The semantic network of causative MAKE

Sami Chatti, Sorbonne Nouvelle University

Abstract

The verb MAKE is a one of the most intriguing verbs in the English language. Not only does it occur in various contexts and situations, but it also conveys a cluster of meanings, depending on the context of its use. Rather than dealing with all uses and meanings of MAKE, I will devote this paper to the study of the semantics of causative MAKE, that is the uses of MAKE with the complementation pattern: [NP VP NP VP].[1] Drawing upon a corpus study of the occurrences of causative MAKE in the British component of the International Corpus of English, this paper challenges the widely-shared assumption that MAKE is a coercive verb, and highlights the polysemous nature of causative MAKE, which expresses a cluster of semantic values, depending on the lexical and conceptual properties of the causative situation.

1   Introduction

The semantics of causative MAKE has often been confined to the notion of *directness*, that is "whether the causer acts directly or indirectly to bring about the caused event*"* (Dixon 2000: 67). For most linguists, the causative constructions introduced by MAKE fall in the category of 'direct causation', in which there is no intervention of a mediating agent in the causal chain between the Causer (represented by the subject of the verb) and the Causee (represented by the object) (Duffley 1992; Rice 2000; Shibatani 2002; Dixon 2005; Khalifa 2006; Wolff 2008, among others). However, the essence of this notion of *directness* remains completely fuzzy. Throughout the literature, 'direct causation' has been defined in terms of *spatio-temporal contiguity* (Goldberg 1995), *intentionality* (De Lancey 1983), *mediation* (Rice 2000; Wolff 2008), *physical contact* (Shibatani 2002; Dixon 2005), or *prototypicality* (Lakoff and Johnson 1980).

This definitional vagueness calls for a refutation of the notion of *directness* in favour of the more subjective concept of *saliency* (Langacker 1997). Rather than analyzing causation in terms of presence or absence of direct contact

between the Causer and the Causee, I will portray the causative situation in terms of a very basic energy flow process, which emanates from the Causer (energy source) and affects the Causee (energy sink). Consequently, the semantics of causative MAKE will be highly contextually-mediated, bringing, thus, to light the role of lexical features and conceptual properties in meaning identification.

Following Talmy (2000), I will claim that causative MAKE portrays a force-dynamic relation, where the Causer bears some relation of impingement to the Causee. Based on a corpus study of the causative occurrences of MAKE in the British component of the International Corpus of English (hereinafter ICE-GB),[2] this paper will elaborate a newly semantic typology for causative MAKE, which focuses on three salient features: (i) animacy of the Causer and the Causee, (ii) evaluation of the causal process, and (iii) nature of the balance of power.

2 Polysemy of causative MAKE

The meaning of a polysemous verb is often contextually-determined and depends to the same extent on lexical properties of the particular arguments as it does on the base meaning of the verb itself. Within the scope of a causative sentence, evaluation of the causal process, animacy of the Causer and the Causee, and their relative strengths are most prominent in sense identification. Causative MAKE conveys one sense rather than another, depending on the animacy of the Causer and the Causee, their relative strengths as well as the evaluation of the causal process.

2.1 The coercive reading

Causation and coercion are two separate notions whose sphere of use does not necessarily overlap. For most linguists, however, MAKE portrays a coercive causation, where the Causer bears some relation of forceful impingement to the Causee. The well-known description of causative MAKE as a "verb of coercive effect" (Quirk *et al.* 1985: 1205) assigns to this verb a force-dynamic interpretation, which stresses the idea that the Causee was forced to bring about the action denoted by the Causer. The rationale behind this reasoning lies on the high frequency of causative MAKE with animate contexts, where a [+ animate] Causee undergoes a change of state due to the volitional action of a [+ animate] Causer.

There are, however, a lot of instances where MAKE has an inanimate Causee:

(1) The sun made the flowers wilt.

Example (1) is a particularly telling example, because flowers do not even have a non-volitional tendency not to wilt (if anything, they have a tendency to wilt). Similarly, there is no implication of coercion when causative MAKE is used with verbs of experience:

(2) His attentions made her feel giddy.

Therefore, the assumption that causative MAKE is a verb of coercive meaning turns out to be only partially true. Furthermore, the data drawn from the ICE-GB corpus shows that the semantics of causative MAKE involves a cluster of senses, with coercion as just one possible – but not necessary – reading.

 Generally speaking, the notion of coercion portrays a dynamic causative situation, whereby the Causee undergoes a change of state due to the Causer's action. Following Dixon (2005: 312), I will consider the notion of coercion in a broader sense, that is to refer to cases in which "the subject of the complement clause is – by its character or nature – impeding the success of the activity; make refers to overcoming this impedance". The following semantic conditions are, therefore, distinctive of the coercive reading:

(i)   The causative situation involves two [+ animate] entities.

