

The metaphoric grounding of grammar: the modal construction with *give* in Brazilian Portuguese

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1 The theoretical issue

The hypothesis that grammar is metaphorically grounded is quite a new idea in the relatively short history of linguistics as a disciplinary field (or as an *ordre du discours*, in the terms of Foucault 1970). The largely prevailing view in the field has grammar either as the Saussurean “system” or as the Chomskyan “competence.” In any case, it is seen as a set of formal regularities to be found across (more or less) spontaneous speech, in distinctive opposition to the more anomalous figurative uses, characteristic of special communicative practices, like poetry, politics or philosophy.

In the late nineties, the idea comes to be forcefully stated within the Neural Theory of Language framework (Lakoff to appear, Lakoff 2006, Feldman 2006, Gallese and Lakoff 2005, Feldman and Narayanan 2004, Lakoff and Johnson 1999), which purports that the meaning of all abstract concepts, including grammatical meaning, is metaphorically mapped from the meaning of concrete concepts. The concrete source domain meaning contributes its frame and image-schema structure to the target domain in point. The theory's strongest claim is that concrete concepts are directly embodied in the brain in such a way that the same neural circuitries activated to carry out an action are also activated when that specific action-type is watched or imagined or remembered. As a consequence, the same neural substrate actually used for acting and imagining is also hypothesized to be used for understanding; therefore, understanding would be a form of neural simulation.

In the case of grammatical meaning, the theory takes a strong push from Narayanan's finding that pre-motor “executing-schemas,” independently required to model motor actions in neural computation, have the exact structure to characterize aspectual meaning in grammar (Narayanan 1997). Lakoff has proposed to generalize that rationale in such a way that grammatical meanings would be characterized by “cogs,” that is, secondary neural structures (in the pre-motor cortex),

with no-active connection to a primary area, corresponding to all the primitive image-schemas (Containment, Path, Force-Dynamics, Orientation). Such a hypothesis would account for the general and abstract character of grammatical meanings and for their quasi-universality in the languages of the world.

Much before those bold propositions, the thesis about the metaphorical motivation of grammar had found voice in cognitive linguistics through the pioneering work of Sweetser (1990) on synchronic polysemy and historical change, especially with respect to the modals of English. Adopting Talmy's analysis of root modality in terms of force-dynamic schematization (Talmy 1988; 2000), Sweetser shows that it is possible to unify metaphorically the treatment of all modals in terms of the basic notions of directed forces and barriers, applied not only to the to the sociophysical domain but also to its epistemic and communicative metaphorical extensions.

The process of metaphorization as a major factor in grammaticalization and semantic change (exemplified by the development of grammatical markers for time from constructions with spatial meaning) is largely acknowledged in the literature (Sweetser 1988; Heine, Claudi, and Hunnemeyer 1991; Hopper and Traugott 1993; Bybee, Perkins and Pagliuca 1994).

The thesis, however, has deserved contradiction from two interrelated directions:

- (i) There are scholars who contend that what has been treated as metaphorical change would be better described as a metonymical development, or, at least, as a metonymically-based metaphorical development: that is the position taken in Barcelona (2000), Radden (2000), Goossens (2000), among others.
- (ii) There are other scholars who assert that, given textual evidence, the supposedly metaphorical shift should be analyzed as the conventionalization of pragmatic inferences: that is the position taken in Traugott and Dasher (2005) and Traugott (2006).

Both allegations do not discard the metaphorical analysis, treated as a kind of "side-effect": in fact, specific metaphorical relationships would be the purported endpoint of either the discussed metonymical extensions or the described historical changes. The main argument, however, is that there would be scarce empirical support in favor of the "metaphorical jump."

In this paper, I want to show that there are sufficient analytical reasons to claim metaphorical explanation for the rising of a specific modal construction in Brazilian Portuguese (BP). I will argue further from a usage-based perspective in favor of the critical role of metaphorization in the process of "grammar-constructing (Tomasello 2003; Goldberg 2006)."

