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A constructionist approach to causative *frighten* verbs

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Abstract: This paper studies, on the basis of corpus data, the licensing and blocking factors in the lexical-constructional integration process of causative *frighten* verbs into a number of constructions. This study is particularly compatible with the central postulates of Goldberg's (1995, 2006) *Cognitive Construction Grammar*. Thus, the analysis is carried out on the basis of construction-specific and more general constraints spelled out in order to avoid the mismatch between coercing and coerced constructional elements. We devote our attention to constraints involving conceptual compatibility between lexical items and constructional configurations, and to the metonymic and metaphoric activity which underlies such compatibility. We also explore the pragmatic and discourse-functional features which influence acceptability in constructional environments. In addition, two families of constructions are identified and discussed as separate from other constructions: the fake intransitive and the cause subject constructions. We offer a fine-grained analysis of both constructional families and of each of the members that each accommodates.

Keywords: causative *frighten* verbs, high-level metaphor, high-level metonymy

1 Introduction

The present article is a usage-based approach to the study of English causative *frighten* verbs embedded within the Cognitive Construction Grammar paradigm. First, it offers a fine-grained analysis of the constructions that are compatible with causative *frighten* verbs. Jiménez (2004, 2006) has examined syntactically and semantically relevant information in the domain of causative *frighten* verbs and the conditions under which a particular predicate occurs with a certain construction. This proposal will complement Jiménez's (2004, 2006) work in three main ways:

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(i) In addition to the analysis carried out by Jiménez, we will shed some light on the high-level metaphoric and metonymic activity that coerces lexical items into a series of constructions in the domain of causative *frighten* verbs. For instance, the high-level metaphors AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION and AN EFFECTUAL ACTION IS CAUSED MOTION and the high-level metonymy MEANS FOR ACTION will be found to play a fundamental role in the process of integration of causative *frighten* verbs into the caused-motion construction.

(ii) In line with a language-user approach, we will advocate for the necessity of incorporating pragmatic and discourse-functional information in order to avoid unacceptable fusions of relevant lexical items with constructions.

(iii) Finally, apart from the prominent role played by verbs in the lexical-constructional process, other lexical items (e.g., adverbs in middles like *Children terrify easily*) will be considered in our study as prominent constraining factors in this process.

Second, in keeping with Boas' (2011a) recent view that both his and Goldberg's approaches should be reconciled, two families of constructions are put forward: the fake intransitive construction, which encompasses the middle (e.g., *They don't terrorize easily*), inchoative (e.g., *The two carabinieri panicked*), and deprofiled object (e.g., *The purpose of terrorism is to terrorize*) constructions, and the cause subject construction, which includes the possessor subject (e.g., *The murderer's grim laughter terrified John*), instrument subject (e.g., *The knife frightened her*), and abstract cause subject (e.g., *The letter frightened him*) configurations. Both similarities and divergences among these constructions will be pointed out. The resultative construction has already been examined as taking part in a family of constructions, among which the caused-motion construction is included (Goldberg and Jackendoff 2004). Among other constructional families, we can highlight Gonzálvez-García's (2009, 2011) family of object-related depictives in English and Spanish and the family of the English subjective-transitive construction. In the same way, we will argue for the existence of two very broad constructions, the fake intransitive and the cause subject configurations, which should be further specified into lower-level subconstructions.

Third, construction grammarians' involvement in the debate on how to limit the seemingly unconstrained power of coercion has shifted the attention away from the factors that license the fusion of a coerced item with a given construction to the aspects that allow for the possibility of extending the scope of a construction (Lauwers and Willems 2011: 1230). This argument is not tantamount to stating that we will dispense with the importance of the target of coercion. The upshot of this discussion is that the source of coercion, constructional

productivity, will also be taken into consideration in our analysis. However, in contrast to Lauwers and Willems' (2011: 1230) proposal that the more neutral term *productivity* should replace *coercion*, we hold that coercion should be retained. Both notions are essential for our study. According to Michaelis (2003a), when there is a mismatch between the semantics of a lexical item and the semantics of a construction, the latter wins over the former. Thus constructions are regarded as coercing elements that impose a series of conditions on lexical items. Nonetheless, this does not mean that the importance of lexical items in constructional meaning construal should be disregarded. On the contrary, they are of the utmost importance. To restrict the power of constructions, coercion should be considered. In accordance with Langacker's (2009) and Gonzálvez-García's (2011) claim on the gradient nature of coercion, this notion is to be considered in terms of a continuum ranging from a type of coercion that is entrenched and conventionalized to another type of coercion that is non-entrenched and non-conventionalized. In our view, those cases that are seemingly unacceptable (like Boas' example of the resultative construction #*Edmund hammered the metal safe*) and which should be further interpreted with the help of analogy and contextual background information, as claimed by Boas (2011a), take longer to process and are less conventionalized and entrenched than clearly acceptable examples like *Edmund hammered the metal flat*. Nonetheless, our cognitive orientation makes us consider both core and peripheral examples. Moreover, productivity, the same as frequency, is only an aspect to take into consideration in order to define coercion (Gonzálvez-García 2011; Suttle and Goldberg 2011). The fact that a construction is not very productive does not mean that the construction does not exist but rather that it is not as frequent as other constructions in certain environments. Our study is qualitative and will also encompass the analysis of constructions that are not very productive in the domain of *frighten* verbs but are attested in the data.

Our methodology is in line with the usage-based approach taken in Cognitive Construction Grammar. As such, authentic data have been retrieved from several corpora: the *British National Corpus* (BNC), the *Corpus of Contemporary American English* (COCA), and from the search engine *Webcorp* (http://www.webcorp.org.uk/). Some of the main advantages of this search engine must be sought in the updated nature of its examples and in its reliance on naturally-occurring data. Kehoe (2006) points out that some language changes are too recent to be gathered in standard corpora and the *Webcorp* project makes up for this drawback. Moreover, the usefulness of the Web as a linguistic resource becomes all the more evident when it comes to searching for words or phrases too rare to be included in any standard corpora (see Renouf et al. 2004; Morley 2006; Kehoe and Gee 2007; Renouf et al. 2007; Gatto 2014).

We have handled an initial corpus of 500 occurrences for each of the predicates under consideration (*frighten, scare, alarm, petrify, terrify, terrorize*, and *panic*). However, whenever it was required, additional examples have been collected. For instance, for our analysis of the inchoative construction, the initial data proved insufficient for a detailed analysis of this pattern and we felt the need to enlarge the size of our corpus.

Moreover, a qualitative analysis of our corpus has been carried out. An exhaustive description has been preferred in which delicate variation in the data is profiled at the cost of quantification; in this kind of analysis, non-core cases receive the same attention as core cases.

In order to conform to our objectives, this paper is structured as follows: the second Section deals with the role of coercion in meaning construction. This oft-debated notion is central to our analysis since metaphor and metonymy will be regarded as coercing elements that license or block out lexical-constructional fusion. As pointed out at the beginning of this introduction, Jiménez's (2004, 2006) research is also devoted to limiting the apparent unconstrained nature of coercion but only in terms of the internal semantic makeup of the predicates under analysis. Jiménez's insights should be complemented by a proposal that takes into account other constraining factors that qualify as cognitive and take the form of high-level metaphor and metonymy. Before carrying out an analysis of the constructional compatibility of causative *frighten* verbs, the different analyses of these predicates should be briefly sketched out. Thus, Section 3 is devoted to the existing characterizations of causative *frighten* verbs with special focus on Jiménez's (2004, 2006) main findings. The fourth Section is concerned with an analysis of the caused-motion and resultative constructions in the domain of causative *frighten* verbs. Section 5 offers a family of constructions, the fake intransitive construction, a broad generalization that will be further specified by its three subconstructions: the middle, inchoative, and deprofiled object constructions. We then explore the cause subject construction. The last section summarizes our main concluding remarks and sketches some lines for future research.

2 The role of coercion in meaning construction

The role of coercion in meaning construction has spurred considerable debate within different theoretical frameworks over the last twenty-five years. The history of this notion should be traced back to the field of logical semantics (Moens and Steedman 1988). The term was adopted by analogy in programming languages (Aït-Kaci 1984). Coercion phenomena have also been addressed from

a formal stance (Partee 1987; Jackendoff 1997; de Swart 1998), from a cognitivist perspective (Talmy 2000; Taylor 2003a, and Taylor 2003b) and from a constructionist point of view (Goldberg 1995, 2011; Croft 2001, 2003; Michaelis 2003a, 2003b, 2004a, 2004b, 2011). Moreover, the issue of evidence for coercion has been handled in some psycholinguistic (Piñango et al. 1999) and neurolinguistic studies (Pylkkänen and McElree 2007; Pylkkänen 2008; Kuperberg et al. 2010). And last but not least, coercion has been discussed (and questioned) from a diachronic perspective (Traugott 2007; Ziegeler 2007, 2010).

Michaelis (2003a: 264) put forward the Override Principle, which stipulates that the meaning of low-level items, such as lexical configurations, must conform to the meaning requirements of the higher-level constructions in which they take part. Cortés and Mairal (2013: 229), who concur with Michaelis' conception of coercion, state that the integration of lexical semantic structures into constructional configurations (called subsumption) has two general kinds of effects: elaboration or full-matching (which refers to the identification of lexical and constructional features; for instance, the lexical specifications of the predicate *kill* fully match the elements of the transitive constructional template and license occurrences like *John killed Mary*) or coercion, which they define as the clash between lexical semantic features and constructional features (for example, the verb *laugh* in *John laughed Mary out of the room* is made to conform to the requirements of the caused-motion construction). At this point, notice should be taken that this proposal focuses on the coercion imposed by constructions onto lexical items and also on the characteristics of relevant lexical items that contribute meaning to constructional examples. However, at the basis of coercion lies a mismatch between the semantic properties of a selector and the inherent semantic properties of a selected element that the specific context in which it is embedded does not usually favor (Lauwers and Willems 2011: 1219).

