More on objectless transitives and ergativization patterns in English

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Abstract

In two relatively recent papers, Goldberg provides a valuable analysis of transitive constructions without an overt object, as in *She contributed to the Leukemia Foundation*. Goldberg correctly stresses that this construction, which she terms the *Deprofiled Object Construction* has a clear semantic value; she further discusses some of the factors that may bring about the deemphasizing of the object (repeated or habitual actions, politeness strategies, etc.) as well as some (lexical) factors that prevent object omission. It is especially the latter issue for which the present paper offers a more nuanced, and at the same time more general, alternative. In our approach, we retain the constructional value but place it in a larger paradigmatic perspective, the opposition between the transitive and the ergative paradigms that structure the English grammar of causative events. Our cognitive lexico-paradigmatic approach is corroborated by ample corpus data, which at the same time brings in important nuances, revealing the intricate and contextually variable interaction between constructional and lexical semantics and it does so in a way different from Goldberg's analysis.

0. Introduction

This paper discusses a particular construction in English that has already attracted much attention, i.e., the use of a lexical causative verb with omitted patient argument, as in *Soldiers trained to kill Ø*.[1] Most of the analyses in the literature focus their attention on the specific **lexical properties** of either the verb (cf. Rice 1988) or the object noun phrase (cf. Fillmore 1986; Cornish, to appear) as crucial factors allowing object omission. On the other end of the spectrum, two recent analyses by Goldberg (2001, to appear) present a constructional approach to the omission of the Patient argument, insisting on the semantics of the construction itself as an explanatory factor. Much to my appreciation, her analysis is remarkably compatible with my own study of these constructions

[1] An earlier version of this paper, written in French, appeared as Lemmens (2005); there have been some revisions and changes, and the analysis of *break* (section 4.2) has not been published before. I thank Doris Schönefeld for pertinent comments on earlier versions of this paper. Responsibility of the final product is of course mine.

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(which I termed "objectless transitives", see Lemmens 1998a). While Goldberg and my account are thus largely compatible with respect to the semantics of the construction itself, they diverge in the way they account for its distribution.

In fact, my analysis combines the two approaches by considering the meaning of the verb **in interaction with** the semantics of the construction whose distribution I explain following the systemic-functional analysis that argues that the grammar of causatives is governed by two different models of causality, the transitive and the ergative. The present paper expands my earlier work and shows that adopting such a lexico-paradigmatic view succeeds in refining Goldberg's analysis as well as other, more lexically-oriented, analyses.

As will become apparent, this paper considers different kinds of one-argument constructions. The larger theoretical question that emerges from this discussion is whether it is in fact legitimate to postulate different kinds of formally identical constructions (i.e., taking only one argument) based on the assumed valence of a verb, if we only arrive at this valence through the abstraction over the constructions the verb occurs in.[2] This issue probes right into the interaction between constructional and verbal semantics, and their respective conceptual weight in the linguistic system. Related to this question is the one concerning the status of alternations (correspondences between constructions sharing the same verb) as opposed to the status of surface generalizations that Goldberg (2002) argues for saying that "each argument structure is best analyzed on its own terms, without relying on explicit or implicit reference to a possible alternative paraphrase" (2002: 329). Within the confines of this paper, a detailed discussion will not be feasible, but some critical thoughts will be offered in the concluding remarks.

The structure of the paper is as follows. In the first section of this paper, I will look more closely at the properties of the construction without over object, as they have been discussed in the literature. The second section concentrates on Goldberg's constructional analysis of object

[2] I thank one of the anonymous reviewers of this paper for having formulated this question so clearly.

omission. Section 3 briefly presents the paradigmatic opposition between (prototypically) ergative and (prototypically) transitive verbs, which allows further generalizations not present in Goldberg's analysis. In the fourth section, I present a short corpus-based empirical evaluation of the suggested hypotheses.

1. Patient arguments and omissibility

In linguistic analyses, a lexical causative verb is typically regarded as encoding a change of state that affects, in one way or another, the patient argument. Examples cited are often of the type *The cat killed the mouse*, *Floyd broke the glass* or *I dried the dishes* where *the mouse*, *the glass* and *the dishes* change in the course of the event, i.e., they go from one state (alive, whole, wet) to another (dead, broken, dry). In these clear-cut cases, the general meaning of the causative verb can be paraphrased as "cause to become X". However, as Goldberg (2001: 504, fn.1) points out, using the notion of change-of-state to define a causative verb might be tricky, as the change of state may not be the one expressed by the verb, which she illustrates with the example *I dry-cleaned this shirt, but it is not really clean*. In this case, the "cause to become clean" does not apply.[3]

Moreover, in the vast literature on verb alternations, the notion of change-of-state has often been "abused" to explain alternations that are mutually exclusive, e.g., the causative-inchoative alternation vs. the middle alternation.[4]

Even if the notion of change-of-state is somewhat slippery, let us accept for the time being that it nicely explains why the participant undergoing the change cannot be omitted from the construction, since it is crucially involved in the change encoded by the lexical causative. For

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[3] One reviewer points out that by doing so Goldberg mixes up the truth-value of a sentence with the semantics of the construction since "the fact that a subordinate clause modifies the truth value of a main clause is completely irrespective of the semantics of the construction". However, Goldberg is not talking here about the semantics of the construction, but that of the verb and whether its semantic structure incorporates a change-of-state. She does have a point that in this respect *dry-clean* differs from *clean*. See Lemmens (1998: 36-7, 78-82) for other reasons why the notion "change of state" as it is often used in linguistic analyses is inadequate.

[4] See Lemmens (1998a: 36-37 and 78-82) for a critical discussion of the change-of-state criterion.

instance, in reference to the same events as the examples mentioned above, object omission is ungrammatical: **The cat killed*, **Floyd broke*, **I dried*. However, it has been observed in the literature that causative verbs can and do occur without an overt object, as in the following examples.

(1a) Mary usually drinks a martini before lunch.
(1b) Mary drinks Ø.

(2a) These soldiers killed innocent citizens.
(2b) These soldiers are trained to kill Ø.

There is a consensus in the literature that even in case of omission, the object is nevertheless tacitly assumed.[5] Levin (1993: 33) nicely summarizes the issue:

> Despite the lack of overt direct object in the intransitive variant, the verb in this variant is understood to have as object something that qualifies as a typical object of the verb; however, there is some discussion concerning how to best characterize this interpretation. There is also some debate about whether the understood object is or is not explicitly represented at some level of syntactic or lexical representation.

The unexpressed patient is interpreted as indefinite and non-specific, and as some say, predicted by verb. In (1b), for instance, the understood object is alcoholic beverages; in (2b), a human being. As Rice (1988: 203) puts it, "objects that can be omitted tend to be those whose lexical content is most probable given the meaning of the verb".