2 The modal construction with *dar* in BP

2.1 Brief presentation

Through the last century, in their conversational usages, Brazilian Portuguese speakers developed a modal periphrasis, modeled on canonical uses of the verb *dar* “give”. The novelty of this employment explains its relative rarity in written discourse. Traditional lexicography, usually resistant to the record of new expressions, has not yet included this modal construction in the entries for *dar*: the three leading dictionaries for Brazilian Portuguese are all incomplete regarding this issue. The construction is, however, productive: a study of frequency over uses in the Internet MSN Messenger system shows that the Modal *dar*-constructions correspond to one-tenth of all modals employed. It is also highly frequent in the lyrics of popular songs, a point that illustrates how natural and vernacular the construction sounds. Attested examples are presented below:

- (1)
- (a) *A gente fica na janela que dá pra ver o refeitório.*
we stay at window that gives for see-inf the diner
“If we get to the window, we can see the dining-hall.”
(PEUL-58m10a2efcurs)
 - (b) *Deu pra copiar o arquivo.*
gave for copy-inf the file
“It was possible to copy the file.”
(MSN-m26s/m26s)
 - (c) *Não dá pra ser feliz.*
not gives for be-inf happy
“It is impossible to be happy.”
(GONZAGUINHA:1983)
 - (d) *Dá pra mim mandar o texto mais tarde?*
gives for me-dat send-inf the text more late
“May I send you the text later?”
(MSN-m32s/m26s)

The examples in (1) illustrate the semantic range of the construction: abilitative in (1a; b), root possibility in (1c) and permission in (1d). One rough syntactic representation of the construction would be (2):

- (2) *dá/deu para/prá* NP_{dat} [VP V (inf)]
GIVE/GAVE FOR

As it may have been noticed, the *dar* clause presents the following formal features:

- (i) it appears as a subjectless intransitive clausal pattern;
- (ii) it governs an infinitive clause introduced by the preposition *para*, frequently in its reduced version *pra*, that may combine with pronominal nominative forms, like in *preu* (1st sg), or *proce* (2nd sg) or *prele* (3rd sg) or just precede the dative form *mim*.

2.2 The lexical network with *dar*

As in so many other languages (Newman 1996), the Portuguese verb for “give” is hugely polysemous. The most commonly used lexicographical registers for BP (www.aurelioonline.com.br, www.michaelis.com.br, or www.houaiss.com.br) report more than one hundred different meanings for constructions with *dar*.

I have claimed elsewhere (Salomao 1990), on the grounds of standard linguistic argumentation that those interrelated uses constitute a radial category (in the sense of Lakoff 1987), since they may be described as a cluster of constructions that partly inherit their syntax and their semantics from a central construction, namely the transfer of ownership construction, exemplified below:

- (3) *O Antonio deu o livro dele pra mim.*
the Antonio gave the book his for me
“Antonio gave me his book.”

It is not surprising that the transfer of ownership construction be the central member of this polysemy network: after all, the socio-cognitive saliency of the related scenario accounts for its being the most frequently meaning connected to the GIVING verbs in the world’s languages (Newman 1996). It also figures among the earliest uses in child language (Tomasello 2003 and Goldberg 2006). Therefore, it could be expected, from its cognitive relevance, that this construction would be extended in multiple ways.

More recently, additional arguments have been introduced: first, that language acquisition is strongly item-based (Tomasello 2003, Goldberg 2006), and, second, that the psychologically-relevant linguistic units of storage and access are the units of usage (Bybee and Hopper 2001). It amounts to say, in the case under examination, that the transfer of ownership *dar* construction, for its high frequency, due to its high relevance in the socio-cognitive world, comes to model other more abstract situations and thus motivates the respective idiomatic extensions, as, for example:

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- (4)
- (a) *O Antonio deu um chute na porta.*
the gave a kick in the door
“Antonio kicked the door.”
 - (b) *Ela me deu uma força quando eu adoeci.*
she me gave a force when I got sick
“She helped me a lot when I got sick”
 - (c) *Aula me dá sono.*
lecture me gives sleep
“Lectures leave me sleepy.”

All those expressions that, in different ways, describe actions or experiences are linked to the central construction by the general metaphor ATTRIBUTES ARE POSSESSIONS (Lakoff and Johnson 1999). Other constructions in the network suppose much more intricate inheritance relationships and I will not pursue this point here.

Assuming the cognitive construction grammar framework (Goldberg 1995; 2006), I will represent below the transfer of ownership construction:

CAUSE-RECEIVE	AGT	PAT	DESTINATION
V	POSSESSOR	RESOURCE	RECIPIENT
<i>dar</i>	SUBJ	OBJ	OBL _{pra}

About this representation, I want to point out that:

- (i) the transfer of ownership construction is an instantiation of the caused motion construction;
- (ii) it is lexically represented here filled by the Verb *dar*; and
- (iii) it may also be instantiated with other lexical fillings (as, for example, *doar*, *ceder*, *conceder*, *outorgar*, *presentear*, *entregar*, *oferecer*, *passar*, *transmitir*, and many others).