One of the most outstanding problems inherent in the notion of coercion is that it has been seemingly pushed too far within the different theoretical traditions or, as Lauwers and Willems (2011: 1220) put it, it runs the risk of becoming an overworked catch-all concept. Suffice it to remark that some researchers uphold divergent opinions on the usefulness of the term. On the one hand, Ziegeler (2007, 2010) claims that the notion of coercion can be dispensed with on the basis that metaphoric and metonymic extension of the Lexical Prototype Construction can account for the fusion of low-level with high-level structure. On the other hand, researchers like Goldberg (1995, 2006), Boas (2003, 2011a), Michaelis (2003a, 2011), Gonzálvez-García (2009, 2011), Ruiz de Mendoza and Gonzálvez-García (2011), Suttle and Goldberg (2011), and Cortés and Mairal (2013) assign pivotal importance to this concept.

Another view on coercion that favors a different perspective is the one held by Boas (2011a). Boas observes that coercion qualifies as a valuable concept when it comes to construing typically unacceptable sentences as acceptable. More specifically, he proposes that in order to regard occurrences like *Ed hammered the metal safe* as an example of the resultative construction, it is mandatory to resort to coercion and contextual background information; in fact, he further argues, these two factors influence acceptability judgments. Boas (2003, 2011a), Nemoto (2005), and Iwata (2008) adhere to the lexico-grammatical strand of constructionist approaches and in stark contrast to Goldberg's (1995) constructionist perspective they propose mini-constructions (event-frames that capture semantic information and draw from Fillmore's Frame Semantics) rather than abstract constructions that lead to overgeneralizations. Boas also retains the term coercion but he restricts the scope of the notion to those unacceptable cases like #*Edmund hammered the metal safe* that do not match the requirements of a given construction (in this specific example, the resultative construction) and should be coerced with the help of contextual background information so that they can qualify as acceptable. Another theoretical strand within Cognitive Construction Grammar is Gonzálvez-García's (2011), who advocates for a conception of the phenomenon of coercion in terms of a continuum in which the two extremes are represented by non-conventionalized instances on the one hand and by fully entrenched or conventionalized examples on the other.

A controversial issue within different linguistic paradigms is the definition of construction. Goldberg (1995) put forward a definition of construction that revolves around the aspects of idiosyncrasy and non-compositionality as outstanding criteria for a construction to qualify as such. She states that "C is a CONSTRUCTION iff $_{\text{def}}$ $_{\text{n}}$ is a form-function pair, such that some aspect of the form or some aspect of the function is not strictly predictable from C's component parts" (Goldberg 1995: 205). A crucial issue that emerges from this definition is that the meaning of an oft-quoted example like *Frank sneezed the tissue off the table* results from the meaning of the construction itself rather than from the constituent parts of the occurrence. However, the emergence of usage-based linguistics brought about a broader conception of construction that allows for fully compositional configurations and grants special prominence to frequency. This definition reads as follows:

> All levels of grammatical analysis involve constructions: learned pairings of form with semantic or discourse function, including morphemes or words, idioms, partially lexically filled and fully general phrasal patterns. Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are

> stored as constructions even if they are fully predictable as long as they occur with sufficient frequency. (Goldberg 2006: 5)

The approach taken in this paper is close in spirit to much of the work in the various cognitively-oriented strands of Construction Grammar, like Goldberg's (1995, 2006) Cognitive Construction Grammar, Croft's (2001) Radical Construction Grammar, and Bergen and Chang's (2005) Embodied Construction Grammar. In this connection, we can elaborate on Galera and Ruiz de Mendoza's (2012: 54) observation that "by construction, we mean a form-meaning pairing where form affords access to meaning (which can then be enriched on the basis of contextual factors) and where meaning is realized by form, i.e., through morpho-syntactic and phonological mechanisms" by adding that those form-meaning pairings should be recognized as highly frequent by native speakers (see also Ruiz de Mendoza 2013: 238). No doubt, those notions of construction based on frequency of use are very lax, as evidenced by Östman and Fried (2005: 1), Bod (2009: 130), or Mairal and Gonzálvez-García (2010: 125), among other researchers. They claim that these definitions are not felicitous since almost anything can count as a construction. Moreover, what can be regarded as frequent and how to measure it are thorny issues that have attracted much attention within Construction Grammar. Our working definition in this paper adds that frequency should be understood in terms of native speakers' judgements. However subjective this addition might seem, from the language user perspective we adopt in this proposal, native speakers play a vital role in determining which patterns can be granted constructional status and which of them cannot. Obviously, sociolinguists have much to say in this respect but this is beyond the scope of our analysis.

Boas' definition of coercion highlights the importance of other constituents in the construction alongside the verb. In his own terms, "coercion is understood as involving the whole utterance and not only a verb within a more abstract construction. As such, the target of coercion may involve verbs as well as other constituents in the utterance, depending on the availability of contextual background information" (Boas 2011a: 1284–1285). This will be made especially evident in our analysis of the middle construction in Section 5, where the presence of an adverb like *easily* will play a prominent role in assigning certain occurrences constructional status. Neither the verb nor any other constituent of the sentence hold the whole responsibility for the meaning of a given particular instance of a construction. The construction itself helps to provide the final interpretation of the occurrence in question. In turn, the verb and other constituents of the predication that can be felicitously integrated into the constructional meaning of a given pattern modulate its abstract (in the sense of broad) sense. Moreover, the importance of contextual background information in

constraining constructional meaning comes to the fore in language-user approaches to coercion like ours. The relevance of pragmatic factors in the construal of constructions is attested by the work of renowned linguists like Fillmore (1982), Goldberg (1995, 2006), Boas (2003, 2011a), and Gonzálvez-García (2011), among others.

From the preceding discussion regarding the fuzziness of the concepts of construction and coercion, it would appear that coercion is an unconstrained and chaotic process. However, considerable attention has been paid to the factors that license or block the compatibility of some lexical items (especially verbs) with constructional configurations. For instance, analyses couched within Cognitive Construction Grammar are carried out on the basis of construction-specific and more general constraints spelled out in order to avoid the mismatch between coercing and coerced constructional elements. As an illustration, Goldberg (1995: 165) put forward a series of semantic constraints to regulate the fusion of verbs with the caused-motion construction. One of them stipulates that the causer argument can only be an agent or natural force, not an instrument. Other more general constraints licensing the integration of verbs and constructions are *The Semantic Coherence Principle* (which is concerned with the semantic compatibility that is mandatory for roles to be fused) and *The Correspondence Principle* (each participant role that is lexically profiled and expressed should correspond with a profiled argument role of the construction) (see Goldberg 1995: 50 for a detailed discussion of these principles). While acknowledging the far-reaching implications of Goldberg's work in terms of constructions and their semantic characterization, it should be complemented by an approach like the Lexical Constructional Model (LCM),[1] which offers a whole gamut of internal and external constraints that regulate lexical-constructional fusion. Internal constraints are much in line with Goldberg's semantic featuring of the lexical items involved in constructional meaning. These constraints license the adaptation of lexical meaning to constructional meaning in terms of the internal semantic make up of the items involved in the process of coercion. However, other constraints of a cognitive nature, like high-level metaphor and metonymy (external constraints in the LCM), which are not considered within Goldberg's framework, should be added to a thorough description of the

1 The Lexical Constructional Model, as devised by Mairal and Ruiz de Mendoza (Ruiz de Mendoza and Mairal 2008, 2011; Mairal and Ruiz de Mendoza 2009; Ruiz de Mendoza 2013), is a very recent meaning-construction approach to language that accounts for the systematic ways in which different conceptual patterns interact and generate complex meaning representations. The proponents of this model stipulate the existence of internal and external constraining factors of lexical-constructional integration processes.

licensing mechanisms of lexical-constructional fusion. Moreover, as observed by Pérez and Peña (2009: 70) and argued above, "the external constraints that regulate the processes of constructional subsumption are not only cognitive in nature, as proposed by Ruiz de Mendoza and Mairal, but pragmatic aspects of what constitutes acceptable human behavior are also at work here". Goldberg and Jackendoff (2004: 546) made a proposal along the same lines in connection with pragmatic requirements. In sum, these coercing devices make reference to both the characterization of lexical items as coerced elements and to the metaphoric and metonymic activity that makes lexical-constructional fusion possible. Furthermore, we have already discussed Michaelis' (2003a) Override Principle. In the light of the preceding evidence, we opt for an all-encompassing framework, like the one offered by Gonzálvez-García (2011), which is embedded within the Cognitive Construction Grammar paradigm and which takes into account constraints that involve the internal makeup of both lexical items and constructional configurations, the metonymic and metaphoric activity that underlies lexical-constructional compatibility, as well as pragmatic factors concerning background contextual parameters, as propounded by Boas (2011a) among others.