As is apparent from this quote, Rice (as many others) looks at the issue essentially from the lexical end and tries to prove that the degree of specificity of both verb and object determines the possibility of object omission. She points out that very general verbs that sustain a wide variety of complements (e.g., *make*) tend to require overt objects. Also verbs that are quite specific with regard to their object or reveal something about the manner in which the action is

[5] See, among others, Mittwoch (1971, 1982); Fillmore (1986); Fellbaum & Kegl (1989); Rice (1988).

carried out (e.g., *John puckered his lips* or *Mary manicured her nails*) almost always require overt objects. Thus, Rice says, object omission occurs mostly when the verb is moderately neutral and the range of objects is restricted to one or two possible semantic domains. Nevertheless, she does notice that transitive verbs that usually do not allow an objectless construction may occur with their objects omitted[6]:

(3a) Hemingway ate, drank, and smoked too much.
(3b) Scott hammers and saws like a pro.
(3c) Bill always interrupts.
(3d) The freedom-fighting contra rebels kidnap, rape, torture, and murder.
(Rice 1988:206)

To account for these examples, Rice observes that they "readily evoke general semantic frames or scenarios, the particular object is fairly unimportant as the pragmatic focus is on the activity itself" (1988: 206). Within a particular semantic frame, such as that of war and/or (organized) violence underlying (3d), it is possible to identify the omitted object. In earlier work I have taken this observation by Rice as the key to the semantics of an objectless transitive construction:

> I argue that this 'pragmatic focus on the activity' is pivotal to the meaning of the objectless transitive. Hence, it comes as no surprise that, as a rule, they function as general statements, not tied to any specific event. […] For this reason, it can be claimed that, in a sense, the objectless transitive is the 'Actor-focusing' counterpart of the [Patient]-focusing middle construction, as both constructions are not tied to individual events but imply a general comment on the process. In essence, then, the objectless transitive focuses on the general characteristics of the act and cannot, in principle, refer exclusively to a specific event. Even when tied to a specific act, the objectless transitive positions the act in a more general perspective […] taking the participants' actions to the more general plane of role (stereo)types within a given frame. (Lemmens 1998a: 142)

6 The first of these examples may not be such a good example, as *too much* seems to have object qualities. I thank Doris Schönefeld for drawing my attention to this.

There are a number of typical contexts that give rise to such generalized encoding of events or to the evocation of (more general or more specific) frames and role stereotypes. One is that of (habitual) repetitions of the action, as in some of Rice's examples above (notice the use of *too much*, *always*, and the like). Another context is the enumeration of actions as in Rice's last example. Bordignon (2003) mentions a similar example in French that in its English translation works very well too:

(4a) Robot multifonction MAGIMIX. 23 fonctions: hache menu, pile, broie, mixe, homogénéise, émulsionne, mélange, fouette, pétrit, bat, coupe, râpe fin et moyen, presse les agrumes…
(Bordignon 2003: 217)

(4b) Robot multifunction MAGIMIX. 23 functions: chops thinly, crushes, grinds, mixes, homogenizes, emulsifies, blends, whips, kneads, beats, cuts, shreds thin and medium, squeezes citrus fruits …

French and English are not fully alike in their transitivity realizations, yet some parallels can be drawn, and this occurrence of Patient omission is strikingly similar.[7] Notice how the last verb in the series does not omit its object; and also in English it feels more appropriate to preserve it. The reason is that this use of *squeeze* is quite specific in its selection of arguments (only citrus fruits) whereas the other verbs do not have such high specification (basically their Patient can be any food that can be chopped, shredded, etc.).

In addition to exemplifying the 'verb chaining' that typifies the objectless construction, example (4) illustrates another feature that motivates the omission of the object – one not mentioned by either Rice or Goldberg, viz. the Instrument Agent, i.e. the promotion to Agent of what is typically (or factually) the Instrument, like appliances or tools. Here are two additional examples (English/French):

[7] As Larjavaara (2000) points out, French omits specific anaphoric objects more easily than English.

(5a) They went straight from trains to "showers" under Zyklon B, which killed in minutes…
(Wall Street Journal corpus)

(5b) Ce couteau ne coupe pas.
This knife does not cut.
(Bordignon 2003: 181)

It should be noted that the distinction between Agent and Instrument is not always that simple. It is clearly beyond the scope of this paper, to enter into a full discussion here. I follow Nishimura (1993) who goes against the classical role preservation principle (once an Instrument, always an Instrument) and argues, quite convincingly, that subjects like those in (4) and (5) are construed as the Agents of the events, albeit non-prototypical ones. This choice is usually well-motivated, as Schlesinger (1989: 191) points out. One of the motivations for recategorizing Instruments as Agents is when the action's progression crucially depends on the Instrument's properties. Coding the gas or the knife as Agents in the examples above profiles their efficiency, or lack thereof, for the actions of killing and cutting respectively, even if our real world knowledge tells us that there is a primary (human) Agent initiating the action and manipulating the Instrument. Indeed, such sentences often contain explicit comments on the (un)feasibility of the process, cf. *in minutes* in (5a) or the negative particle *not* in (5b). The objectless construction further enforces the generic character of the utterance.

The contextual salience of the Agent is in sharp contrast to the non-salience of the omitted patient. This is why definite object NPs are less likely to be omitted (although omission may even be possible here), not because they are definite, but because their definiteness is the logical outcome of some degree of salience in the context at hand, a characteristic that is in strong conflict with the semantics of patient omission. A particular sub-case of the above mentioned enumeration of actions is that of contrasting actions by different Agents, i.e., patterns of the type [X $VERB_1$ *conj* Y $VERB_2$] as illustrated by the following examples, taken again from Rice (1988: 206).

(6a) Martha cooked and cleaned while Mary entertained.
(6b) Billy Jo washed and Bobby Jo dried.

This pattern is often found in the characterization of roles (in the sense of 'division of labour') which can be seen as complementary, and thus positions the actions in a more general perspective.

To summarize, my earlier work sees Rice's notion of pragmatic focus on the activity as pivotal to the semantics of the objectless construction, which can be characterized as providing a maximal focus on the *Agent-Process* unit, mostly implying a general statement which abstracts away from individual instances. As has been pointed out, there are a number of typical patterns that fulfil that function that are naturally compatible with (and conducive to) the construction's meaning, such as repetition, action series and/or opposition, or various types of "modal" comments, e.g., the *in minutes* in (5a) or the negation in (5b).

2. Goldberg's Deprofiled Object Construction

Working in the framework of *Construction Grammar* Goldberg sets herself the goal of finding "a full understanding of the way rich lexical meaning interacts with discourse and constructional factors" (Goldberg 2001: 522). Fully in line with my earlier analysis (yet independent of it), Goldberg (2001: 514) formulates a principle of Patient Omission under Low Discourse Prominence:

> Omission of the patient argument is possible when the patient argument is construed to be deemphasized in the discourse vis a vis the action. That is, omission is possible when the patient argument is not topical (or focal) in the discourse, and the action is particularly emphasized (via repetition, strong affective stance, discourse topicality, contrastive focus, etc.).

