl leave the room.

(4) Finnish: Savu \{sai
    pani\} tytön läntemään huoneesta
    Smoke made girl leave room
    'The smoke made the girl leave the room'

(5) Turkish: Duman kızın odadan çıkmadına seber oldu
    smoke girl-gen. room-abl. leave 3 sg. cause was
    'Smoke made the girl leave the room'

The following pairs of sentences can illustrate this principle further with respect to the feature of volition:

(6) The smoke made the girl cough
(7) The smoke made the girl leave the room
(8) Hot weather makes me thirsty
(9) Hot weather made me drink a lot
coughing or getting thirsty usually doesn't depend on one's volition. It is a physiological reaction whereas leaving or drinking can be a volitional activity. Only the sentence (6) and (8) with a non-volitional verb can be made into morphological causatives as shown in (10)-(15):

(10) Hungarian: A füst megköhögtette a lányt
    the smoke cough-cause-it-her the girl
    'The smoke made the girl cough'

(11) Finnish: Savu yskitti tyttöä
    Smoke cough-cause girl
    literally Smoke coughed the girl
    'The smoke made the girl cough'

(12) Turkish: Duman kızı öksürttü
    smoke girl-obj. cough-cause -past 3 sg.
    'The smoke made the girl cough'

(13) Hungarian: Ez a nagy höseg megszomjaztat
    this the big heat thirsty makes-it-me
    'This big heat makes me thirsty'
(14) Helteellä janottaa
Hot weather drink cause (one)
'Hot weather makes one thirsty'

(15) Turkish: Sicak havan beni devamlı susatti
Hot weather me all the time be thirsty
caus-past
'Hot weather made me thirsty all the time'

Human subjects, on the other hand, can be used also with volitional verbs in morphological causatives.3 Sentences (16) and (17)

(16) The editor made Maya rewrite her article
(17) His father made him save money

with volitional verbs can be translated into sentences with morphological causatives in all the three languages:

(18) Hungarian: A kiadó ujraíratta Mayával a cikkit
the editor rewrite-caus -he-it Maya-with
the article -her
'The editor made Maya rewrite her article'

(19) Az apa pénzt spóroltatott vele.
the father money-acc. savecause-he- it with
him
'The father made him save money'

(20) Finnish: Toimittaja kirjoittutti Maijalla artikkelin
Editor write-cause Maya all article
uudelleen again
'Editor made Maya rewrite her article'

(21) Hänen säästätti hänellä rahaa
father save-cause him all money
'Father made him save money'

(22) Turkish: Redaktör Maya'ya makalesini fekrar
editor Maya-dat article 3 sg. obj.
yazdırttı
rewrite-caus
'The editor made Maya rewrite her article'

(23) Babası ona para biriktitti
father him money save-cause
'Father made him save money'

The question arises how to explain this data. Why is it that non-human subjects take only non-volitional verbs in morphological causatives while human subjects take both volitional and non-volitional verbs? We would like to suggest that the notion of Controller is a useful concept in providing an explanation to the discussed facts about morphological causatives.

The notion of control has been used by several linguists on various occasions: Berman (1970), Kuno (1971), and more recently by Givon (1975) and Brennåstuhl (1975). Kuno attempted to explain
some of the facts about statives, which were observed by Lakoff (1965), in terms of control. For example stative adjectives cannot have imperatives. Therefore an imperative *be tall is ill-formed. According to Kuno and Berman this is due to the fact that one cannot have control over one's height. Controllability, though more or less inherent in certain verbs depends on the real world facts.

However, the notion of control is not well defined in the philosophical literature. Thalberg (1972) makes an attempt to classify verbs in terms of control. However, although he gives a number of interesting facts concerning control he has not attempted a formal definition of control.

In the linguistic literature an explication and definition of control has been given by Waltraud Brennenstuhl (1975), who uses the notion of control to distinguish Actions from Non-actions. Her notion of control applies to human controllers, i.e., agents, explicating to what extent they have control over their own actions.