A final note is in order in this discussion of the notions and scope of construction and coercion. At first sight, the reader might have the wrong impression that these notions and their applicability are so divergent that they cannot be reconciled. On closer inspection, however, as has been advanced, researchers are gradually converging towards a common treatment of constructions or, at least, towards providing complementary views on such configurations. For instance, one of the main pieces of criticism raised by Boas (2003, 2011a) and Iwata (2008) in connection with Goldberg's theory is that her notions of construction and coercion give way to overgeneralizations (that is to say, to very abstract and general constructions that are not endowed with sufficient explanatory power and thus are unable to rule out unacceptable occurrences of constructions) and put forward a finer-grained analysis that leads to mini-constructions. In the same way, in the last few years, Herbst (2010, 2011) and Herbst et al. (2011) have argued for a valency grammar approach that results from the combination of Goldberg's abstract grammatical constructions and detailed valence descriptions. Goldberg (2006: 56) concurs with Levin (1993) that semantically similar verbs tend to participate in the same argument structure constructions. However, this tendency has been subject to much debate. Herbst, among others, finds it necessary to come to terms with and provide a principled explanation of item-specificity in language, as shown, for instance, by different valency patterns of predicates that are closely related in meaning. We agree with Boas (2013: 8) that we need both Goldberg-type abstract meaningful

constructions, which capture very broad generalizations, and more concrete constructions at various midpoints of the hierarchical network that include more limited conventionalized patterns. Following this line of thought, Gonzálvez-García (2007, 2009, 2011) has offered an analysis of different families of constructions in which the leading construction is further specified by proposing more specific constructions.

3 *Frighten* verbs

Jiménez's (2004, 2006) re-elaboration of the list of *frighten* verbs proposed by Faber and Mairal (1999: 288) within the framework of the Functional Lexematic Model (FLM) will be the starting point for our discussion on causative *frighten* verbs. There are several reasons for this choice. First, the analysis of the lexical items and of their semantic and syntactic combinatorial properties offered by Jiménez (2004, 2006) is to my knowledge the most comprehensive and detailed in the literature. Second, and more important, Jiménez's analysis is in full consonance with the objectives of this paper since it investigates the way in which the internal semantic makeup of causative *frighten* predicates licenses or blocks out constructional integration. Finally, in contrast to other characterizations of this and other sets of verbs, like the ones offered by Levin (1993), Wierzbicka (1996, 2006) and Goddard and Wierzbicka (2014), or FrameNet (Fillmore and Baker 2010), Jiménez's classification is arranged in a hierarchical fashion.

Wierzbicka's Natural Semantic Metalanguage (NSM) is a decompositional system of meaning representation. One of the pivotal notions of NSM is that of semantic primes or primitives. These semantic primitives, which are postulated as valid from a cross-cultural perspective, are combined following a series of syntactic rules. NSM is mainly concerned with the description of prototypical[2] scenarios in terms of generic cognitive structures underlying sets of related concepts. For instance, emotion concepts like fear, sadness, or distress would all share the following semantic structure: "X feels something/ Sometimes a person thinks something like this:/ .../ .../ .../ because of this, this person feels something/ X feels something like this" (Wierzbicka 1996: 182). Despite its

2 The term "prototypical" here means "more representative". According to Rosch (1973, 1977, 1978) and cognitive linguists in general, some members of a category seem to be better or more representative than others, refuting in this way the long-standing assumption that all the members pertaining to the same category hold the same status.

intrinsic interest in terms of cross-linguistic validity, the excessive genericity of NSM descriptions can be a problem when what is actually required is a high degree of delicacy. In this connection, Faber and Mairal (1999: 77) have noted that Wierzbicka's analysis is comparable to Jackendoff's in the sense that it does not seem to be feasible to distinguish troponyms or manner verbs. Thus Wierzbicka's definitions of predicates in terms of prototypical scenarios are too general. In connection with our object of analysis, she does not go into detail into either the lexical units that evoke the causative scenario of frightening or the syntactic distribution of the predicates. Within NSM, only the general prototypical scenario of 'feeling fear' is supplied.

An alternative way of classifying the lexicon is through FrameNet. This lexical database, which is structured into frames, is based on the main tenets of Fillmore's Frame Semantics. According to Fillmore (1982), the meaning of a word can be interpreted only in the context of a structured background of experience, beliefs, or practices. This lexical database is an inventory of frames, each of which is defined in terms of semantic roles (called frame elements). Frame entries also include a set of the lexical units that call upon frames, the relations that hold among frames (like "inherits from", "is inherited by", "perspective on", "subframe of", etc.) and the valency patterns and corpus-based annotated examples of the different lexemes.

If we compare syntactically-oriented classifications like Levin's, Faber and Mairal's, and Jiménez's with a taxonomy like the one provided by FrameNet, guided by semantic criteria, the results are astonishingly distinct because of their essentially different focus. Boas (2011b), following Baker and Ruppenhofer (2002), provides a frame-semantic classification of *build* verbs and points out that syntactic criteria can be dispensed with when establishing verb classes. This scholar criticizes Levin's (1993) syntactic perspective by highlighting that (i) it would be necessary to stipulate the number of alternations in which a given lexical unit should participate in order to regard that lexeme as part of a particular verb class. Although alternating syntactic behavior can appear as a reliable criterion for verb class membership, this is not necessarily the case. If we exclusively rely on syntax, verbs that belong to a given semantic class (like *construct, erect* or *weld*) should be ignored, which is counterintuitive at best; and (ii) sometimes verbs that take part in the same set of alternations belong to different semantic classes. This suggests that an approach that combines the advantages of semantically- and syntactically-oriented accounts could be desirable.

In FrameNet, the verb *frighten* is categorized as a lexical unit belonging to the Experiencer-obj frame, which describes a situation in which some phenomenon (the Stimulus) prompts a particular emotion in an Experiencer. Within this

frame, we also find the verbs *alarm*, *petrify, scare*, and *terrify*, among many others. *Terrorize* belongs to the Cause_to_experience frame (defined as a situation in which an Agent deliberately attempts to bring about an internal or emotional state in the Experiencer). Other lexical units (e.g., *panic*) are disregarded within the database. While this analysis of *frighten* verbs is quite exhaustive both in semantic and syntactic terms and the valence patterns and annotated examples of the different lexical units should be taken into consideration for an in-depth study, it falls short of providing the underlying reasons for the integration of causative *frighten* verbs into various constructions. By contrast, Jimenez's study, which is even more detailed, focuses on motivation and our study, which is further limited to causative *frighten* verbs, complements this motivational phenomenon.

Now we turn our attention to Jiménez's classification of causative *frighten* verbs, which, as has been stated, is embedded within the Functional Lexematic Model. The FLM has been concerned with the organization of the English and Spanish verbal lexicon both in paradigmatic and in syntagmatic terms. This has resulted in a series of coherent semantic classes or lexical domains. One of the subdomains of the lexical domain 'feeling' is 'to feel fear' and, on a further level of specification, we find 'to cause somebody to feel fear' (Faber and Mairal 1999: 288). Among the lexical units that elicit this subdomain the verbs *frighten, scare* and *terrify* figure prominently. Jiménez (2004, 2006) elaborates on this preliminary taxonomy of causative *frighten* verbs. In consonance with FLM methodology, the meaning of each lexical unit is elaborated by using already existing dictionary definitions, from which generic terms are extracted. These generic terms are shared by all the members pertaining to the lexical domain in question. Then hierarchical relations are established between the different lexemes within the domain. This is a manual process that endows the hierarchy with a high degree of coherence (Faber and Mairal 1999: 90). By way of illustration, we reproduce Jiménez's (2004: 122) domain of causative *frighten* verbs.[3]

3.1 Fear

To cause somebody to feel fear

1. FRIGHTEN: to cause somebody to feel fear/be afraid (the unpleasant, strong feeling caused by the presence or expectation of danger).

3 We are aware that many more verbs could be added to this list but these have been analyzed as some of the most representative ones.

1.1. SCARE: to cause somebody to feel frightened in a sudden way.
1.2. ALARM: to cause somebody to feel frightened and anxious about something unpleasant or dangerous in the future.
1.3. PETRIFY: to cause somebody to feel extremely frightened, esp. so that they are motionless.
2. TERRIFY: to cause somebody to feel terrified, i.e., extreme fear because they think they might be killed.
2.1. TERRORIZE: to terrify somebody deliberately over a long period of time by threats or acts of violence.
3. PANIC: to cause somebody to feel panic, i.e., a great sudden feeling of fear which makes you unable to act sensibly or think clearly.

Jiménez (2004: 122) claims that the Principle of Lexical Iconicity (Faber and Mairal 1999: 187), which stipulates that predicates belonging to the same class systematically display similar syntactic behavior, is shown by this type of organization. A comparable argument is also supported, among other scholars, by Levin (1993), who classifies verbs into lexical classes on the assumption that syntactic behavior is an epiphenomenon of semantic meaning. This is in contrast to frame semantic analyses like the ones mentioned above (Baker and Ruppenhofer 2002; Boas 2011b), according to which syntactic criteria play a very small role in establishing class membership. Levin (1993: 4–5) discusses an illustrative example taken from Hale and Keyser (1987): *gally*, a whaling term. Among the possible meanings that a speaker not familiar with this verb might predict in a sentence like *The sailors gallied the whales*, we might mention 'see' or 'frighten'. On the basis of this simple assumption, speakers can make judgments on the syntactic distribution of this predicate. For instance, a speaker attributing the meaning of 'see' to *gally*, would disallow the middle construction *Whales gally easily*. In contrast, if *gally* is taken to mean 'frighten', the middle construction would be licensed. Hale and Keyser conclude that for any verb to be compatible with the middle construction, it must include the notion of change of state in its meaning, which would account for the impossibility of the middle reading of *gally* with the hypothetical meaning 'see'. According to Hale and Keyser (1987) and Levin (1993) this is an example of how semantic meaning determines the syntactic distribution of verbal predicates. Moreover, Levin (1993), the same as Jiménez (2004, 2006), zeroes in on diathesis alternations to show that differences in form bring about differences in meaning but acknowledges that sometimes semantic classes are not homogeneous. This is, for example, the case with motion verbs (Levin 1993: 15). Levin always speaks about syntactic and semantic similarities and not about exact behavior. She does not argue in favor of a one-to-one correspondence between semantics and

Table 1: Syntactic alternations and constructions (Jiménez 2004: 122).