Goldberg takes issue with Rice's analysis in terms of pragmatic focus, as she argues that

> the increased emphasis on the actions is not captured by the notion of focus. […] It seems that a different dimension of discourse prominence is required; the action is somehow emphasized in the discourse, but not necessarily by virtue of being focal (2001: 513)

I agree with Goldberg's observation that the action is not focal, but – at least as I understand it – Rice did not use the term "pragmatic focus" in this way, but rather as a notion similar to Goldberg's idea of "emphasis", i.e., "a cover term for several different ways in which an action is construed to be especially prominent in the discourse" (Goldberg, to appear).[8] It is precisely the compulsory co-occurrence of deemphasis of the Patient and emphasis of the action that is essential to the objectless transitive or the "Deprofiled Object Construction", as Goldberg (to appear) calls it. (In this paper the term "objectless transitive" will continue to be used.)

As to the means of emphasizing an activity, Goldberg's Principle of Omission mentions strategies similar to the ones already discussed: repetition, contrastive focus, discourse topicality, etc. However, she points out an additional motivation factor that may have contributed to the grammaticalization of this construction for certain verbs, viz. politeness strategies. One particular subclass for which this is true are verbs of donating, such as *donate* or *contribute*.[9] A construction not specifying how much one has contributed is often considered more polite than one that does, as shown by the following pair:

(7a) She contributed $1000 to the Leukemia Foundation.
(Goldberg, to appear)
(7b) She contributed to the Leukemia Foundation.

As Goldberg points out, "[t]he construction allows a means of making implicit an argument that would be indiscreet to mention" (Goldberg, to appear). It should be clear that also here the actual semantic import of the construction is essentially the same as in the other contexts,

[8] Quotations from this paper are taken from the on-line version (see References), so no page numbers are given.

[9] This type of verb has already been discussed by Fillmore (1986), but not in terms of politeness strategies.

i.e., it renders the action component more salient and deprofiles the Patient. The politeness strategy "is proposed to explain why it is natural for such a construction to exist" (ibid).[10] Interestingly, Goldberg points out, while *give* generally does not allow an omitted object construction, it does allow it when the verb acquires the meaning "donate":

(8a) *She gave to the girl.
(Goldberg, to appear)
(8b) She gave to the Leukemia Foundation.

Goldberg makes a case, correctly so, for the existence of the objectless transitive as a grammaticalized construction in the grammar of English, which in some cases may be motivated by politeness and semantic recoverability. She furthermore points out that "speakers need to learn that it is available and which classes of verbs can appear in it" (ibid.). Also, she observes, for some verbs, such as *eat*, *drink*, or *sing*, the frequent occurrence in an objectless construction in generic contexts with habitual interpretation (precisely one that sanctions this construction) "has apparently led to the grammaticalization of a lexical option for these verbs, whereby they could appear intransitively in less constrained contexts" (ibid.). In other words, the objectless uses are reinterpreted as an intransitive lexical option instead of being licensed by specific discourse constraints that motivate the objectless transitive. Taking this view, Goldberg arrives at an explanation why less frequent near-synonyms of the above verbs do not easily sanction object omission (indicated by #):

(9a) Pat drank/#imbibed last night
(Goldberg, to appear)
(9b) Pat read/#perused last night.
(9c) Pat wrote/#drafted last night.

[10] Larjavaara (2000: 53) mentions Alvarez (1968) who observed that taboo words form an important subclass of omitted objects in French; this seamlessly fits in the politeness strategy account presented here.

These verbs may occur in an objectless transitive, but clearly not as frequently as the other ones (since generally less frequent), and thus have not been subject to a reanalysis of the objectless construction as a lexical option. The idea of usage-based grammaticalization as argued for by Goldberg provides a unified account of why for some verbs the omission of the object is indeed more common than for others. In other cases, the semantics of the verb itself may render it more difficult to furnish a context that sanctions an omitted object. This is nicely illustrated by my earlier corpus-based analysis of a subset of causatives, verbs of killing (Lemmens 1998a, esp. 140ff). In that study, I analysed some 4,000 sentences with verbs of killing drawn from text corpora (fiction and non-fiction, AmE and BrE) and 11,000 attestations drawn from the Oxford English Dictionary. Verbs such as *kill*, *murder*, *execute*, *butcher* etc. can be regarded as prototypical causatives and it should thus be possible to devise contexts that sanction the omission of the object, as illustrated by the following examples:

(10a) "Maybe he has gone insane," said Justin. "Of course, in that case, he could have murdered, too, I suppose."
(Contemporary American short stories)11

(10b) "And which grants me powers like a god's, the power to slay!"
(ibid.)

(10c) "Old enough to bleed, old enough to butcher"
(Leuven Drama corpus)

(10d) The anguished serial killer turns himself in to police and says, "Stop me before I kill again."
(WSJ)

However, while the construction is relatively common with *kill* (between 5-10% for the different corpora), it rarely occurs with the other verbs, the above examples nearly exhaust all the objectless constructions attested in the text corpora (there is only one more with *murder*). In the

11 These examples are drawn from a collection of American short stories published in the free electronic magazines *Athene* (http://www.etext.org/zines/Athene), *Quanta* (http://www.etext.org/zines/Quanta), and *Intertext* (http://www.intertext.com/magazine).

WSJ corpus (the only non-fiction corpus in our sample of text corpora), *kill* is the only verb for which an objectless construction has been attested. This clearly shows that lexical matters do count as well. Possibly, for verbs such as *assassinate* or *massacre* there is a stronger Patient-orientation, as they incorporate a more salient reference to Patients that are considered "important" in some socio-economical context (*assassinate*) or to a high number of Patients (*massacre*). In these cases, integrating the semantics of the verb with that of the objectless construction would require greater cognitive effort, which may explain the overall low frequency of the objectless construction in the corpus. The verb *kill* has a less specific semantic structure (not coincidentally, it is the common denominator of this lexical field) which renders it more readily available for this construction. Rice's conclusion that "neither extremely schematic nor extremely specific verb-complement pairs encourage object omission" (1988: 207) can be interpreted as identifying the *prototypical* situation for this construction.

So, even though less common, the objectless construction is still possible with these verbs. Conversely, there are verbs, like *open*, *break* or *starve* for which the objectless construction is hardly ever possible even in contexts that would normally sanction the construction. The following examples, paraphrases of some of Rice's examples mentioned earlier, are awkward, to say the least:

(11a) ?Hemingway broke too much.
(11b) Scott opens and closes {doors/?Ø} like a pro.
(11c) The freedom-fighting contra rebels kidnap, rape, torture, and ?drown.