From a usage based theoretical viewpoint this is not a problem: there is no contradiction in posing as units of the grammar abstract argument structure patterns *and* the lexical filling of those patterns that, in the actual language usage, constitute their most frequent and most natural instantiation (Langacker 1987; 2000; Kemmer and Barlow 2000).

The conceptual frame evoked by the transfer of ownership *dar*-construction is inherently complex in that:

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- (i) it conflates the causing event and its result in a causative pattern; and
- (ii) it binds three conceptual schemas with each other:

FIRST POSSESSOR	=	AGENT	=	SOURCE
RESOURCE	=	PATIENT	=	THEME
RECIPIENT				DESTINATION
POSSESSION SCHEMA	=	ACTION SCHEMA	=	PATH SCHEMA

It is this rich conceptual structure, paired to an elegantly simple syntactic framework that, in alliance to its strong pragmatic relevance, makes the transfer of ownership *dar* construction such a powerful resource as a source domain.

We should not be surprised by the internal complexity of the GIVING scenario: as complex physical actions have been shown to arise from the elaborate choreography of basic primitive actions (Gallese and Lakoff 2005), it may be expected that social patterns of interaction arise as conventionalized blends (Fauconnier and Turner 2002) of independent conceptual structures. As a fact, the description above proposed is possibly a quite bare version of the actual linguistic instantiations, which may require, as demonstrated for Japanese (Newman 1996), the further recruitment of other sociocultural schemas (e.g. politeness conventions).

2.3 The metaphorical motivation of the modal *dar* construction

In this section I will describe the metaphorically motivated enablement *dar* construction and its further generalization as a modal construction.

2.3.1 The conceptual metaphors

2.3.1.1 The ENABLEMENTS ARE POSSESSIONS metaphor

The metaphor ENABLEMENTS ARE POSSESSIONS is a case of the more general metaphor ATTRIBUTES ARE POSSESSIONS, described in Lakoff and Johnson (1999), and exemplified by the expressions in (4):

- (4)
 - (a) *I have a headache.* (The headache is a possession.)
 - (b) *I got a headache.* (Change is acquisition.)
 - (c) *The noise gave me a headache.* (Causation is giving.)

Not all ATTRIBUTES, however, are enabling: *my headache* may work as a Barrier (in the sense of Talmy 1988; 2000) and prevent me from going to a con-

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cert, for example. That is why it is necessary to pose the specific metaphor ENABLEMENTS ARE POSSESSIONS to deal with cases like (5):

- (5)
- (a) *I have enough money for the trip.*
 - (b) *He managed some time to read my paper.*
 - (c) *God give me patience so that I can bear him for one more hour.*

In all the examples in (5), the POSSESSION is a positive resource that empowers the POSSESSOR in such a way that one previous existing difficulty (lack of *money*, or of *time*, or of *patience*) is removed in the pursuit of a GOAL.

It is worthy noting that ENABLEMENTS, conceived metaphorically as POSSESSIONS, are critically distinct from CAUSES: the fact that *I have money* is not a sufficient (although it may be a necessary) condition for *me to travel*. This distinction is accounted for in Talmy's treatment of causation in terms of force-dynamics (Talmy 1988; 2000): within this framework, CAUSES are conceived as DIRECTED FORCES but ENABLEMENTS will be SUPRESSED BARRIERS.

POSSESSIONS ARE ENABLEMENTS motivates in BP an enablement *dar* construction, distinguished from the modal expression, although closely connected to it, exemplified in (6):

- (6)
- (a) *A CAPES me deu uma bolsa pro Doutorado*
the CAPES me gave a scholarship for the doctorate
"CAPES gave me a scholarship for my doctoral studies."
 - (b) *Eu dei uma chance pro Ze prele apresentar sua proposta*
I gave a chance for Ze for him to present his bid
"I gave Ze a chance to present his bid."
 - (c) *Ele me deu mais tempo preu acabar de escrever.*
he me gave more time for I finish-inf of write
"He gave me more time to finish my writing."