	To cause somebody to feel fear					
Verbs					**Alternations**	**Construction**
	Causative	**Inchoative.**	**Middle**	**PRO-Arb**	**Possessor-Subj**	**Resultative**
1. *Frighten*	+	*	+	+	+	+
1.1 *Scare*	+	*	+	*	+	+
1.2 *Alarm*	+	*	+	*	+	*
1.3 *Petrify*	+	+	+	*	+	+
2. *Terrify*	+	*	+	+	+	+
2.1 *Terrorize*	+	*	*	+	+	+
3. Panic	+	+	+	*	+	+

syntax. Following her lead, we contend that Faber and Mairal's (1999: 187) Principle of Lexical Iconicity should be reformulated as a tendency rather than as an invariable rule. Jiménez (2004: 122) summarizes the compatibility of causative *frighten* verbs with certain constructions and the participation of these verbs in a series of alternations, as shown in Table 1. No doubt, Jiménez (2004) sheds some light on the analysis of this set of verbs in terms of their fusion with some constructions. She argues that the results presented in Table 1 are the upshot of the Principle of Lexical Iconicity put forward above. According to her, in application of this principle, we should expect the hypernyms *frighten, terrify*, and *panic* to show a greater syntactic coverage than their corresponding hyponyms. However, her own data, captured in Table 2, contradict this formulation. Note that the syntactic coverage of *scare* and *alarm* equals the one of their

Table 2: Syntactic alternations and constructions.

	To cause somebody to feel fear		
Verbs			**Alternations**
	Causative-inchoative	**PRO-Arb Object**	**Possessor-Subj (transitive)**
1. *Frighten*		+	
1.1 *Scare*		+	
1.2 *Alarm*		+	
1.3 *Petrify*	+		+
2. *Terrify*		+	
2.1 *Terrorize*		+	
3. *Panic*			

hypernym *frighten*. For this reason we prefer to assign the Principle of Lexical Iconicity the status of a tendency rather than of a hard-and-fast generalization. In Levin's (1993) account, *frighten* predicates take part in the syntactic alternations and constructions shown in Table 2.

Table 2 has been designed on the basis of Levin's (1993) book, which does not provide a hierarchical organization like the one depicted in Tables 1 and 2. Her 1993 book is valuable insofar as it provides a detailed inventory of alternations and constructions together with the verbs taking part in them. Nevertheless, regarding *frighten* verbs information is scarce.[4] Thus, Jiménez's (2004, 2006) detailed classification of this set of predicates comes in useful for our analysis. In Levin's account, these predicates are characterized as psychological verbs of state, more specifically as belonging to the *amuse*-type. There are two main exceptions to this statement: the predicate *panic* is not included within any group and *petrify* is mostly considered in its change-of-state sense with the meaning 'change to stone.'

Two observations are in order before getting to the point of our study. In the first place, we will be concerned with constructions rather than with alternations. Dealing with constructions in terms of alternations leaves aside interesting syntactic patterns that are not part of alternations. As Baker and Ruppenhofer (2002) and Boas (2011b: 220) point out, one of the main problems with Levin's (1993) approach is precisely that in focusing on alternations, it ignores other syntactic patterns that are supposedly less important but that, on closer examination, play as central a role in syntactic and semantic description as constructional alternations. In fact, in constructionist approaches like Iwata's (2008), Ruiz de Mendoza and Mairal's (2011), or the one presented herein, syntactic alternations are taken to be two connected but different constructions. Levin's (1993) analysis, based on constructional alternations, as shown in Table 1, ignores interesting points about the syntactic distribution of predicates. In second place, our proposal improves (and complements) the one provided by Levin (1993) and Jiménez (2004, 2006) in the sense advanced in the introduction: we will offer a fine-grained study of the metaphoric and metonymic activity underlying lexical-constructional integration processes in the domain of causative *frighten* verbs and of the pragmatic and discourse-functional features that influence acceptability ratings in constructional environments within the framework of Cognitive Construction Grammar. Jiménez limits herself to discussing

4 Levin (1993: xviii) insists on the fact that her book is preliminary in nature and aims at stimulating further research into the English verbal lexicon. It is very wide in scope at the expense of exhaustiveness.

those constraints that license the adaptation of the lexical meaning of a set of *frighten* verbs to constructional meaning in terms of the internal semantic makeup of these predicates. Our main focus is not on the syntactic behavior of these predicates, although we discuss the syntactic consequences that metaphoric and metonymic operations bring about for the organization of the clause.

Before going into details, we would like to define the concepts of high-level metaphor and metonymy. The classification of metonymy has been one of the main concerns in Cognitive Linguistics (Dirven 1993; Kövecses and Radden 1998; Radden and Kövecses 1999). Thus, metonymy has been classified from the perspective of the scope of the operation as referential (*Nixon bombed Hanoi*), predicative (*John is a real brain*), predicational (*I'll be brief* 'I'll speak briefly'), and illocutionary (*Will you be quiet?* 'be quiet') (Panther and Thornburg 1999, 2003, 2005, 2007). A different classification criterion is based on the observation that metonymy may work at different levels of genericity (Kövecses and Radden 1998; Radden and Kövecses 1999). On the basis of this observation, we can distinguish between low-level and high-level metonymies. Low-level metonymies, like HAND FOR WORKER, exploit non-generic models, whereas high-level metonymies, like PROCESS FOR ACTION,[5] work at a higher level of abstraction since they involve generic cognitive models.[6] For instance, the example *The door opened* is construed as a high-level metonymy since the nature of its source and target domains[7] is generic. This example has been discussed by Ruiz de Mendoza and Peña (2008) as a case of the PROCESS FOR ACTION metonymy since we are expressing a process in syntactic terms but at the conceptual level we have an underlying action (we take for granted that someone should have opened the door since opening requires an external agent or force). The notion of grammatical metonymy – first coined by Ruiz de Mendoza and Pérez (2001) and then developed by Ruiz de Mendoza and Peña (2008) – may be roughly identified with that of high-level metonymy. A grammatical metonymy is a high-level

5 The labels "action" and "process" have been taken from Dik's (1997) work. In his typology of states of affairs (SoAs), actions are dynamic, controlled SoAs and processes are dynamic, non-controlled SoAs.

6 According to Lakoff (1987: 68), cognitive models are the way in which we organize our knowledge.

7 Both metaphor and metonymy involve source and target domains. Within the framework of Cognitive Linguistics, a metaphor is a mapping across domains and a metonymy is defined as a mapping within a domain. Such domains are called source and target domains. The source domain, which is usually more concrete than the target, helps us understand the target, which is usually more abstract in nature. For instance, in LOVE IS A JOURNEY, the source domain, journey, is more concrete than the target domain, love, and makes us easier to understand this emotion.

metonymy whose activity has consequences in some domain of grammar. For example, the use of the verb *open* in the intransitive construction (*The door opened*) has two evident grammatical consequences: the verb loses one of its arguments and the semantic object is realized as a syntactic subject. In contrast, its use in the transitive construction (e.g., *Someone opened the door*) preserves its two arguments and a one-to-one mapping between their semantic and syntactic function (the semantic agent is the syntactic subject and the semantic object is the syntactic object).

Ruiz de Mendoza and Mairal (2007a) and Ruiz de Mendoza (2008) have applied to metaphor this same classification criterion according to levels of genericity. Thus we could make a twofold distinction between low-level and high-level metaphors. An example of a low-level metaphor would be PEOPLE ARE ANIMALS (e.g., *John is a pig*) and an example of a high-level metaphor would be AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION (e.g., *John frightened Peter into submission*), of which a detailed analysis is provided in the following section.

4 The caused-motion and resultative constructions

The distinction between the caused-motion and the resultative constructions has been addressed by many scholars who stick to different positions. According to Goldberg (1995, 2006), the resultative construction is but a metaphorical extension of the caused-motion construction. Boas (2003: 119) does not find it necessary to make a distinction between the two constructions and refers to both of them as resultatives or resultative constructions. Kay (2005) regards both constructions as "patterns of coinage" rather than as constructional patterns.[8]

In this section, we focus on the constraining factors that underlie the fusion of causative *frighten* predicates into the caused-motion and resultative

8 Kay and Michaelis (2012) define patterns of coinage as analogical, nonce creations which are not productive from a synchronic perspective. Moreover, they are not considered an active part of the grammar. These scholars pose as examples of patterns of coinage metaphorical comparatives like *heavy as lead* or *light as a feather* and expressions like *They laughed him off the stage*. The latter is attributed a constructional status by most scholars. For further discussion on the issue of the relationship between the caused-motion and resultative constructions, see Peña (2009), where a cognitive continuum between them is posited, and Ruiz de Mendoza and Luzondo (2012), where the caused-motion construction is treated as a member of the resultative family of constructions, which would include several figurative and non-figurative uses of the caused-motion configuration, and the *way* construction. This view is very close to Boas'.

configurations. Goldberg (1995: 3) exemplifies these constructions and their meanings in the following way:

– Caused motion (e.g., *John laughed the poor guy out of the room*). X CAUSES Y to MOVE Z
– Resultative (e.g., *She kissed him unconscious*). X CAUSES Y to BECOME Z

In the caused-motion construction, X is the causer, Y is the causee, the predicate constitutes the causing event, and Z is the result. The caused-motion construction is related to transitivity. By way of illustration, take the following examples:

(1) *The shaggy professor showed me into his office.*

(2) *John laughed the poor guy out of the room.*

In (1) the caused-motion construction adds further argument structure (the *into*-prepositional phrase) to the original syntactic makeup of the transitive predicate *show*. (2) should be also construed in terms of the caused-motion configuration. However, in this example an intransitive verb like *laugh* has undergone a process of subcategorial conversion in order to become a transitive predicate and thus to be compatible with the caused-motion construction. This pattern coerces the intransitive verb *laugh* to shift its argument valency from a one-place predicate to a three-place predicate (Ruiz de Mendoza et al. 2007a and Ruiz de Mendoza and Mairal 2008).