How can this be explained? Goldberg does it by drawing further on the lexical properties of the verb. She points out, for instance, that the verb *recycle* generally does not present any problems for the objectless construction (e.g., *That man always recycles*), since "[t]he patient argument, the garbage, is in many contexts less relevant in that we often don't care what particular

items are recycled" (Goldberg 2001: 512). However, the situation is quite different, she says, for *break*:

> Bubbles, TVs, breadsticks, and hearts break in very different ways and with very different consequences. The patient argument supplies much of the relevant information. Thus it is hard to imagine a context in which there is a very strong discourse emphasis on the action of breaking and relatively little on what was broken. (ibid.)

Hence, it is generally impossible to omit the object here: **That man always breaks*.

While it is clear that *break* generally does not permit the objectless construction, the question is whether Goldberg's explanation is entirely correct. Two critical comments can be suggested.

First, if we look at the semantic coverage of a verb like *kill*, we also note a wide variety of caused processes: the interaction between participants is quite different for *kill a human being* or *kill weeds*, or *a bill* or *a production process*. Paraphrasing Goldberg's argument, we could say that human beings, plants, bills and processes "die" in different ways and with different consequences. Nevertheless, this verb does allow omission of the Patient, and more so than more specific verbs of killing. At the same time, when the object of *kill* is omitted, it generally refers to an event in which a human being is killed, as in example (10d) *Stop me before I kill again*, or at most a living being; contexts where the omitted object concerns plants, bills or processes are much harder, if not impossible, to construe. Notice that this observation does not figure in Goldberg's argument at all, where it seems to be of less concern.

Secondly, a verb such as *drown* is more specific in the particulars of the event, yet it does not allow omission of the patient either: *John drowned the ants* does not alternate with an objectless construction **John drowned*. The latter construction can occur, yet will immediately be interpreted as the non-causative (often also somewhat infelicitously called "inchoative") counterpart of *Somebody drowned John*. This already reveals that what is at issue here is not so

much a lexical matter, as Goldberg suggests, but – once again – a systematic *grammatical* opposition. The next section will discuss this paradigmatic opposition in more detail, after which I will be in a position to examine corpus data revealing the intricate interaction between lexical and constructional semantics. By doing so, the objectless transitive is placed in a broader framework that augments Goldberg's and Rice's pertinent analyses.

3. A lexical-paradigmatic view on Patient Omission

The present study subscribes to Davidse's (1999 [1991]) view that the English grammar of actions and events is governed by two distinct causative models, viz. the transitive and ergative paradigms. These two models represent different ways of conceptualizing causative processes, implying different conceptual centres and different participant relations (in Hallidayan terms, different "inherent voice" relations). The full details of this model should not concern us here; what is essential for our purposes is that it distinguishes two large families of alternations (paradigmatic perspective) and how they tie in with different verbs (lexical perspective).

Applied to the objectless construction, this boils down to the fact that in English (as in all the Germanic languages) there are two large classes of verbs: (i) **transitive** verbs like *kill*, *pull*, or *make* that may occur without an object and (ii) **ergative** verbs like *break*, *open* or *burst* that in principle cannot.[12] The transitive verbs encode an event where the Agent is the central participant, who targets his action against a Patient; in an ergative construal of an event, the second participant, which Davidse calls the "Medium", is the central element, having the potential of self-instigating the event although a secondary Instigator can be added to the event (e.g., *John broke the glass*).[13]

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12 In generative-inspired literature, the term "unaccusative" is mostly used where Davidse uses the term "ergative".

13 The terms used in this paper for the different participant roles are thus "Agent-Patient" for the transitives and "Instigator-Medium" for the ergatives. See Lemmens 1998a: 39ff for further description.

There is thus no need to look for lexical specifics to explain why the verb *break* does not tolerate omission of the object: it is an ergative verb for which this construction is not sanctioned, because of a mismatch in the conceptual salience between the participant and argument roles. The alternation central to ergative *break* is the causative/non-causative alternation, just as with verbs such as *open*, *burst*, *starve* or *drown*, as illustrated in example (12)

(12a) John broke the glass / He burst the balloon / He drowned the dog.
(12b) The glass broke / The balloon burst / The dog drowned.
(12c) *John broke ∅ / *He burst ∅ / *He drowned ∅

Saying that the objectless construction is an exclusively transitive phenomenon does not mean that it will be equally likely with *all* transitive verbs. In fact, the construction is not the most prototypical exponent of the transitive model. The (transitive) objectless construction, but also the middle construction (e.g., *These markers wash easily from children's hands*), are clearly less typical in terms of both frequency and naturalness and not all transitive verbs allow them. On top of that, there is a considerable degree of interaction with the verb's semantics that may contribute to the typicality of a construction. This is exactly Goldberg's point mentioned above about the objectless construction having become a lexical option for some verbs (e.g., *drink* or *eat*) but not for others (e.g., *imbibe* or *peruse*), a point that was also illustrated by our analysis of verbs of killing. As already noted by Jespersen (1927), the objectless construction may entrench to the extent of the verb having become a fully-fledged intransitive, especially with originally reflexive verbs, e.g., *pine* (*away*) [from *pine oneself*] or *recover* [from either *recover oneself* or *recover health*].

The larger claim here is that while a verb may be typically (or largely) "transitive" or "ergative", the paradigmatic character is in fact a property of the entire construction, where verbal and constructional semantics are intertwined. In other words, depending on its usage, a verb may oscillate between the two models. One of my parade examples is the verb *abort* which has a

transitive-ergative split aligned with the distinction between literal uses that are transitive, illustrated in (13), and metaphorical uses which, quite surprisingly perhaps, continue the older ergative pattern, as illustrated in (14). (See Lemmens 1997, 1998a: 191-219 for details).

(13a) Too many pregnant teen-agers are urged to take the "easy way" and **abort**, convinced by twisted logic that it is kinder **to abort than to bear the child** and place it for adoption.
(WSJ)
(13b) *The child aborted.

(14a) The pilot … was aborting the takeoff moments before the crash
(WSJ)
(14b) The mission for peace aborted when one of the negotiators was shot dead.
(WSJ)

Such clear alignments as with the verb *abort* are unusual, but there is nothing inherently awkward about prototypically ergative verbs being used in transitive constructions, cf. (15) and (16):

(15a) John opened the door.
(15b) The door opened.

(16a) John opened a can of baked beans.
(Davidse 1991: 63)
(16b) *A can of baked beans opened.

It is difficult to conceptualize the tin as a participant co-participating or capable of self-instigating the event (a feature crucial to the ergative paradigm), which renders the non-causative unlikely. Nevertheless, it remains a coding possibility, even if a marginal one, whereas the non-causative construction is in principle never possible with transitive verbs.[14]

[14] In their reference grammar of English, Huddleston et al. (2002: 306) say about the causative/non-causative alternation that "we are concerned with a lexical relationship which is subject to a fair amount of idiosyncratic variation for particular items". Undeniably, there is variation, but the term "idiosyncratic" seems too strong here. Also, in our account, the relationship between the constructions is not lexical.