(ii) The causal process is described as [– pleasant].

(iii) The balance of power entails a [+ strong] Causer.

Each of these conditions instantiates one salient feature of the coercive situation. Firstly, animacy[3] places the causative interaction at the animate, intersubjective level. Secondly, unpleasantness implies a case of strong resistance from the Causee against the Causer's impingement. Finally, the condition of strength ensures the realization of the causal process, regardless of the Causee's intrinsic volition. Together, these conditions convey a coercive interpretation of the verb MAKE throughout the ICE-GB corpus. What examples (3) and (4) have in common is that they satisfy each of the three defining conditions of coercion, listed above.

(3) Perhaps most distressing of all were the experiences of hearing or being made to watch other people being tortured.
                                    <ICE-GB:S2A-034 #094:3:A>

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(4)   So when I got to the airport they stripped me completely naked and made me bend over and touch my toes at the airport.
<div align="right"><ICE-GB:S2A-050#128:1:A></div>

In line with these conditions, the causative situation described in examples (3) and (4) conveys a coercive interpretation of the verb MAKE. Both the adjective *distressing* and the participle *tortured* in (3), contribute to the conceptualization of a context depicting torture. Such context involves a disparity in the balance of power between the Causer and the Causee, which results in a change of the latter's state. Similarly, the use of expressions such as *stripped completely naked*, *bend over* and *touch my toe* in example (4) connote the causal process as [– pleasant], upholding thus the coercive dimension within the semantics of causative MAKE.

In this use, MAKE is synonymous with FORCE – the coercive verb *par excellence*. In example (5), FORCE overlaps with coercive MAKE, showing therefore the synonymy between the two verbs in coercive contexts:

(5)   Pitt was simply using his star power to force the celebrity press to cover poverty and disease.   (Newsweek, 10 July 2010, p. 60)

The contrast between the nominals *celebrity press* and *poverty and disease* reveals the gap between the Causer's intention and the Causee's tendency. Clearly, the conceptual schema is one of coercion as it depicts a Causer using *his star power* to overcome the Causee's reluctance and push him to accomplish an action which the Causee would not have spontaneously undertaken.[4]

2.2   The directive reading

Causative MAKE also occurs in situations in which the causal process is denoted as [+ pleasant]. This positive portrayal of the causal situation would logically counter any coercive interpretation of the causative verb in use. I suggest, therefore, to assign a directive reading to causative MAKE when it occurs in situations that match the following semantic conditions:

(i)   The causative situation involves two [+ animate] entities.

(ii)   The causal process is described as [+ pleasant].

(iii)   The balance of power entails a [+ strong] Causer.

Conditions (i) and (iii) are common to both the coercive and the directive readings. Consequently, the main difference between the two meanings lies in the evaluation of the causal process. The coercive reading implies strong resistance from the Causee, due to the unpleasant nature of the causal process, whereas the directive reading entails the realization of a pleasant process, against which the Causee would show little or no resistance. The directive reading is illustrated by examples (6) and (7) below:

(6) They can make her feel easier because I think she feels she's being rather an intrusion.   <ICE-GB :S1A-021 #164:2:A>

(7) Eleanor at last had made her feel she's not excluded from anything.
                                                    <ICE-GB:W2F-009 #045:1>

There should be no opposition between the psychological nature of the causal process, on one hand, and the directive interpretation of the causative verb, on the other. Unlike Wierzbicka (1998), who accords a special statute to the "MAKE…feel" constructions, I include these structures under the directive reading, as long as they satisfy the semantic conditions set above. This inclusion is based on Freudian's 'divided self' rationale which opens the way to an analysis of psychological events in terms of physical events, that is depending on the type of the dynamic interactions they portray.

This particularity set apart, examples (6) and (7) perfectly match the basic conceptual schema of causative situations. The comparative adjective *easier* in example (6) stands in opposition to the nominal *intrusion*, indicating thus a positive change of state. Generally speaking, the action undertaken by the Causer alters the Causee's feeling, which moves from anxiety to ease. A similar analysis can be applied to example (7). In this example, the Causer overcomes the Causee's resistance and brings about a positive change of state in the Causee. This beneficial turn of events is further supported by the use of the adjectival *not excluded*, which gives a positive connotation to the causal effect.