Baicchi (2007, 2008) has devoted some attention to the analysis of intransitive predicates belonging to the domains of cognition, perception, speech, and sound emission. She has explored these predicates and the way they are subsumed into the caused-motion construction and concludes that some intransitive verbs pertaining to the domains mentioned before are liable to participate in the caused-motion construction. This is possible through the activity of high-level metaphors such as A PERCEPTUAL ACT IS AN EFFECTUAL ACTION (in examples like *He gazed me out of the club*) or A PERCEPTUAL ACT IS AN ACT OF CAUSED MOTION (in examples such as *He showed me into the room*).

In this section we will discuss how some causative *frighten* verbs are integrated into the caused-motion and resultative constructions. Generally speaking, these verbs are transitive in nature. Thus no process of transitivization (and its associated subcategorial conversion) has to take place so that a *frighten* predicate can meet the requirements of the caused-motion construction. However, a comparison between the verbs *hit* and *frighten* might be revealing in order to properly characterize *frighten* verbs. In *Sometimes teachers hit their pupils*, the object is

physically affected by the action. In contrast, in *He frightened him*, the object is not physically but only psychologically affected by the action. While *hit* describes an effectual action whereby the object is physically affected by the action conveyed by the verb, *frighten* (and *frighten* verbs in general) describes an experiential action. Researchers like Baicchi (2007, 2008), Ruiz de Mendoza and Mairal (2007a, 2007b, 2008), and Mairal and Ruiz de Mendoza (2008a, 2008b, 2009) have shown that predicates should conform to the characteristics of effectual actions in order to be compatible with the caused-motion construction. Therefore since *frighten* verbs are experiential in nature, they need to be metaphorically construed as effectual actions in order to fuse into the caused-motion construction. This involves what Ruiz de Mendoza and Mairal (2007a) and Ruiz de Mendoza (2008) call a change of transitivity type. Let us consider the following examples:

(3) *She frightened him into submission.*

(4) *However, what really frightened him out of the house was the dead bats he kept finding in the bedroom.*

In Examples (3) and (4) the verb *frighten* is allowed to take part in the caused-motion construction because it is possible to understand the impact on the object of an experiential action as if it were the physical impact on the object of an effectual action. This construal is metaphorical and can be captured by the label AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION.[9] Figure 1 shows the mappings of this high-level metaphor.

SOURCE		TARGET
Effector	←=→	Actor
Effectee	←=→	Goal/Experiencer
Effecting	←=→	Acting
Instrument	←=→	ø
Purpose	←=→	Purpose

Figure 1: AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION (from Ruiz de Mendoza 2008).

9 The notions of *effector* and *effecting* are inspired in terminology used in connection to functional approaches that regard semantic functions or roles as related to Aktionsart characterizations. The effector corresponds to the argument which does something (what we have called the *causer* before), effecting to acting (or *causing*), and finally, the *effectee* (the *causee*), a term coined by Ruiz de Mendoza and Mairal (2007a), to the affected entity.

Once the predicate *frighten* has been metaphorically understood as denoting an effectual action, a second high-level metaphor licenses such an action to participate in the caused-motion construction: AN EFFECTUAL ACTION IS CAUSED MOTION (see Figure 2).

SOURCE		TARGET
Causer of motion	←=→	Effector
Causing motion	←=→	Effecting
Object of motion	←=→	Effectee
Destination of motion	←=→	Location reached

Figure 2: AN EFFECTUAL ACTION IS CAUSED MOTION (from Ruiz de Mendoza 2008).

So we have a combination of two metaphors in which the 'effectual action' domain acts both as source and target thereby creating a metaphorical chain: AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION WHICH IS CAUSED MOTION. We can conclude that high-level chaining underlies the integration process of a verb like *frighten* into the caused-motion construction.[10] In Examples (3) and (4) the emotional effect that being frightened has had on the causee is compared to the effect of directly applied physical force. The prepositional phrases in (3) and (4) are different in nature. While the former codifies an abstract concept, i.e., submission, the latter expresses a literal location. In the following examples, we provide evidence of the compatibility of other *frighten* type verbs like *scare*, *alarm*, *panic*, *terrify*, *terrorize*, and *petrify* with the caused-motion construction:[11]

(5) *He would not let them scare him into silence.*

(6) *Desmond's experience scared him off margin trading forever.*

(7) *These three things alarmed me out of my morning stupor into a dead charge out the door...*

10 "High-level chaining" was coined by Ruiz de Mendoza (2000, 2007, 2008). Barcelona (2005) uses the term metonymic chain in order to refer to the same phenomenon but applied to metonymies. To avoid potential confusion, Ruiz de Mendoza and Mairal (2011) have referred to chained metonymies by means of the label *metaphoric complexes*.

11 Even though the prepositional phrases of our examples of the caused-motion construction are headed by the prepositions *into, out of*, and *off*, other spatial prepositions like *across* or *towards* can also prompt caused-motion occurrences, as in What *frightens people across Europe most is that this year could be just the start of a much longer drought...* and *They flap wings and bills to scare preys towards the shore, in shallow water.*

(8) *They were supposed to terrify children into obedience*.

(9) *... a real religious zealot seeking to frighten others (i.e., terrorize them) out of their mourning and their demonstration of free speech...*

(10) *But fear can also petrify us into a rigid ideology that prevents us from experiencing the ever changing world around us*.

(11) *Gordon was planning a snap election, but George panicked him into retreat...*

(12) *Horror movies scare people into this great fear*.

(13) *Choose well, and you can terrify mortals into flight or madness*.

(14) *Bill Clinton is living out a familiar scenario of judgment that has been used to terrify sinners into repentance for centuries*.

(15) *They were both equally motivated to kill and terrorize Americans out of their hatred for this country*.

(16) *Their spiritual degradation drives a meaningless life, in which confusion and absurdism petrify people into catatonic sadness and indifference*.

All these examples abide by the metaphoric chain AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION + AN EFFECTUAL ACTION IS CAUSED MOTION. Apart from these two high-level metaphors, the occurrences above are construed in terms of the low-level metaphor ABSTRACT ENTITIES ARE DESTINATIONS (Examples 5–11) or of EMOTIONAL STATES ARE DESTINATIONS[12] (Examples 12–16). By contrast, Examples (17)–(22) are not realizations of the metaphor ABSTRACT ENTITIES/EMOTIONAL STATES ARE DESTINATIONS since the prepositional phrases codify literal locations.

(17) *What Uptmore saw next nearly scared him off the gate he was standing on*.

(18) *My dad alarmed me out of his house again*.

12 In fact, emotions are abstract entities. Thus a more generic metaphorical system, ABSTRACT ENTITIES ARE DESTINATIONS, could be postulated.

(19) *... wherever stewards appear, violent attacks and intimidation are used to create a climate of fear and escalating tension in an attempt to terrify protesters out of the field.*

(20) *A small minority in Iraq accuse Kurds of trying to terrorize them out of their homes in Kirkuk and surrounding areas.*

(21) *... mandated to catch up with the legions of drivers who terrorize pedestrians out of crosswalks and cyclists off the road.*

(22) *Chris suffered a weighty fear of cancer that panicked him right out of bed nearly every midnight.*

The analysis of a third group of examples might prove revealing in connection with the caused-motion construction as applied to causative *frighten* type verbs:

(23) *Danke must have told you about what frightened him into getting sick.*

(24) *Contrary to claims of the liars attempting to scare Floridians into voting against the marriage amendment because of the false assertions...*

(25) *Trying not to alert or alarm him into shutting the door, I managed to get off a few...*

(26) *Early in the morning, scattered raindrops panicked me into packing everything up and retreating to the shelter of the dining pavilion.*

(27) *World Looks like Hugo Chavez's attempt to terrorize Jews into staying home and not voting against him didn't work.*

(28) *The footage ... appears to be an attempt to terrify Afghans out of co-operating with the coalition.*

(29) *... which was a mythical monster of vast size – half reptile, half bird-supposedly found in Maryland, and which was invented to terrify ex-slaves out of voting.*

(30) *If I was a journalist, a look at Language Log would probably terrify me out of ever writing about language research.*

(31) *... cold callers who petrify their victims into thinking they've been robbed...*

Examples (23)–(27) are cases of what Stefanowitsch and Gries (2003, 2005) have called the '*into*-causative construction' or of what Baicchi (2007) has labelled the 'NP *into*-gerund construction'. All *frighten* type verbs under study are found to co-occur with a complex prepositional phrase consisting of a gerund and sometimes its complements. But, as evidenced by Examples (28)–(31), it would be necessary to provide a new label to refer to this occurrence since it is not only the preposition *into* that instantiates examples of this kind. For instance, *out of*-gerund cases should be also accommodated into the theory. Thus, a more comprehensive label, for instance the *prepositional gerund causative construction*, would be necessary.[13] While in (24) Floridians are forced to vote against the marriage amendment by scaring them, in (28) Afghans are forced not to co-operate with the coalition by terrifying them. Therefore we observe that the *into*- and the *out of*-gerund constructions are used to express opposite meanings. The former conveys the idea that someone or something is forced to do something while the latter implies that someone or something is prevented from acting in some way. Finally, Example (27) reveals that the *into not* + gerund pattern is similar in meaning to the *out of*-gerund construction. Stefanowitsch and Gries (2003, 2005) distinguish two predicates in this specific construction: the cause predicate, which is the main predicate and codifies the causing event, and the result predicate, which is identified with the gerund and expresses the result. If we apply this distinction to Example (26), the main predicate is *panic* and it is the causing event, whereas *packing up* and *retreating* are the result. In other words, scattered raindrops are seen as the causer that makes the causee (the speaker) pack everything up and retreat to the shelter of the dining pavilion. The cause of such actions is conveyed by the main verb, *panic*.