The interaction between verbal and constructional semantics has always been tricky to analyse and to formalize. Within our study of the objectless construction, it would be interesting to try to trace lexical influences more explicitly, by checking whether a prototypically ergative verb, which in principle does not sanction omission of its object, may nevertheless occur in an objectless construction. In an either-or approach to grammatical categories, such examples would immediately reject the paradigmatic oppositions outlined above. However, we subscribe to a cognitive view on categorization, which posits that each category (lexical or constructional) will have a prototype and that there may be less prototypical cases which violate the category's general denominator. This is in fact precisely what the following section will reveal, discussing corpus material for three prototypically ergative verbs.

4. A corpus-based analysis of lexical and constructional interaction

In order to validate the lexical-paradigmatic account, a complement to Goldberg's analysis, we have carried out some corpus analyses of three typically ergative verbs: *starve*, *suffocate* and *break*. The present paper will only discuss the results of *break* in full detail, based on data drawn from the *British National Corpus*, a 100 million word collection of samples of written and spoken language from a wide range of sources, designed to represent a wide cross-section of current British English, both spoken and written.[15] The results for *starve* and *suffocate* will only be summarized very briefly here, as they have been presented elsewhere (see Lemmens 2005).

4.1 Starve *and* suffocate

The verb *starve* has known an interesting diachronic evolution from an intransitive verb (OE *steorfan*, parallel to German *sterben* or Dutch *sterven*, both meaning 'die', which to this day continue to be exclusively intransitive) to an ergative verb, allowing causative/non-causative alternation and having ambiguous past participles, taking either a causative or a non-causative

[15] For more information on the BNC, see Aston & Burnard (1998) or http://www.natcorp.ox.ac.uk/.

reading, which is also an exponent of the ergative paradigm. For example, the phrase *a cash-starved company* can be interpreted causatively (*somebody starved the company for cash*) or non-causatively (*the company starves for cash*). One needs no advanced statistics to prove the atypical nature of the objectless construction for *starve*: On a total of nearly 1000 examples, there is only one example (0.001%) of an objectless construction, that in (17).

(17) The tyrant was bored. For years he had starved and destroyed, tortured and killed.
(BNC)

The constructional context in which it occurs highly favours object omission: there is an enumeration of actions in which *starve* is put on a par with the other (transitively encoded) cruelties of the tyrant (cf. also example (3d) above). This case can thus be argued to be one of "***constructional contamination***", where the [*V and V*] construction imposes a semantic and constructional enlargement on the verb, overruling its usual focus on the Medium and shifting it to the Instigator and thus bringing it on a par with the other Agent-oriented transitives.

As the following examples show, the verb *suffocate* also allows the causative/non-causative alternation and its object cannot be omitted.[16]

(18a) For this reason insects are tiny, otherwise they would suffocate.
(BNC)
(18b) Scientists are devising a method for suffocating Mexican fruit flies.
(WebCorp)17
(18c) *Scientist are suffocating ∅.

Yet sometimes object omission is possible, as in the following case:

[16] This also holds for some other verbs in the same semantic field, e.g., *drown*, *choke*, or *smother*; see Lemmens 1998b for an explanation for this constructional convergence.

[17] To better match the participant type in (18a), an Internet example has been included that has been retrieved using the WebCorp tool (see http://www.webcorp.org.uk/ for more details).

(19) Work began at dawn, taking advantage of the hours before the sun grilled the earth and the earth in turn reflected its own massive heat. It was all an oven to me. All twenty-four hours. I could not distinguish between the nuances of temperature, only the change in light. It was either white hot or black hot. **The white hot burned. The black hot suffocated.**
(BNC)

Once again, the syntactic context in which the omission occurs is typical, a 'role opposition' between two different Agents engaged in two different processes [AC_1-V_1 / AC_2-V_2]. Even if in reference to specific events, the latter construction takes these to a more general level, situating the Agents in a more stereotypical scenario. In contrast to *starve*, omission of the object seems to be a bit more common for *suffocate* (2.4% of the attested occurrences). The use of an objectless construction seems to be a relatively recent phenomenon, as it is not attested in the OED, which generally lists all the construction types actually used. Diachronic analyses have shown that the group of ***suffocate*** verbs has always been quite flexible in their constructional behaviour (see Lemmens 1998b), but at present it is unclear what may have caused *suffocate* to allow a higher frequency of object omission. The data seem to suggest that the frequent occurrences of Instigator-modifying *-ing* forms, as in (20), may have had an influence on the ease of singling out that participant.

(20a) If there be Cords, or Knives, Poyson, or Fire, or suffocating streames, Ile not endure it
(OED, 1604)
(20b) The Putin government pulled Russia out of the IMF's suffocating squeeze
(WebCorp)
(20c) In London, the poky City offices had been suffocating
(BNC)

Usually, such modifiers in *-ing* derived from ergative verbs cannot refer to the Instigator (see also Keyser & Roeper 1984: 387). However, further diachronic analysis is warranted to

evaluate the hypothesis that Instigator-modifying *suffocating* (typically, but not exclusively, occurring in predicative position) has contributed to the rise of the objectless construction.

4.2 Break

The last verb that will be discussed is *break*. In the linguistic literature, the verb has invariably been invoked as one of the hallmarks of the ergative paradigm (not necessarily under those terms, of course). Indicative, for example, is that Levin (1993) uses *break* as the label for the class of verbs that allows what she terms the "non-causative alternation". This alternation is possible with literal uses (see example (12) above, *John broke the glass* vs. *The glass broke*) as well as metaphorical uses (e.g., *He broke my heart* vs. *My heart broke*).

For this highly frequent verb 11,078 occurrences which were marked for the kind of construction the verb occurs in were extracted from the BNC. One of the surprising things that falls out of the BNC examples is that the non-causative construction is actually relatively infrequent (594 cases or 9.9%) in contrast to the causative construction (4,759 cases or 79.5%). For reasons which will become clear shortly, particle constructions have not been included in this particular calculation (thus limited to some 6,000 sentences). In line with our earlier observations for *open*, see example (15), the ergative paradigm is no longer invoked in contexts where the co-participation of the second participant is no longer applicable, as in the case *to break the law/rules/regulations* etc. constructions that no longer sanction the non-causative (* *The law broke*, cf. Fillmore 1967; Huddleston et al. 2002: 307).