Her explication leads to the following categorization of the agent-caused events:

```
Agent-caused events
\[\begin{array}{c}
\text{uncontrollable} \\
\text{controllable} \\
\text{Doings} \\
\text{Non-actions 1} \\
\end{array}\]

\[\begin{array}{c}
\text{uncontrolled} \\
\text{controlled} \\
\text{Non-actions 2} \\
\end{array}\]

\[\begin{array}{c}
\text{unsuccessfully controlled} \\
\text{successfully controlled} \\
\text{Actions} \\
\end{array}\]

\[\begin{array}{c}
\text{Failures} \\
\text{Successes} \\
\end{array}\]
```

An action is defined as a controllable and controlled bringing-about by a potential agent of an event which otherwise, all things being equal, would not have occurred, e.g., drink, walk, save money.

A Non-action 1 is defined as an uncontrollable, and hence uncontrolled, bringing-about of an event by a potential agent (get thirsty, forget, bleed).

A Non-action 2 is defined as a controllable, but, on the actual occasion in question, uncontrolled, bringing-about of an event by a potential agent, e.g., cough, break a plate, breathe.

Brennenstuhl (1975) explicates the key notion controllable in the following way: Suppose that in a particular situation a
person has, in principle, the opportunity of either bringing about a particular event or forebearing to bring it about. Suppose further that this person, in this situation, has also the intention a) of bringing about this event or b) of forebearing to bring it about. If he has the ability to carry out whichever of these intentions he chooses, it can be said that the bringing about of the event is fully controllable for him.

The agent can be said to have the ability to carry out an intention, if in an appropriate number of cases in which he has such an intention, he succeeds in his attempt to carry it out.

The number of successes required is in proportion to the difficulty ascribed to the performance of the action. The lower the rate of success, the smaller the degree of controllability.

The causation of an event by an agent is controlled if he caused the event:

   a) as a result of an intention and an attempt to bring it about,

or

   b) as an (unsuccessful) result of a contrary attempt not to bring it about.

The causation of an event by an agent is uncontrolled if he had no intention whatsoever with respect to the bringing-about of that event.

Now our data require an extension of this notion of control. It can easily be extended to the control of one agent over another agent's Actions and Non-actions, i.e., to coercion. An agent has control over another agent's Actions and Non-actions if in an appropriate number of cases where he tries to make the other person behave in a certain way he really succeeds in doing so. Of course, the success of coercion depends in many cases also on what the coerced person chooses to do. The strategy of coercion is to make other alternative reactions seem so unfavorable to the urged person that he prefers to avoid them by choosing the alternative the controller wants him to choose. The fewer alternatives the controlled person has as a result of coercion, the greater is the controller's degree of control over him.

To extend the notion of control to causal factors we have to say that a causal factor has control over a Non-action of a person if in an appropriate number of cases where this factor is present in the environment the person will go through a specific Non-action. The more control the causal factor has over the person the less control the person has over his own reaction to it.

In general, the degree of control the controller has over the controlled person is in inverse proportion to the degree of control the controlled person has over his own reaction. As we said, an agent has control over his own behavior if he has the ability to choose either to behave or not to behave in a certain way. If he is not able to carry out whichever of the alternatives he chooses when he intends to do so, what he does is out of his control. A controller (animate or inanimate) which has full control over the controlled person makes the controlled person unable not to react in the way the controller demands. In other words, in this case it
is totally out of the controlled person's control to choose between whether to react in the way demanded or not.

At the other end of the scale a controller has nearly no control over the controlled. This happens when the controlled person has nearly the full ability to choose whether or not to allow himself to be influenced by the controller. In such a case the controller will merely enter the controlled person's decision-making process and may serve as a reason for his reaction.

We have seen from the data that morphological causatives are used to express a high degree of control with respect to the controller and that periphrastic causatives and causal connectives are used to express a low degree of control with respect to the controller.

Our notion of controller can be said to have some similarity to Fillmore's Agent: instigator of the event. What we have shown so far is: the notion of control must include all kinds of pragmatic considerations as the means of control and the interaction between the causer (controller of the event) and the causee (the surface object of a morphological causative, the entity acted upon by the controller). In order to account for the effect the controller has over the controlled person we must take into consideration the degree and the source of control. Non-human controllers, such as environmental conditions, chemicals, drugs, etc., typically can instigate physiological or emotional states and state changes in humans. Thus heat makes one thirsty. It is not up to us whether to get thirsty or not. In this sense we have not control over this
reaction. However, heat cannot induce drinking. It can be the reason for drinking but the final decision whether to drink or not still belongs to the causee, i.e., drinking is mainly in the control of the causee. In this sense heat does not have total control over the action of drinking. In such a manner we explain why (8) Hot weather makes me thirsty can be translated into a well formed morphological causative but (9) Hot weather makes me drink a lot cannot.