Up to now, we have been concerned with the metaphorical substratum that underlies the process of integration of *frighten*-type verbs with the caused-motion construction. Nevertheless, to provide a complete motivational account of this configuration we need to resort to metonymic activity. All these examples are licensed by a high-level metonymy whereby the means or cause and the action are conflated into the meaning of the verb. Radden and Kövecses (1999: 30–38) offer a classification of metonymies based on the relationship between a whole domain of experience and its subdomains or between different parts of the same matrix domain. This observation constitutes Radden and Kövecses' starting point to group the different metonymic classes in terms of the Idealized

13 Examples like *This bastard frightened her off ever going back* support our argument that the prepositional gerund construction should encompass varied prepositions apart from *into* and *out of*.

Cognitive Model (ICM) that qualifies as matrix domain for metonymic development. The Action ICM can be conceived as a whole domain of experience and each of the elements within this domain as subdomains. Since metonymies are based on the relationship between domains and subdomains, the Action ICM is apt for metonymic elaboration. Radden and Kövecses (1999: 37) put forward the metonymy MEANS FOR ACTION as one of these metonymic relationships. This high-level metonymy qualifies as a PART FOR WHOLE metonymy. In it, the subdomain "means" involves domain expansion since it refers to the whole domain of action. If MEANS FOR ACTION is applied to the analysis of Example (8), *They were supposed to terrify children into obedience*, we obtain a reading according to which children are supposed to be forced to obey by someone terrifying them. In its application to Example (20), *A small minority in Iraq accuse Kurds of trying to terrorize them out of their homes in Kirkuk and surrounding areas*, we understand that Kurds are accused of using terror as an instrument to make a small minority of Iraqis leave their homes. In both cases, the conflation of means and action is licensed by a high-level metonymy. Such conflation obeys economy criteria since we only mention a subdomain (the means/instrument) in order to refer to a whole domain (the action itself).

The same metaphoric and metonymic constraints that were discussed in connection with caused-motion, except for the metaphor AN EFFECTUAL ACTION IS CAUSED-MOTION, apply to the resultative construction, which, as shown by Examples (32)–(44) below, combines with all the causative *frighten* verbs under analysis. However, while the result in caused-motion involves the movement (either literal or figurative) of some entity to a new location, in resultatives the result is seen as a change of state. Compare Example (18) above (*My dad alarmed me out of his house again*) with Examples (32)–(35) below. In (18) a change of location is involved ('me' moves from the interior of his house to somewhere outside his house; in this case and similar ones, results are mapped onto changes of location), whereas in an example like (32) a change of state is conveyed. Hugh is subject to a change of state as a result of the impact of his dream on him: he was asleep but his dream made him stop sleeping.

(32) *Hugh breathed heavily like a man who was dreaming and opened his eyes with a start as though his dream had frightened him awake.*

(33) *You are going to scare him dead!*

(34) *Meeting new people scares me stiff.*

(35) *Animals will scare you stiff* now.

(36) *This movie is supposed to scare you spitless.*

(37) *Spiders scare me spitless.*

(38) *Some folk like to scare themselves witless by watching horror movies.*

(39) *Meeting new people scares me to death.*

(40) *Julia's wandering face alarmed me into silence.*

(41) *It panicked me to death with its blue screens of death and its frightening "fatal error" messages.*

(42) *I would terrify him to death.*

(43) *Little did they know that this discovery would terrorize them to death.*

(44) *Then, when she has reassured herself, breathing a sigh of relief, petrify her to death by placing a prowler outside her back door!*

While Examples (32)–(38) are adjectival resultatives, (39)–(44) exemplify prepositional resultatives. Goldberg (1995: 181) only pays attention to adjectival resultatives. Prepositional resultatives pose some problems since sometimes they show some features that are more typical of caused-motion than of resultatives. That is the main reason why Peña (2009) has put forward a continuum between these two constructions in which some cases fall midway between the adjectival resultative pattern and the caused-motion construction where caused motion is literal. For instance, Examples (5)–(16), in which states are metaphorically mapped onto destinations, share features of both constructions. However, there seems to be no objection to the fact that Examples (17)–(22) are special cases of the caused-motion construction where motion is literal but it is not instigated by a physical force but by a psychological one.

Let us now focus our attention on the contrast between expressions (32)–(38) and (39)–(44) in the domain of causative *frighten* type verbs. First, we will be concerned with adjectival resultatives. The expression in (33) depicts the situation of someone causing another person to be scared to the point of feeling as if he were dead, that is to say, that person is so scared that he cannot feel, move, etc. This is metonymic because 'dead' stands for the effects of being dead. If we conceive of 'being dead' as a domain of experience, one of is subdomains would be 'the effects of being dead' (for instance, being unable to

move, being unable to feel, etc.). In this case, the whole domain of 'being dead' is used to refer to such effects. Therefore, this is an example of the WHOLE FOR PART metonymy whereby we mention a whole domain in order to highlight one of its subdomains. In (34) and (35), the fact of meeting new people or animals scare the speaker to such an extent that as a result he/she feels he/she cannot move. The phrase *to scare someone spitless* in (36) and (37) means to frighten someone to the point that his/her mouth becomes dry. This is in fact one of the effects that we can experience as a consequence of feeling scared or frightened. And the expression *to scare someone witless* in (38) also focuses on one of the effects of feeling frightened or scared: whenever we experience these emotions, we feel as if we were unable to understand or think logically. All these examples involve a change of state.

Now let us consider prepositional resultatives. The contrast between Example (33) (*You are going to scare him dead*!) and (39) proves revealing. Both of them designate the same state of affairs. However, the difference stems from the codification of the result. Example (39) metaphorically regards the resultative part of the construction as a destination. Death is seen as a point in space. Thus a change of state is figuratively construed as a change of location.[14] As was the case with (33), death metonymically refers to the effects of death. Examples (40)–(44) abide by the same logic.

Contrary to what Jiménez (2004, 2006) states, the verb *alarm* is also eligible for constructional fusion into the resultative construction. This predicate, apart from incorporating a causative element in its semantic internal makeup, is endowed with the same conceptual structure than the rest of causative frighten verbs and, through a process of adaptation through metaphoric and metonymic activity, is ready for lexical constructional compatibility with the resultative construction.

As argued in Section 2, the construal and acceptability of constructions in general is determined by discourse-pragmatic factors to a great extent. Boas (2013), following Goldberg's (1995) work, makes a threefold distinction between argument structure constructions, constructions that incorporate discourse-relevant information, and speech act constructions licensed by particular pragmatic conditions. The caused-motion and resultative constructions are claimed to fit into the first group. However, we argue, all constructions require the activation of pragmatic and discourse factors to some extent in order to yield a proper

14 This is one of the features which make prepositional resultatives be midway cases between the caused-motion and the resultative constructions. The result is expressed by means of the destination reached by some entity. Thus there is some kind of motion implied in the purported state of affairs.

construal of the state of affairs expressed by specific linguistic instantiations of constructions. Nevertheless, it goes without saying that some constructions are more dependent on pragmatic and discourse factors than others. In fact, we could postulate a continuum with two extremes represented by argument structure constructions like the ones analyzed in this section on the one hand and by configurations that necessarily call for pragmatic and discourse relevant information on the other. However, compare these examples of the caused motion and resultative constructions: (18) *My dad alarmed me out of his house again* and (45) *Peter frightened her into love*. While (18) can be understood without resorting to any kind of pragmatic or discourse information outside the expression itself (even though, of course, any detail outside the expression could complement the meaning of the expression to a great extent), (45) is not attested in any of the corpora we have used in our analysis. Nonetheless, certain contexts could turn this occurrence into an acceptable instance of the resultative construction following Boas' (2011a) claim for the leakage of grammar. It is taken for granted that the prepositional complement should express something the affected entity does not like or does not agree with. The unacceptability of this example stems from the prepositional phrase *into love*, since love is objectively taken to refer to a positive state. Nevertheless, if we envisage a scenario in which someone has undergone a hard and negative experience after getting divorced, then 'love' can change its positive load to a negative one and get ready to be integrated into the resultative construction in the domain of *frighten* verbs. This also lends support to the fact that it is not the verb alone that licenses or blocks lexical-constructional compatibility. In terms of the continuum we have just discussed, expressions like (18) do not necessarily require pragmatic and discourse factors to be construed. They belong to the group Goldberg calls traditional argument structure constructions. The verb and its arguments are directly compatible with the construction or they are adapted to fit into the structure of the construction. Additionally, the arguments and verbs raise no doubt as to what they refer to. The other extreme is prototypically illustrated by the constructions that Goldberg (1995) observes incorporate discourse-relevant information like the Deprofiled Object Construction (or the PRO-arb construction, as Levin 1993 calls it), which we will examine in the following section together with the middle and inchoative constructions, which would also belong to this group. In these cases, the right interpretation of the examples hinges upon the retrieval of the relevant pragmatic and discourse factors. I would also add illocutionary constructions to this group. In examples of these constructions, some logical or conceptual arguments are left unspecified (as is the case with the PRO-arb, inchoative, and middle constructions) or they belong to the third group of constructions sketched out by Goldberg: illocutionary constructions. In them, pragmatic and discourse

conditions license specific configurations (for instance, the *let alone* construction). In between the two extremes of our continuum represented by argument structure constructions and by configurations requiring discourse-pragmatic factors, we find midway cases. For instance, in expression (45), which gravitates towards the first extreme of the continuum, and similar ones, as was the case with the examples that do not necessarily call for pragmatic or discourse information, the structure generated by the verb is either compatible with the construction and does not undergo any modification or it is adapted to be integrated into the construction. However, one or more lexical items clash with the meaning of the construction (see 45). In these cases, pragmatic and discourse information can help us to properly understand the sentences or to make a seemingly unacceptable sentence acceptable.