4.2.1 Degree of Medium overlap

In order to give more depth to the analysis of this alternation, I compared the type of Medium in 200 randomly selected tokens, 100 for the causative, 100 for the non-causative, irrespective of whether it concerned literal or metaphorical uses. Surprisingly, the comparison reveals that the types of entities figuring as objects in the causative constructions (the entities ***being broken***) are generally different from those occurring in subject position of the non-causative: of 106 types,

there are only 11 entities occurring in both constructions, which represents an overlap of 10.4%. Ranked by their overall frequency within the overlapping set these entities are: *human* (13), *glass* (10), *heart* (8), *neck* (5), *news* (5), *egg* (4), *spell* (4), *chain* (3), *marriage* (2), *pattern* (2), and *skull* (2). In terms of token frequency the overlap concerns 58 sentences out of a total of 200, or 29.9%. It should be pointed out that the types have been taken at face value, so there has been no semantic grouping. For example, *ankle*, *neck*, and *bones* have not been put together in one semantic category.[18] There is – apart from the unexpectedly low convergence of Medium types – a second observation emerging from the random subset: the entities referred to in the non-causative construction are more often concrete, brittle objects (55% of the types as opposed to only 25% for the causative construction). As a result, the non-causative constructions occur less often in metaphorical uses compared to the causatives, which select object referents that require more effort to break or should not be broken. This is clearly the case for laws and regulations already mentioned earlier, but also for a deadlock, a consensus, a habit or an embargo. For all of these, a non-causative construction is normally blocked (e.g., **The promise/embargo broke*).

I hasten to add that the above comparison is not completely correct, since I have only marked as non-causative those cases where a causative counterpart would also have been possible (e.g., *The bottles broke* vs. *He broke the bottles*). The motivation for doing so is that the corpus data yield a number of formally intransitive constructions that go in the other direction, i.e., where no external Instigator can be added to the constellation. These "intransitive" clauses will be discussed next.

[18] While this may be a sensible thing to do, there seems to be a difference at the more detailed level too, but this intuition – which emerged while coding the construction types for the whole database – has not yet been tested at large.

4.2.2. Subgroups of formally intransitive constructions

4.2.2.1 Breaking clouds

One of the common "intransitive" contexts is illustrated by the following examples:

(21a) The clouds were beginning to break, revealing a storm of stars across the heavens.
(BNC)

(21b) In the foreground, sea waves break at the temple- or city-gates.
(BNC)

Especially the latter (with minor variants referring to *sea* or *ocean* or the like) is relatively frequent; the former is essentially restricted to clouds, mist, or smoke. The motivation for the non-causative construction is quite straightforward: we know from our experience that these events do not involve an external cause, although such a cause may occasionally be added to the constellation, as in the following example.

(22) It is a weird experience to […] see the heavy mists broken every now and then by the far reaching flash of the Portnahaven lighthouse. (BNC FTT n = 1262)

Mostly, however, this is not the case. In other words, in these constructions, the Medium reaches a maximally autonomous role in the conception of the event, similar to Actors in intransitive event construals as expressed in *John died* or *John jumped*.

4.2.2.2 Intransitive motion

Another context where an "intransitive" construction has lexicalized is illustrated by the following examples:

(23a) Dawn had begun to break.
(BNC)

(23b) The day was breaking.
(BNC)

(23c) The hot, dry weather was beginning to break.
(BNC)

The type of entities that figure frequently in this type of construction pertain to the domain of (day)light (*dawn*, *light*, *morning*) or other atmospheric elements (*storm*, *weather*, etc.). Unlike in (21), where the subject expresses the Medium (clouds, waves), the subject in these constructions is the entity breaking through another entity which, however, remains unexpressed and, in some cases, even difficult to add to the conceptualization. The semantics of the usage is that the entity ***appears*** by breaking through that which conceals it. The apparition sense is quite clear in the context of budding flowers, shoots, or plants.

(24) the flowers are about to break
(BNC)

One commonly finds metaphorical extensions as well, e.g.

(25a) Those parliamentary gossips […] waited […] for the scandal to break
(BNC)
(25b) You never know when the next big story will break
(BNC)

Occasionally, one finds a causative construction, as in (26b), to which we can add one where the broken entity is expressed in a *through*-phrase. This gives the following three constructional possibilities:

(26a) […] a dolphin breaking for air
(BNC)
(26b) […] the surging sharks as they break the surface.
(BNC)
(26c) […] the surging sharks breaking through the surface of the water
(my own example)[19]

[19] There are also 3 attestations in the BNC of the more idiomatic unit *break surface*, e.g. *an orca breaking surface* (BNCB0P n = 645).

In short, these types of formally intransitive constructions are all instantiations of a more general construction, viz. that of intransitive motion, where the verb typically indicates "forceful motion out of or into a constrained area" (Goldberg 1995: 3). The pattern *x moves y* is thus realized as Subj-V-Obl. This typically occurs in construction with particles, e.g.,

> *break free*, *break loose*, *break away*, *break adrift*, *break ahead*, *break through*, *break clear* (*of*), *break even*, *breaking forth*, *break in* (*to*)

or in combination with prepositional phrases, e.g.,

(27a) he'd achieved his success by breaking **from** the past
(BNC)
(27b) most men seem unable to break **beyond** the six minute barrier
(BNC)

This is why the particle constructions and the intransitive motion constructions have been set apart in my analysis even if the caused-motion pattern is still possible sometimes (for both types), e.g.,

(28a) Sam carefully broke the eggs into the bowl
(Goldberg 1995: 171)
(28b) […] an egg broken into a frying pan of hot fat
(BNC)

but not so common (for example, of the 546 BNC constructions with *break into* (28b) is the only one referring to caused motion).

One special subtype can be mentioned here, namely when *break* (*up*) occurs with an obligatory *with*-phrase as in the following examples:

(29a) He had broken with his family long ago
(BNC)
(29b) […] the affair that caused the Church of England to break with Rome
(BNC)

(29c) he congratulates the king on breaking with the tradition of his ancestors
(BNC)

The NP in the *with*-phrase typically refers to people or institutions (the a- and b-sentences) or to traditions, habits, or the past (the c-example). In all of these cases, it seems ill-founded to reconstruct some omitted object, even if in some cases one might interpret these cases as relationships being "broken". Yet clearly, the semantics of *breaking the relationship with your father* and *breaking with your father* are not identical, the latter implying a much more drastic and all-encompassing break. In this usage, the *with*-complement is in principle obligatory, although there are two attestations where it has been omitted, which makes the construction similar to an objectless construction:

(30a) […] it it'll not take as long to sort it out, because we've broken
(30b) Maybe he had proved to himself that he had recovered his nerve but he had had to hold on very tight at that moment when she had broken.

However, such constructions are exceptional, and the data does not allow any reliable conclusions, even if the omission of the *with*-phrase and/or the particle *up* seems to trigger the interpretation that the break-up is an undeniable fact.