2.3   The control reading

The notion of control is part of the cluster of meanings inherent in the causative use of the verb MAKE. Typically, the control involves a manual operation by which a [+ animate] entity acts on a [– animate] entity and brings about a change in the latter's state. The inanimate nature of the Causee counters either a coercive or a directive reading of the causative verb. The [± pleasant] figure loses its pertinence, since the causal process refers to an inanimate entity devoid of any

volition or intentionality of its own. As for the balance of power, it shifts in favour of the Causer due to its higher degree of animacy and agentivity. Consequently, the following two conditions can be used to define the control reading:

(i) The causative situation involves a [+animate] Causer and a [– animate] Causee.

(ii) The balance of power entails a [+ strong] Causer.

The combination of these two conditions assigns a control reading to causative MAKE. This is illustrated in examples (8) and (9) below:

(8) You can get into a car and make it move

ICE-GB:S1A-097 #142:1:B>

(9) Low volley is hard to play, but Tim makes it look easy

<ICE-GB:W2D-013 #148:1>

These examples portray the same causal schema in which a [+ strong], [+ animate] Causer impinges on a [– strong], [– animate] Causee and alters its state. The modal of capability (*can*), in (8), indicates a clear shift in the balance of power in favour of the Causer. Due to the Causer's impinging action, the Causee's state undergoes a change from rest to motion (*move*). The same analysis can be applied to example (9). Here the *but* conjunction illustrates a change from an initial situation which is *hard* to a new situation which *look[s] easy*.

2.4 The implicative reading

The causative interaction between an inanimate entity and an animate entity portrays a counterfactual relation whereby the causing event necessarily produces the resultant effect. I suggest attributing an implicative reading[5] to causative MAKE when it occurs in situations that match the following semantic conditions:

(i) The causative situation involves a [- animate] Causer and a [+animate] Causee.

(ii) The causal process is described as [+ pleasant].

(iii) The balance of power entails a [+ strong] Causer.

Examples (10) to (12), below, all comply with this implicative schema:

(10) Impressive views of Yosemite with its massive rocks and beautiful forests made me wish we'd made it there this holiday.

<div align="right"><ICE-GB :W1B :011#099 :2></div>

(11) It's a beautiful park, especially the parts with trees and water which make you feel you're not in a city at all.

<div align="right"><ICE-GB :W1B-012#061 :1></div>

(12) Religion is supposed to make you behave well to the people around you treat them with respect and dignity and caring and kindness.

<div align="right"><ICE-GB:S1A-084 #191:1:B></div>

The mental dimension of these causal processes does not challenge the implicative reading of the causative verb in use. As in a physical interaction, a natural element (*rocks*, *trees*, *water*) or a moral concept (*religion*) acts on an animate Causee and affects his/her state of being. Indeed, it is the charming landscape in (10), the beautiful park in (11), and the religious belief in (12) which change the Causee's feelings or behaviour. Moreover, the use of adjectives like *impressive*, *massive* and *beautiful*, in (10), and the appearance of nominals like *respect*, *dignity*, *caring* and *kindness*, or even the adverb *well*, in (12), call for a positive evaluation of the causal process. In example (10), for instance, the causal process takes the form of a *wish*, showing thus the Causer's complete and natural adhesion to the Causee's intrinsic tendency. This context in which a [– animate] Causer impinges on a [+ animate] Causee and brings about a pleasant change in the latter's state assigns an implicative reading to causative MAKE.

2.5   The effective reading

Unlike implication, the effective reading refers to causative situations in which a physical object or event impinges on a human subject in an unpleasant way. This negative evaluation of the causal process distinguishes the effective reading from the coercive one. The following conditions define the effective reading:

(i)   The causative situation involves a [- animate] Causer and a [+animate] Causee.

(ii)   The causal process is described as [- pleasant].

(iii) The balance of power entails a [+ strong] Causer.

Causative MAKE in example (13), below, conveys an effective reading in accordance with the semantic conditions stated above.

(13) Diarrhoea kills children by making them dehydrated.

<div align="right"><ICE-GB:S2B-022 #127:2:A></div>

Here the lexical items *kill* and *dehydrate* reveal the unpleasant nature of the causal process, as indicated in condition (ii). In this context, the Causee would strongly resist the Causer's impingement, but in vain. Consequently, the Causee undergoes an immediate change of state which assigns an effective reading to causative MAKE.

2.6   *The mechanical reading*

Rather than being restricted to one particular context, causative MAKE can occur in all types of causative situations including purely physical interactions, where the laws of nature have the upper hand. In this kind of context the causal process takes the form of a mechanical relation governed solely by the conditions of animacy and balance of power.[6]

(i)   The causative situation involves two [- animate] entities.