In this section, we have studied the metaphoric and metonymic activity that underlies the caused-motion and resultative constructions. We have also related these metaphoric and metonymic operations to transitivity. Since *frighten* verbs are transitive verbs *per se* no process of transitivization is needed. However, a change of transitivity type is involved in these cases, which is but the linguistic realization of a conceptual mapping from an experiential action onto an effectual action. The mapping is needed for the lexical predicate to meet the requirements of the caused-motion and resultative patterns. Contrary to what Jiménez (2004, 2006) states, the verb *alarm* is also eligible for constructional fusion into the resultative construction. This predicate, apart from incorporating a causative element in its semantic internal makeup, is endowed with the same conceptual structure than the rest of causative *frighten* verbs and, through a process of adaptation through metaphoric and metonymic activity, is ready for lexical constructional compatibility with the resultative construction.

5 The fake intransitive family of constructions

Within the system of transitivity, the transitive and intransitive patterns are considered the basic configurations. In this section, we focus on the latter and we put forward a family of constructions that take the syntactic form of the intransitive construction. In turn, a two-fold distinction is made between real intransitives (like *He fainted*), where the verb does not require a direct object, and fake intransitives, which take the same form as real intransitives but which, on closer inspection, in semantic and conceptual terms, are instances of the transitive pattern. Within this last set, the middle, inchoative, and deprofiled object constructions should be considered (see Figure 3).

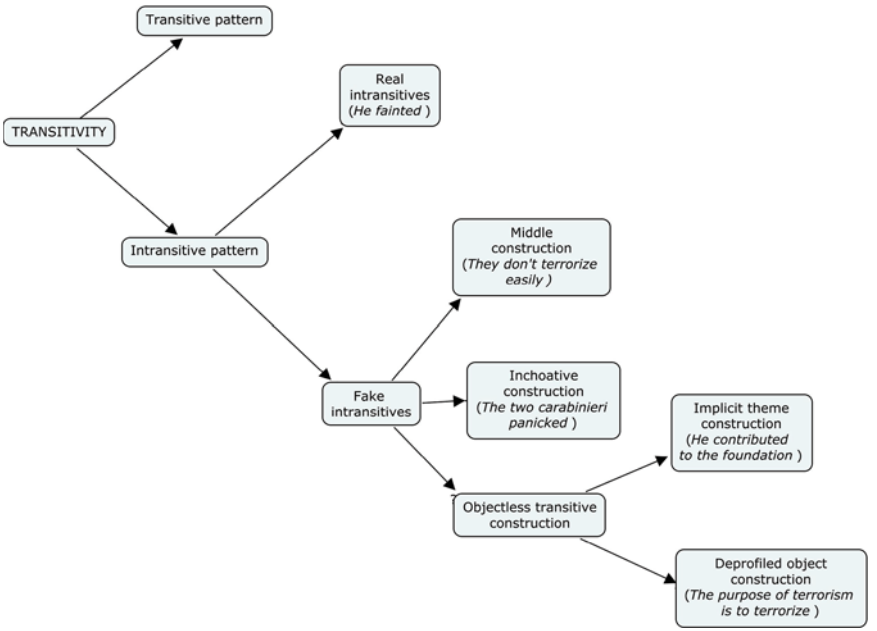

Figure 3: The fake intransitive family of constructions.

The expression *Children terrify* illustrates the deprofiled object configuration, which is a subconstruction within the more general objectless transitive construction. However, the middle interpretation (in an example like *Children terrify easily*) is constructed upon the basis of an inchoative reading whereby someone/something terrifies children. The inchoative, middle, and objectless transitive patterns are fake intransitives. Both in the inchoative and middle constructions, the agent or effector is left syntactically unexpressed, although it is semantically present in the construction. Someone or something must have panicked the carabinieri in *The two carabinieri panicked* and terrified children in *Children terrify easily*. On the other hand, in the deprofiled object construction, the first argument of an underlying transitive pattern is saturated but the affected entity (or effectee) is left unexpressed. In the implicit theme construction the effectee is specific and can be retrieved through inferential activity from context, while in the deprofiled object construction, it calls upon a very generic interpretation (*one*, *people*, etc.). The inchoative, middle, and objectless transitive constructions share two major features: first, they are transitive patterns disguised as intransitive ones; second, they need to resort to relevant pragmatic and discourse information in order to be

properly understood. However, this dependence on pragmatic and discourse information comes in different degrees. On the one hand, in the case of the inchoative and the objectless theme constructions, there is no linguistic clue that limits our construal. So, context is crucial to determine both the construction we have and also whether the effector is the grammatical subject or not. On the other hand, the adverb *easily* suggests the middle construction, and the effector is backgrounded to the detriment of the effectee, which is highlighted.[15] Thus, this construction, in not being so subject to pragmatic factors, shows some traits of what Goldberg and Boas call argument structure constructions. Now, let us explore the three constructions in more detail.

As observed, causative *frighten* verbs are transitive. For this reason, it might be argued that it makes no sense to discuss these constructions in the domain of *frighten* verbs. A possible answer would be to say that these verbs can be subsumed into these constructions by making them undergo a process of subcategorial conversion from transitive verbs to intransitive ones. However, this topic goes beyond this mere observation.

(46) *Reindeer are ideally suited to working with children. He says they don't frighten easily, and they're very docile.*

(47) *Teenagers don't scare easily.*

(48) *The parents of children with AD/HD don't alarm easily.*

(49) *Don't worry. I don't petrify easily.*

(50) *Horses panic easily*, even in a familiar environment.

(51) *You terrify easily, don't you?*

(52) *Emma didn't terrorize easily.*

To begin with, let us briefly spell out the semantics of the middle construction. According to Goldberg (1995: 183–185), middles call upon an indefinite and volitional unexpressed agent (people or any other indefinite agent in general). Moreover, the patient subject argument should be endowed with a particular inherent quality that causes it to be mostly responsible for the property

15 A dispreferred reading as non-middle is also possible (i.e., 'Dogs terrify people easily').

conveyed by the predicate phrase. This semantic characterization blocks out the compatibility of fake object cases (in fact, many transitive resultatives and even many simple transitives) with the middle construction. In the first place, the indefinite nature of the unexpressed agent argument renders the corresponding middles of fake object cases ungrammatical (e.g., the middle counterpart of *He cried himself asleep*, **He cries asleep easily* is not possible in English). Second, the inherent quality of the patient argument that makes the predicate true also precludes the integration of fake object cases, which usually convey the hyperbolic idea that the action was carried out to excess, into the middle construction. Thus *The joggers ran the pavement thin* is feasible, while **The pavement runs thin easily* is not.

Examples (46)–(52) are cases of what the functionalist literature (e.g., Dik 1997: 8–15) has discussed under the label of quantitative valency reduction. Ruiz de Mendoza and Pérez (2001) have studied the metonymic motivation of this phenomenon. These examples are construed in the light of the high-level PART FOR WHOLE metonymy PROCESS FOR ACTION. The verbs *frighten*, *scare*, *panic*, *terrify*, and *terrorize* are transitive. However, the middle construction coerces these transitive verbs to shift their argument valency from two-place predicates to one-place predicates. Even though the action is not overtly expressed in syntactic terms, at the conceptual level we take for granted that someone carried out the actions involved in (46)–(52) above. Someone or something must have frightened the reindeer, scared the children, panicked the horses, terrified the addressee, or terrorized Emma. The PROCESS FOR ACTION metonymy has been analyzed as a PART FOR WHOLE metonymy by Díez (2002) and Ruiz de Mendoza and Díez (2002). According to Díez (2002: 311), processes can be regarded as actions that lack the subdomain of 'agent' (or effector). An action can be seen as a domain of experience and its subdomains are the typical elements of actions: 'agent', 'goal/affected entity', 'instrument', 'location', 'beneficiary', etc. Actions and processes share all their elements (or subdomains if understood in metonymic terms) except for 'agent'. In Examples (46)–(52), the construction denotes a process from a constructional perspective. However, there is a latent action. There are other consequences to this metonymic operation. The affected entity acquires conceptual prominence whereas the agent/effector remains backgrounded and should be retrieved from context. For example, in (46) what is important is the fact that reindeer do not get scared easily. The agent that makes these animals feel fear is not relevant to this state of affairs. The affected entity (or "effectee") is made prominent by allotting this entity syntactic subject position in the middle construction. Heyvaert (2003: Ch. 6) has discussed two different approaches to this construction based on the patient- or agent-like nature of the syntactic subject of middles. Some scholars in favor of the

agentivity with which the subject entity is endowed in middles are Lakoff (1977) and van Oosten (1986). On the other hand, linguists like Sweet (1891), Halliday (1967), Smith (1970), and Fellbaum (1986) argue for the 'patientive' nature of the subject-entity. These scholars assert that the agent of the process is necessarily implied and thus the agent-like nature of the middle subject should be discarded. This can be applied to middles in general.[16] Examples (46)–(52) are middles in which we find an evaluative element and an action that is disguised under the appearance of a process. Moreover, if we follow Levin's (1993: 26) observation that the middle construction is restricted to verbs with affected objects, our examples fit this description perfectly. In (47), for instance, teenagers are affected by the action denoted by the verb *scare* rather than playing an active role in it. In other words, teenagers have a patient-like nature in spite of occupying the syntactic subject position. The agent, as has been noted above, is backgrounded but conceptually implied. We know that some agent (any entity, either human or non-human) must have acted in order to scare the teenagers. They have done nothing but suffer the consequences of the action described by the verb. This is linguistically evidenced by the paraphrase of *Teenagers don't scare easily* as 'It is not easy to scare teenagers', where teenagers are seen as affected by the action of scaring. This is in line with Levin's (1993) identification of *frighten* predicates as psychological verbs of state and with Halliday and Matthiessen's (2004: 210) categorization of this set of predicates as mental processes. The syntactic subject of these verbs, which is called "senser" or "experiencer", evidently shows patientive traits. As previously claimed, this set of verbs is experiential in nature.