A human causee, on the other hand may have more possibilities to influence other humans and control even their decisions and volitional actions. Possible means of control available to him are: physical force, authority, threatening, urging, forbidding. As a result, typically, he may have control over the causee's Actions although he may have control over some Non-actions too, e.g. over changes of emotional states like for example, getting angry.

Let us look again at the example (16) The editor made Maya rewrite her article. Rewrite is in principle a volitional verb dependent on the causee's volition. However, in some contexts, the actual total control may belong to the causer. The authority of the editor is the source of control. He may force someone to rewrite an article because it is up to the editor to accept the article or not. But this is not the whole story. Whether Maya (in the example 16) rewrites her article or not may depend on a number of circumstances. She may have no choice because he would fire her otherwise. There may be other reasons. For example, she must have an article accepted for publication. Unless she follows the editor's requirements and changes the article according to his wishes it would not be published at all.

What seems to be crucial here is that there is a necessity for the causee to act or react in a certain fashion. This necessity may arise as a result of coercion and the wish to avoid punishment or other non-preferred consequences as is the case with human causers or as a result of all kinds of physiological reactions as is the case with non-human causers.

This hypothesis is further supported by the fact that the morphological causatives in the languages discussed carry an inference of strong coercion. Some stylistic effects follow from this. For example, in Turkish under very special circumstances one may use a morphological causative to translate the sentence: The smoke made the girl leave the room. This would indicate that due to some special circumstances she lost her control over her actions (I owe this information to Doğan Güceoğlu). However, he could not devise a context where the sentence Hot weather made me drink a lot could be used with a morphological causative. Here a special causative construction 'seber oldu' is obligatory.

In colloquial Finnish a normally volitional verb 'eat' can be used with a non-human controller in the following context:

(25) Tämä kakku on sellaista (niin) hyvää että se syöttää this cake is such (so) good that it eat-cause 'This cake is so good that it makes eat'
The usual rule for morphological causatives has been seemingly violated in order to denote the degree of temptation which makes the causee loose control over his decision whether to eat or not. This shows that eating in this situation is a highly involuntary event.

As we have already said there exist a scale of control among the causative expressions in language: morphological causatives--periphrastic causatives--causal connectives corresponding to a scale of controllability. Morphological causatives denote the greatest degree of control on the part of the causer and causal connectives such as the English because, the least amount of control. Periphrastic causatives are in the middle of the scale.

It is well known that periphrastic causatives follow different syntactic principles with respect to adverb modification, negation and clitic movement (Shibatani 1973; Aissen 1974; Horn 1975). How this difference in the syntactic behavior is connected to the degree of controllability of the causee's behavior expressed in the periphrastic and morphological causatives has yet to be examined. Most likely the solution has to be sought along the lines of degree of clausiness (Aissen's 1974 term).

The notion of controller is also applicable to other linguistic phenomena. For example, it is useful in explaining facts about pseudo-reflexives. Pseudo-reflexives can never occur with any volitional adverbs such as: deliberately, on purpose, etc., in Finnish, German, Hungarian and Polish. They denote an event beyond one's control, either an emotional state as in Polish (26) or German (27):

(26) Martwię się
    worry oneself
    'to worry'
(27) sich sorgen
    oneself worry
    'to worry'

or an action performed by mistake or carelessness as in the Polish sentence (28):

(28) Paziokiet mu się zjamę
    nail to him itself broke
    'He got his nail broken'

We hope that the notion of control may prove useful in explaining facts about voices in general like: passivity, activity, middle voice and ergativity.

FOOTNOTES

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1 Morphological causatives are the causatives formed by adding a causative morpheme to the verbal stem, e.g., Turkish suffix -t: öksür 'cough': öksür-t-tu 'cause to cough', 'make cough'.

2 Periphrastic causatives are analytic verbal causatives such as the English: cause, have, make.

3 There is a number of various types of irregularities in the morphological causativization.

REFERENCES