(ii)   The balance of power entails a [+ strong] Causer.

It goes without saying that condition (i) excludes any coercive or directive reading of causative MAKE. Therefore, I propose to assign it a mechanical reading in order to account for physical contexts of the kind illustrated in examples (14) and (15) below:

(14) The rays of light make the columns appear to soar, as though weightless. <ICE-GB:W2B-003 #029:1>

(15) Light falling on the chemical element selenium made its resistance change. <ICE-GB:W2B-034 #013:1>

The regularity of the causative situation holds to the disparity in the balance of power, as indicated in condition (ii). In fact, the causal process embodies a counterfactual relation of the type "if (x) occurs…then (y) follows" (Lewis 2001: 197). The rationale behind the conceptualization of examples (14) and (15) involves a basic law of nature which states that an isolated object naturally tends towards a state of equilibrium, provided that no other object intervenes. There-

fore, any additional energy flow coming from the Causer would *de facto* generate an immediate change in the Causee's state. Neither the appearance of the *columns* in (14), nor the resistance of the *selenium* in (15) will change unless a stronger Causer intervenes to alter this initial state of equilibrium. Throughout the ICE-GB corpus, this mechanical interaction governs the use and meaning of causative MAKE when it occurs in inanimate contexts.

3   *Toward a semantic network of causative MAKE*

The application of this theoretical model on the occurrences of causative MAKE in the ICE-GB corpus offers a fine-grained and quantitative approach to the verb's semantics. Table 1, below, presents the distribution of the senses of causative MAKE in the ICE-GB corpus.

Table 1:   Distribution of the senses of causative MAKE in the ICE-GB corpus

Meaning	Frequency	Percentage
Coercive	23	19.65
Directive	16	13.67
Implicative	30	25.64
Effective	15	12.82
Control	12	10.25
Mechanical	21	17.95
Total	117	99.98

Drawing upon this corpus study, I propose the following semantic network for the occurrences of causative MAKE in the ICE-GB corpora (Figure 1):
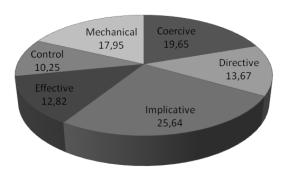
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MAKE

Figure 1: Semantic network of causative MAKE in the ICE-GB corpus

The data in Table 1 and Figure 1 show that causative MAKE is a highly polyse-mous verb which conveys a cluster of different readings, depending on the lexi-cal and conceptual context of its use. More surprisingly, this study overturns the widely-shared assumption that MAKE is a coercive verb (Quirk *et al*. 1985; Wierzbicka 1998; Shibatani 2002; Dixon 2005, among others). Not only is coer-cion just a possible sense of causative MAKE, it is also far from being the most frequent one. In fact, coercion is only the second most commonly occurring use of causative MAKE with a frequency ratio almost equal to that of the mechani-cal reading. The implicative reading accounts for a quarter of the uses of caus-ative MAKE throughout the ICE-GB corpus. This means that causative MAKE tends to occur more frequently in lexical contexts where an inanimate Causer impinges on an animate Causee and produces a beneficial change in the latter's initial tendency.

4   Conclusion

The semantics of causative MAKE hinges on the distribution of its lexical fig-ures and conceptual properties. The present study is an attempt at targeting sense distinctions of causative MAKE motivated strongly or exclusively by differ-ences in lexical features and conceptual considerations of the causative situa-tion. The plausibility of this analysis stresses the accuracy of Cruse's (1986: 1)

statement that "the semantic properties of a lexical item are fully reflected in appropriate aspects of the relations it contracts with actual and potential contexts". In fact, the study of the verb's distributional characteristics reveals many if not most of its semantic and functional properties.

Contrary to the well-known animacy feature, the elaboration of the pleasantness parameter could be a matter of debate. However, the common characterization of human action as goal-oriented and the widely-shared distinction between 'intentional causatives' and 'accidental causatives' both support the soundness of this analysis. What is intentionality if not the pursuit of a desired end?

Notes

1. I will ignore:
   • Uses of MAKE as a generic creation verb (i.e. make ice cream, make a card, etc.);
   • Uses of MAKE with an NP and adjectival complement (i.e. make me sick, make me afraid);
   • Uses of MAKE with two NP complements (i.e. make him president, made her a widow).
2. The ICE-GB contains one million words of spoken and written British English from the 1990s.
3. I will consider, for the purpose of this paper, animacy as a specific figure of the human beings. Animals and natural forces will be treated as [- animate]. Therefore [± animate] is to be interpreted solely as [± human].
4. In this context, the use of MAKE instead of FORCE would be totally acceptable: 'Pitt was simply using his star power to *make* the celebrity press cover poverty and disease'.
5. Implication is "a logical relation connecting any finite item with that which follows from it" (Haserot 1932: 497).
6. Due to the inanimate nature of the participants, the evaluation of the causal process is irrelevant.