Notice that this construction includes in its syntactic expression both the enabled actor (in Talmy's terms, the agonist) and the situation to which the newly-acquired enablement may apply. Notice, also, that the enabling property is construed as a contingent ability, one that is externally transferred to the agonist and so may not be considered as one of his/her inherent capacities.

2.3.1.2 The PURPOSES ARE DESTINATIONS metaphor

This well-studied metaphor integrates one of the two major metaphorical conceptions of event-structure (Lakoff and Johnson 1999) and accounts for cases like (7):

- (7)
- (a) *We are seeing the light at the end of the tunnel.*
(Achieving a purpose is reaching a destination.)
 - (b) *We've come a long way.*
(Amount of progress is distance moved)
 - (c) *We are going nowhere with this.*
(Lack of progress is lack of movement)

The Brazilian Portuguese enablement construction expresses the metaphorically motivated purpose, underlined in the examples in (6). As it may be noticed, the intended situation, when represented as a clause, appears to be an infinitive clause, introduced by the preposition *para/pra*.

In BP, destinations and purposes, being metaphorically related, are marked by the preposition *para/pra*. Consider the following examples (8):

- (8)
- (a) *Ele mudou pra Sao Paulo.*
he moved for Sao Paulo
“He moved to Sao Paulo.” (Sao Paulo is his final destination)
 - (b) *Faz este favor pra mim*
do this favor for me-dat
“Do me a favor” (*pra mim* indicates the beneficiary)
 - (c) *Ele saiu do emprego pra ganhar dinheiro.*
he left from the job for earn-inf money
“He left his job to make money” (purpose clause)

2.3.2 The enablement *dar* construction

The enablement construction inherits structure from the transfer of ownership construction via a metaphorical link (Goldberg 1995). It also combines with the purpose construction to motivate its whole frame.

The enablement *dar* construction is represented as below:

CAUSE-RECEIVE	AGENT	ENABLEMENT	RECIPIENT/ _{BEN}	PURPOSE
V				
<i>dar</i>	SUBJ	OBJ	OBL/ _{pra}	INF CL/ _{pra}

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Through the metaphorical link, the following mappings result:

POSSESSOR / AGENT	—————>	AGENT
POSSESSION	—————>	ENABLEMENT
RECIPIENT	—————>	BENEFICIARY / AGONIST

As it has been pointed out before (Goldberg 2006), Constructions are motivated via inheritance and/or by syntagmatic combination. The enablement *dar* construction inherits frame-structure from transfer of possession and combines with the purpose construction to constitute its own complex syntactic/semantic pairing.

Combined with purpose, the construction allows the following inferences:

- (i) the transferred resource enables the recipient to move to the intended destination;
- (ii) the enabled recipient is an empowered agonist;
- (iii) the shift in the force-dynamics pattern unblocks the path of the agonist.

In its instantiations, it is possible to articulate the sentences in (9), sentence (9b) being the most frequent version of the pair:

- (9)
- (a) *Ele deu força pra mim preu viajar*
he gave force for me-dat for I travel-inf
“He helped me that I could travel.”
 - (b) *Ele deu força preu viajar*
he gave force for I travel
“He helped me that I could travel.”

The difference between the two sentences is that (9a) expresses both the recipient and the subject of the infinitive whereas (9b) only expresses the latter. As indicated by the English translations, the two uses are semantically equivalent, although (9a) might be characterized as the emphatic version. The interesting point worthy mentioning is that, in (9b), we find a kind of syntactic blend predicted in Barlow (2000): the recipient of the *dar* clause and the agonist/subject of the infinitive clause are fused into the same syntactic expression. We could say that what we face here is an iconic reduction: it involves the merger of two distinct syntactic places filled by entities referentially identical and conceptually related.

2.3.3 The generalization to the modal construction

The enablement *dar* construction already conveys a modal meaning: it clearly expresses an abilitative sense that, in the terms of the relevant literature, should be categorized as a kind of root or dynamic modal meaning (Palmer 1986; Nuyts 2006; de Haan 2006). In order to adapt Bybee, Perkins and Pagliuca (1994)'s terminology to Talmy's framework, here assumed, we should say that we are dealing with a case of agonist-oriented modality (instead of their agent-oriented modality). As said before, the abilitative property is acquired by the recipient/agonist and cannot be counted as a case of participant-internal possibility, a category proposed in the semantic map of modality by van der Auwera and Plungian (1998).