Intransitive motion constructions with a prepositional phrase or particle are quite frequent, they account for almost 2,000 attestations, or 18% of all BNC extractions. Derived from such intransitive motion usages are those cases where *break* means 'to achieve a certain point or limit', with the limit optionally specified in a *to*-phrase (31b) or in what formally looks like an object (31c), e.g.

(31a) To break … and recede
(BNC)
(31b) So I went over and said, 'That's all… break to your corners'
(BNC)

(31c) He plays off scratch in University golf, and looked like breaking 70 today. (BNC)

The construction exemplified in (31c), commonly found in sports commentaries and stock market analyses, could be argued to be a pseudo-transitive construction, where a circumstantial element is dressed up as an object which, however, does not express an affected entity, as shown by the marked passive construction ?*70 was broken today* (it is not fully excluded, however.) The construction in (31c) indicates that these uses of *break* are like other intransitive motion verbs and no longer realize the ergative model. In fact, all the uses referring to intransitive motion mentioned here are in origin objectless constructions, with the "breaker" expressed as the subject and the "breakee" omitted, as in (23) or (26a), or expressed obliquely, as in (27). The "intransitive" option has lexicalized for *break* in these motion uses, which thus form a separate (yet semantically related) subgroup within the *break*-category. In this sense, they do not have the same status as the "real" objectless constructions of the type mentioned in example (12c) above, which are in principle not sanctioned for an ergative verb like *break*.

4.2.2.3 Objectless clauses

Ignoring the intransitive-motion uses of the verb, the overall hypothesis that a "true" objectless construction is not allowed is largely confirmed by the BNC data, as only 84 cases (0.8%) are of this type. Moreover, most of them fall into four distinct idiomatic uses, which, taken together, account for 75 cases of the objectless constructions. Let us consider these idiomatic cases briefly before turning to some isolated cases of "true" objectless constructions.

Break for coffee. The first concerns the semantically particular use of *break* to indicate that one is interrupting an event for a pause, e.g., *break for coffee/lunch*, etc. It is invariably used without any overt object (the session being interrupted). It may appear in a causative construction, but this is rather rare; the only BNC examples that come close all involve a journey, as in (32a),

and a (non-systematic) Internet search (using Google) yielded only one attestation in the domain of interrupting classes and the like, as in (32b):

(32a) […] we will break our journey there, for breakfast, next week.
(BNC)

(32b) Astronomy Class Support: […] George breaks the class for observing at 9:30PM on the evenings listed.
(http://www.harfordastro.org/PDF_files/HCASnewsletter_2003_09.pdf)

While semantically related, the sentences involving a journey stand somewhat apart from the particular objectless uses which all involve a class, a public lecture or a presentation. The self-evident nature of the object has surely contributed to its invariable omission: it is the act of having a break that is the central issue. Actually, I would suggest that the objectless usage started to lead a life of its own after the noun *break* had become well-established, but this requires more careful analysis exceeding the limits of our corpus material as well as the confines of the present discussion.

Break or make/break and enter. Two other contexts in which *break* can occur in an objectless construction follow the verb conjunction pattern typical of this construction; they are *break or make* (13 attestations, of which 8 objectless) and *break and enter* (14 attestations, all without object), illustrated by the following examples (the a-examples provide a causative construction, the b-examples, an objectless construction):

(33a) Training our sales force properly and thoroughly about the market applications is going to make or break our marketing effort.
(BNC)

(33b) It could make or break with vibration or thermal expansion as the machine warmed up.
(BNC)

(34a) The right […] to enter (or in cases of emergency to break and enter) the Premises
(BNC)

(34b) A burglar is inspecting a window with a view to breaking and entering, but in order to make his interest look innocent he pretends to be cleaning the windows.
(BNC)

These constructions have clearly become independent idioms and are mostly used as such, as prefabricated units, which is especially true for *make or break* (e.g., *a make or break factor*).

***Break* (*a contract*)**. The last idiomatic construction discussed here is where a tenant or a landlord has the right to break a contract; the BNC has 11 attestations of objectless constructions with this particular meaning, e.g.,

(35) if the tenant is entitled to break at a specified date linked to a rent review, the effect of the break-clause may be to make time of the essence as far as the review is concerned
(BNC)

This construction is of course to be linked with those mentioned at the beginning of the section on *break*, where it was said that the non-causative was no longer possible for cases like *break a contract*, *a law*, etc; the possibility of the objectless construction is a further indication of their transitive character. At the same time, it is noteworthy that the omission of the object only occurs in references to housing contracts and not in the context of laws or other regulations being broken. This is probably due to the fact that breaking a housing contract should be either party's right (even when strictly regulated), whereas this usually does not hold for other types of contracts or regulations.

Break Ø. If these four idiomatic uses are being left out of consideration, there are only four examples with object omission left, and one of these, taken from the spoken material, is either an unfortunate formulation or the result of fronting from an extraposed construction:

(36) the the [sic] carousel it's very difficult to break
(BNC)

There are only three constructions in the BNC that unambiguously can be regarded as objectless constructions:

(37a) He's made sure there's nothing to to [sic] break and lever with
(BNC G07 n = 1789)

(37b) It is a fire to warm and a hammer to break, water to cleanse, milk to nourish, meat to invigorate, light to guide, a sword for the fight, and a mirror to reveal.
(BNCEFT n = 93)

(37c) This hardens the parts of the body which are to be used to strike and break, each part that is to be hardened striking the board 40 or 50 times a day.
(BNC GVF n = 1890)

Notice once again that they all involve the conjunction of different verbs and moreover, activate an instrument reading (example (32c) refers to a form of karate where certain body parts are used as instruments to break boards, bricks, etc.), which provides a maximal focus on the properties of the Agent in line with the semantics of the construction (cf. also the discussion of examples (4) and (5) above). It should be obvious from our corpus figures that such constructions with *break* are, however, quite rare (less than 0.03%).

To complete the description of objectless constructions with *break*, there is one final construction to be considered, not attested in the BNC material. Cornish (to appear) mentions the case of the object omission in instructions like *Break in case of emergency* (notice on an alarm) or *Take with precaution* (notice on a bottle of pills). As Cornish correctly points out, the object omitted is referentially quite specific here and sufficiently salient (and thus recoverable) in the context, a result, Cornish claims, of the directive constructions (cf. also Huddleston et al. 2002: 301).[20] While the referent is clearly identifiable and more salient perhaps than in other types of

[20] No such constructions for *break* have been attested in the BNC material, surely due to the specific instructional register to which this construction is limited. The present discussion is quite brief; a more elaborate discussion is in preparation.

objectless constructions, I would argue that the effect of the directive construction is not rendering the object's referent more salient but rather maximizing the focus on the Agent-Process cluster (*you do V*), thus allowing the actual demotion of the object. This view aligns more with the semantics of the objectless construction as out-lined here as well as with the directive context in which it occurs.[21] In fact, this type of construction is quite entrenched, to the extent that it allows for object omission even for ergative verbs, as illustrated by the *break*-example above; other examples with prototypically ergative verbs are *Turn ∅ clock-wise*, *Pull lid to open ∅*, *Pull ∅ to open ∅*, or *Don't heat ∅ up*. Notice that in another context these would all receive a non-causative reading. For instance, when *turn clockwise* is said in a ballet class, it will instantiate a different construction than when it figures as an instruction on a knob or lever. Even if ergative verbs can apparently readily occur without an overt object in this instructional register, it would be interesting to examine more carefully whether paradigmatic differences do not play a part in these as well.