References

Chatti, Sami. 2009. Semantics of periphrastic causation. Unpublished Ph.D. thesis. Sorbonne Nouvelle University.

Comrie, Bernard. 1985. Causative verb formation and other verb-deriving morphology. In T. Shopen (ed.). *Language typology and syntactic description*, 309–348. Cambridge: Cambridge University Press.

Croft, William. 1991. *Syntactic categories and grammatical relations: The cognitive organization of information*. Chicago: University of Chicago Press.

Croft, William. 2009. Connecting frames and constructions: A case study of *eat* and *feed*. *Constructions and Frames* 1: 7–28.

Cruse, David Alan. 1986. *Semantics*. Cambridge: Cambridge University Press.

Dixon, Robert Ward. 2000. A typology of causatives: Form, syntax and meaning. In R. M. W. Dixon (ed.). *Changing valency: Case studies in transitivity*, 30–83. Cambridge: Cambridge University Press.

Dixon, Robert. M. W. 2005. *A new approach to English grammar on semantic principles*. Oxford: Oxford University Press.

Duffley, Patrick. 1992. *The English infinitive*. London and New York: Longman.

Haserot, Francis Samuel. 1932. *Essays on the logic of being*. New York: Macmillan.

Khalifa, Jean-Charles. 2006. Pour une cartographie des causatifs en anglais contemporain. *Corela* 4: 42–58.

Lakoff, George and Mark Johnson. 1980. *Metaphors we live by*. Chicago: University of Chicago Press.

Langacker, Ronald William. 1987. *Foundations of cognitive grammar*. Volume I: *Theoretical prerequisites*. Stanford: Stanford University Press.

Langacker, Ronald William. 1999. *Grammar and conceptualization*. Berlin and New York: Mouton de Gruyter.

Lewis, David. 2001. *Counterfactuals*. Malden: Blackwell.

Nedjalkov, Vladimir and Georgij Silnitsky. 1973. The typology of morphological and lexical causatives. In F. Kieffer (ed.). *Trends in Soviet theoretical linguistics*, 1–32. Berlin: Reidel.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech and Jan Svartvik. 1985. *A comprehensive grammar of the English language*. London: Longman.

Rice, Keren. 2000. Voice and valency in the Athapaskan family. In R. M. W. Dixon and A. Aikhenvald (eds.). *Changing valency*, 173–235. Cambridge: Cambridge University Press.

Shibatani, Masayoshi. 1976. The grammar of causative constructions: A conspectus. In M. Shibatani (ed.). *Syntax and semantics* 6, 1–42. New York: Academic Press.

Shibatani, Masayoshi. 2002. The causative continuum. In M. Shibatani (ed.). *The grammar of causation and interpersonal manipulation*, 136–177. Philadelphia: John Benjamins.

Talmy, Leonard. 1976. Semantic causative types. In M. Shibatani (ed.). *Syntax and semantics* 6, 43–116. New York: Academic Press.

Talmy, Leonard. 2000. *Toward a cognitive semantics*. Vol. 1. Cambridge, Mass: MIT Press.

Verhagen, Arie and Suzanne Kemmer. 1997. Interaction and causation: Causative constructions in modern standard Dutch. *Journal of Pragmatics* 27: 61–82.

Wierzbicka, Anna. 1975. Why 'kill' does not mean 'cause to die': The semantics of action sentences. *Foundations of Language* 13: 491–528.

Wierzbicka, Anna. 1998. The semantics of English causative constructions in a universal-typological perspective. In M. Tomassello (ed.). *The new psychology of language: Cognitive and functional approaches to language structure*, 113–153. New Jersey and London: Lawrence Erlbaum.

Wolff, Phillip. 2008. Dynamics and the perception of causal events. In T. Shipley and J. Zacks (eds.). *Understanding events: How humans see, represent, and act on events*, 555–587. Oxford: Oxford University Press.

Wolff, Phillip, Grace Song and David Driscoll. 2002. Models of causation and causal verbs. In M. Andronis, C. Ball, H. Elston and S. Neuval (eds.). *Papers from the 37th Meeting of the Chicago Linguistics Society, Main Session.* Vol. 1, 607–622. Chicago: Chicago Linguistics Society.