It should be mentioned that Bybee, Perkins and Pagliuca (1994) had already reported, on the description of languages like Baluchi, Lahu, Cantonese and Uigur, the development of modal abilitative meanings from lexical expressions of possession.

The abilitative meaning of the enablement construction is expressed in quite precise ways: the construction will not take a subject that could not be understood as an admissible agent/causer or an object that could not be construed as a proper enablement. See the examples in (10) which illustrate those impossibilities:

(10)

- (a) **A bagagem deu uma força pra mim viajar.*
the luggage gave a force for me-dat travel
? "The luggage helped me so that I could travel."
- (b) **O barulho me deu dor de cabeça pra mim viajar.*
the noise me gave headache for me-dat travel
? "The noise gave me a headache so that I could travel."

The modal construction is a generalization over the enablement construction, from which it partly inherits its syntax and its semantics. In this construction, not only the causer goes unnamed, treated as generic or indeterminate, but also the enablement appears as a null object (generic/indeterminate or retrievable from the immediate context). The semantic range of the agonist role is also dramatically increased. The examples in (11) illustrate those characteristics:

(11)

- (a) *Dá pra ele chegar a tempo.*
gives for he arrive-inf to time
"He can arrive in time."
- (b) *Dá pra mim receber os convidados.*

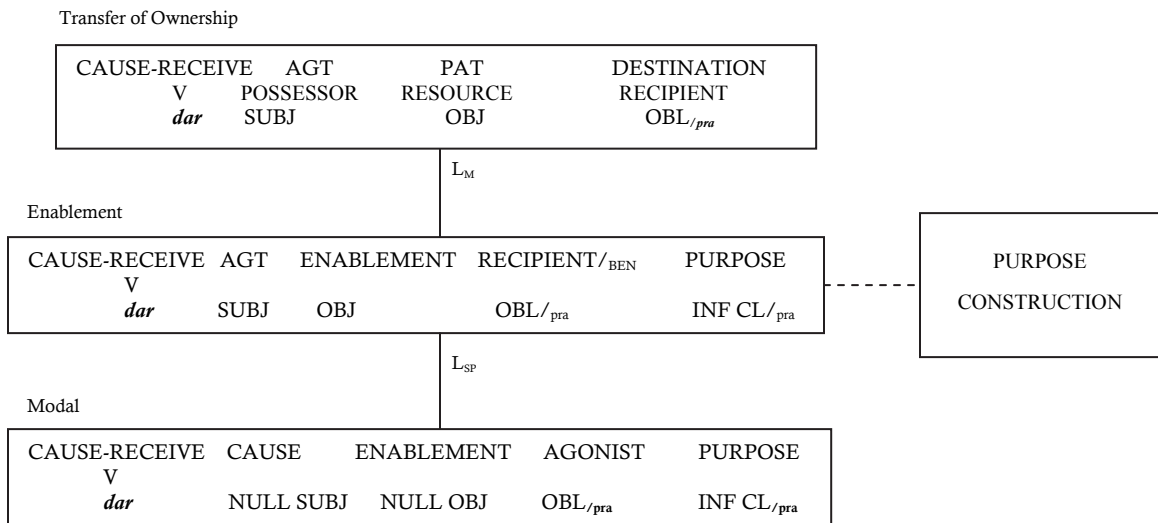
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gives for I-dat receive-inf the guests
 “I can play host to the guests.”

- (c) *Dá prele ta mais calmo agora.*
 gives for he be-inf more calm now
 “He can be more relaxed now.”
- (d) *Dá prele ser derrotado na eleição.*
 gives for he beinf defeated in the election
 “He can be defeated in the next elections.”
- (e) *Dá pra cerveja tá gelada antes do churrasco.*
 gives for beer be-inf cold before of the barbecue
 “The beer can be cold before the barbecue.”

In the examples (11), sentences (a) and (b), with an agent agonist, may be understood as conveying an abilitative sense. However, sentence (c), with an experiencer as agonist, and sentences (d) and (e), with a patient in the agonist slot, are better interpreted as expressing a root possibility meaning.

The representation of the modal *dar* construction, connected to the enablement *dar* construction through a subpart link (Goldberg 1995; 2006), is the following:



As we see, the modal construction is motivated from the transfer of ownership construction through multiple inheritance (Goldberg 1995; 2006).