In this section, I have focused on some of the main patterns for the lexically and constructionally highly variable verb *break*. The view that *break* is a typical ergative verb still holds, provided one takes into account that it also occurs frequently in an intransitive motion construction with the "breaker" as subject and the "breakee" omitted or coded obliquely. The only examples of "true" objectless constructions are rare, which confirms our general hypothesis. If they do occur they are mostly quite idiomatic (*break or make*, *breaking and entering*, *break for coffee*). Further, it seems no coincidence that the occasional (less idiomatic) objectless construction occurs in contexts where an instrument-focus is at issue.

21 Cf. Cappelle (2005:313) : "direct objects are more easily omitted in directive contexts […] it seems intuitively correct that an imperative stresses the action more than anything else."

5. Conclusions

In this paper, I have fleshed out my earlier lexical-paradigmatic analysis of the objectless construction, by bringing in further evidence that the construction is in principle limited to the transitive paradigm and does not occur with ergative verbs, such as *open* or *break*. Its non-occurrence with these verbs is thus not a purely lexical matter but a paradigmatical one, since – due to a clash between the semantics of the verb and the construction – the construction is in principle excluded with ergative verbs. Combined with insights from Rice's and Goldberg's analyses, the paradigmatic account thus has a much wider applicability. At the same time, the analysis has provided clear examples of how specific usages interact with the paradigmatic potential in non-trivial ways. In some cases, these concern variations tied to more general patterns, such as for example the intransitive motion construction for *break*, typically combined with a particle further specifying the path of the motion. In other cases, particular uses of the verb may interfere with the verb's prototypical paradigmatic behaviour (transitive or ergative).

As the exploratory contrastive study of *break* has shown, this also pertains to the type of entities that occur in different constructions with this verb, as the entities that are being broken are generally different from those that break. This (quite modest) type of analysis examining the associations between the construction(s) at issue and (some of) the words occurring in them is one that should be pursued on a larger scale for more attestations for a larger sample of verbs and with more statistical support. It is expected that such a study would further confirm what has been observed for *break* in the present paper, namely (i) that the type of affected entities are largely different in the causative versus the non-causative construction, (ii) that larger semantic schemas may be at work that trigger their own constructions (like the intransitive motion schema) and (iii) that the specifics of a given usage may overrule the usual constructional constraints of a verb.

A final question to be considered is how all this relates to the theoretical issue mentioned at the beginning of the paper, concerning the conceptual weight of surface generalizations as opposed to alternations. The question concerned the validity of postulating different kinds of

construction that are formally identical based on the assumed valence of a verb, if this valence is the result of a generalization process (by the linguist or by the language user) over the different constructions that the verb occurs in. In other words, would it not be preferable to altogether abandon the notion of alternations (often used to prove underlying differences, as also in this paper), and posit instead *surface generalizations*, as do for example Goldberg (2002) and Yoshimura and Taylor (2004). The modest scope of the present study does not allow any definite conclusions, but some thoughts can be offered for further consideration and reflection.

First of all, in the usage-based approach, to which this study subscribes, such "perceived" valence, deriving from the integration of a construction and a verb, does not pose any problem at all. On the contrary, it is the repeated experience of such context-specific instances that gives rise to a certain valence pattern for a verb becoming the predominant one, or the one that is **prototypically associated** with the verb. In other words, the valence of a verb is the entrenchment of similar individual occurrences in a given construction. Obviously, the lexico-semantic structure of the verb itself will provide further semantic specifications for the schematic roles projected by the construction.

By way of example, let us consider the one-participant constructions as in *These girls cried*, *These glasses broke* and *These books read well.* Pushing for surface generalizations, Yoshimura and Taylor (2004) put these SU-V constructions all under one single heading.[22] While such unifying operation might still be workable for the first two, where the subject participant possesses characteristics of Agent and Patient, the third construction clearly stands out as a middle construction where the participant does not have any Agent properties. Yoshimura and Taylor – who regard their account as being "in conflict with core aspects of the traditional approach" (2004: 316) – group all SU-V constructions together as "middle constructions" whose essence

22 Yoshimura and Taylor (2004) do not use the term "surface generalization", which is Goldberg's (2002), but the underlying idea is similar.

they define as "residing in the special way in which a subject referent is conceptualized in association with the semantics of the verb phrase" (ibid).

Their arguments are open to some criticism, which will not be presented here, however. Suffice it to point out that by grouping all these constructions together into one super-category, they ignore semantic distinctions for which ample evidence exists in the literature. In the words of Croft (2001), they can be regarded as true "lumpers". I agree with Croft when he says that "[t]he fundamental fact that is overlooked is that while difference of form entails difference in categorization, identity of form does *not* entail identity of categorization" (2001: 76). While I refrain from becoming a true "splitter" (the extreme opposite of the lumpers), I do argue for more refined subgroups, since the data clearly suggest that verbs and their semantic roles pattern in subcategories and that speakers of English are well aware of these and often exploit them creatively. This seems to indicate that the language user operates at a lower level of abstraction, which result from generalizations from different verbs (or verb groups) occurring in a given construction, rather than at the most schematic one possible.

As has become apparent from the analyses presented in this paper, I argue for two types of refinements. First, on the constructional level, I follow Davidse's (1999) distinction between the transitive and ergative models of causation, which each project different semantic relationships between the participant and the process expressed by the verb, and hence represent different constructions. While I equally reject a derivational view on alternating constructions – each construction clearly exists in its own right and is not "derived" from another – I argue that alternations do reveal the more hidden regularities of grammar. It would not be fair to Goldberg to say that she would ignore those, as she, too, points out that broader generalizations can be obtained by looking at "all instances with a formal and semantic similarity" (2002: 335; my emphasis).Much hinges on how far one is willing to push these generalizations and at what semantic cost; as I see it, Yoshimura and Taylor's analysis pays it far too dearly.

At the same time, I extend Davidse's approach considerably by considering the semantics of the verb as well as the contextual specifications (such as type of participants). As such, regular patterns of use (units) can be distinguished at yet another level. This is precisely where cognitive-functional linguistics would benefit from the corpus linguistic tradition, where such more fine-grained analyses of large data sets have been common practice. The analyses reported on in this paper are but the beginning of such a synergism.

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