It is a defining characteristic of modal constructions to display greater semantic generality. Dascher and Traugott (2005:109) point out that English modal

verbs, unlike main verbs, impose no selectional restrictions on their subjects or the verbs that follow them. As the BP modal construction is a much younger development than the English modal verbs, the perusal of frequency data reveals a more restrained development. Actually, the original abilitative meaning with agentive agonists is still largely the most common usage of the modal *dar* construction: a frequency study over spoken discourse and Internet *MSN Messenger* usage shows that the abilitative meaning occurred 63% of the time, the root possibility meaning appeared 27%, and the permission sense happened 10% of all times that the modal *dar* construction was employed (Velloso 2007).

The above mentioned frequency pattern suggests a gradual spreading of the semantic range of the construction, which follows the predictions about the process of grammaticalization of modality markers (Bybee, Perkins and Pagliucca 1994; van der Auwera and Plungian 1998; Traugott 2006):

ABILITY > ROOT POSSIBILITY > PERMISSION

Besides the illustrated convergence with other grammaticalization patterns, the modal *dar* construction also exhibits the characteristic higher degree of abstraction that identifies grammatical meaning: the cause and the enablement arguments in its conceptual frame are understood to be generic causes and enablements that need not to be specified. Even the agonist may be left without mention when it is the case that it is universally quantified, as in (12):

- (12) *Da pra pegar uma praia mais logo.*
 gives for pick up a beach more soon
 “It is possible for everyone to go to the beach in a while.”

The increased generalization also correlates with increased *subjectification*, as predicted by Traugott (1982; 1985; Langacker 1990; Traugott and Dasher 2005): several of the examined uses have an unequivocal evaluative flavor, as in (13):

- (13)
- (a) *Dá pra ele ser médico.*
 gives for he be-inf doctor
 “It may be that he becomes a doctor.”
 - (b) *Ainda dá pra chover mais logo.*
 still gives for rain-inf more soon
 “It is quite possible that it will rain soon.”

Sentences (13) sound like predictions, conveying a future meaning, also characteristic of modal expressions.

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Furthermore, we should mention the severe syntactic pruning of the modal construction: its syntactic framework omits systematically subject and object and, eventually, also the agonist. The strong reduction imposed on the enablement construction syntax is another feature of the ongoing grammaticalization process.

Finally, we may say that the impersonal *dar* clause works as a mental space builder, introducing the modal space specified by the infinitive purpose clause.

3. Conclusions

In this paper, I have illustrated the development of a young modal construction in Brazilian Portuguese and described its immediate connections to the constructional network in that language: the modal construction arises as a generalization of the enablement *dar* construction through syntactical reduction and loss of semantic restrictions.

I have specifically shown that the enablement construction is metaphorically linked to the central (transfer of ownership) construction via the conceptual metaphor POSSESSIONS ARE ENABLEMENTS, a case of the general metaphor for event-structure that ATTRIBUTES ARE POSSESSIONS.

I have also shown that the enablement construction is syntagmatically motivated via a combination with the purpose construction. The whole frame of the enablement construction blends the ENABLEMENT AS TRANSFER OF OWNERSHIP metaphor and the PURPOSE AS DESTINATION metaphor. All the inferences that follow from the construction are mapped from this composite source domain. We may then assert that, in the case under examination, the metaphorical relationship is established at the beginning of the process of grammaticalization, not at its endpoint. There is no doubt that the abilitative modal meaning (the first modal sense to appear in this situation) develops from a metaphorical mapping.

It may be claimed that the process of generalization from the enablement construction to the modal construction involves the conventionalization of pragmatic inferences in the spreading of its use and consequent entrenchment. It should be argued, however, that such inferences are made possible precisely by the “metaphorical jump.”

Usage-based approaches to language acquisition and to grammatical explanation have demonstrated that grammatical abstract patterns arise, through analogy, from the frequent use of lexically-specified constructions: those linguistic units contribute their lexical and syntactical expression and their corresponding generic conceptual schemas to the grammar. In the case of the modal construction, the enablement construction contributes its syntactic frame and the metaphorical inferences drawn from its source-domain.

The above mentioned conclusion is also compatible with the hypothesis about cogs, developed within the Neural Theory of Language framework: the ab-

stract grammatical meaning corresponds to the most schematic core of the basic human experiences; in our specific case, the central social experience of disposing of goods for free.

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