In the middle construction, besides the shift of attention from the agent to the patient by assigning the latter first argument position in the sentence, the adverb *easily* greatly contributes to the semantics of middles. This lexical item makes the potential addressee focus on the assessment of the action designated by the verb. By way of illustration, we can paraphrase (47) as 'teenagers get scared without difficulty' or 'it is easy/not difficult to scare teenagers'. The expression focuses on evaluating the action of scaring teenagers.[17]

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16 However, from our point of view, each particular group of middle structures has its own characteristics. Heyvaert (2003: 132–137) has provided a semantic typology of middles and has distinguished the following kinds of middle: facility-, quality-, feasibility-, destiny- and result-oriented middle structures. Facility-oriented ones have been identified as the most prototypical examples of the middle construction. Our examples belong to this kind and we have focused on them in our study.

17 As pointed out, this only applies to facility-oriented middles like the ones presented in this paper. In contrast, according to Ruiz de Mendoza and Peña (2008: 264–265), the process involved in middles like *This bread cuts well* is assessed in terms of the inherent difficulty in

The inchoative construction has been discussed in connection with the causative construction by many scholars like Pinker (1989), Parsons (1990), Levin (1993), and Levin and Rappaport Hovav (1995) under the label of the causative-inchoative alternation. Ruiz de Mendoza and Mairal (2007a) have related the middle and inchoative constructions to each other in terms of the high-level metonymic operations underlying them and to intransitivity. Both inchoatives and some middles are licensed by the metonymy PROCESS FOR ACTION. Inchoatives like *The door opened* (vs. its causative counterpart *Jane opened the door*) express a process from a grammatical point of view but an implicit action is involved.

(53) *The two carabinieri panicked.*

(54) *In prison I learned that my body itself is the enemy, my skin so black it reflects you. You want to take it from me. I terrify.*

(55) *From under the trailer, a white cat skits out, petrifies at the sight of her, then bullets around the back.*

(56) *I terrorize because I love.*

A causative counterpart could be provided for (53)–(56): *Someone/something panicked the two carabinieri* in (53); the fact of the hearer wanting to take the speaker's skin from him/her terrifies the speaker in (54); the sight of a woman petrifies a white cat in (55); finally, feeling love terrorizes the speaker in (56).

One of the most controversial issues revolving around middles is the affectedness condition (see Cortés and Mairal 2013: 232–233 and the references therein). Two divergent opinions are held: the grammatical subject of middles

achieving a result. Ruiz de Mendoza and Mairal (2007a: 46) discuss this example and similar ones in connection with a further metonymic shift. They claim that this construction is motivated by the double metonymy PROCESS FOR ACTION FOR RESULT. As has been observed, Ruiz de Mendoza and Díez (2002) have related PART FOR WHOLE metonymies to domain expansion and WHOLE FOR PART metonymies to domain reduction operations. These expansion and reduction operations have been found to combine thus yielding what Ruiz de Mendoza and Díez (2002) and Ruiz de Mendoza (2007) call double metonymic shifts or metonymic chaining. PROCESS FOR ACTION FOR RESULT is a case of domain expansion and domain reduction. As advanced, the PROCESS FOR ACTION metonymy is a PART FOR WHOLE metonymy which involves domain expansion since a subdomain of the matrix domain of actions, i.e., the notion of 'process', provides conceptual access to the whole domain. Additionally, the whole action domain is mentioned in order to highlight one of its subdomains, the result.

is affected by the action of the verb or such subject is not affected by the verb. Different accounts of middles leave the question open as regards the notion of affectedness. Which kind of affectedness are we making reference to? Our proposal is that the grammatical subject of middles is not physically or effectually (but rather psychologically or experientially) affected by the action of the verb. In fact, the focus is on the development (and especially on the assessment) of the action and not on the physical or effectual impact of the verb on the subject. Prototypical cases of verbs whose syntactic subject is physically influenced by the action of the verb (in other words, what we have called effectual actions) are contact-by-impact verbs like *hit*. These verbs do not fit into the middle construction since the less affected the grammatical subject of a construction by the action of the verb from a physical or effectual point of view (and the more affected from an experiential perspective), the more readily available it is for middle construction integration. *Frighten* verbs in general, in being experiential actions whose grammatical subjects are experientially (but not effectually) influenced, are compatible with the middle construction. These subjects are effectees, experiencers or patients (as shown by a sentence like *A teenager doesn't scare easily, even if they disguise as monsters*, where *they* makes anaphoric reference to the agent or effector of the first clause) and not effectors or agents. This is the reason why, in opposition to Jiménez's (2004: 128) argument, we hold that the verb *terrorize* also participates in this construction, as evidenced by (52). The same rationale holds for inchoative patterns, whose syntactic subject is the affected entity in experiential terms in the set of *frighten* verbs that are the object of our study.

There are other features that should be taken into account to establish a clear dividing line between middles and inchoatives: the *Able* component and the Genericity condition.

- The *Able* component is constitutive of middles but not of inchoatives. Cortés and Mairal (2013: 233) argue that "the subject argument of middles – irrespective of its role – must have some inherent properties that enable the event depicted within the construction to be obtained". This is reflected in the constructional template of middles, where the *Able* component is included as an outstanding feature that functions as a restrictor over the subject. This is related to the feasibility of many middle realizations to be paraphrased by means of derived *–able/-ible* adjectives stemming from the verb (for instance, *This book reads easily* can be paraphrased as 'This book is easily readable'. In the case of *frighten* verbs, there are no derived adjectives of this kind, but the *Able* component is of pivotal importance as well).
- The Genericity condition is another crucial feature for the distinction between middles and inchoatives. Middles like *Teenagers don't scare easily*

are subject to a generic interpretation ('It is not easy to scare teenagers in general') but this is not the case with inchoatives such as *The two carabinieri panicked*. The generic character of middles ties in nicely with their tendency to take simple present tense. On the contrary, inchoatives do not show this tendency because of their specificity.

– Finally, it goes without saying that the evaluative component expressed by the adverb in middles is absent in inchoatives.

A key issue should be made clear at the end of this discussion on middles and inchoatives. We may wonder why middles including *frighten* verbs, but not inchoatives, abound in English.[18] For a causative *frighten* verb the natural tendency is to saturate the object in examples where the object is not syntactically expressed. In other words, when the object is not explicitly stated in the structure of the sentence, language users will tend to search for an object that saturates the object position coherently. Nonetheless, the addition of an evaluative adverb will override this natural tendency since it will point to a middle interpretation. An inchoative interpretation of an example that lacks a syntactic object will require a very specific context that demands this construal.

Additionally, the discussion on internally vs. externally caused verbs helps us to account for the fact that causative *frighten* verbs are not usually eligible for occurrence in the inchoative construction. Externally caused verbs "imply the existence of an external cause with immediate control over bringing about the eventuality described by the verb: an agent, an instrument, a natural force, or a circumstance" (Levin and Rappaport Hovav 1995: 92). In contrast, internally caused verbs happen naturally in an entity (Levin and Rappaport Hovav 1995: 97). The causative-inchoative distinction is but a consequence of the perspective from which we see an event. It is taken for granted that for a verb to display a causative reading, it must be externally caused. This is not tantamount to stating that every externally caused verb can occur in the inchoative pattern, as evidenced by causative *frighten* verbs. We concur with Levin and Rappaport Hovav (1995) that internally caused verbs can only accept an inchoative construction.[19]

18 Since this is a qualitative study, we do not provide numerical data. However, notice should be taken that in our process of gathering data middles greatly outnumber inchoatives, approximately four to one.

19 The debate on the causative-inchoative alternation has been inextricably linked with the distinction between transitivity and intransitivity. In this connection, it should be observed that the transitivization of an internally caused verb does not bring about integration into a causative construction. For instance, the contrast between (a) *The trees bloomed* and (b) *The trees bloomed pink flowers* shows that the direct object argument in (b) is not promoted to subject position in (a) because we already have a subject. In fact, the direct object argument is

The fact that causative *frighten* verbs are externally caused implies that they are, no doubt, ready for lexical constructional fusion into the causative construction. Nevertheless, this does not preclude these verbs from undergoing an intransitivization process and having an inchoative reading (as in [53] *The two carabinieri panicked*). But we cannot be blind to the fact that these verbs do not usually display the inchoative reading, which is, as argued, prototypical of internally caused verbs. These examples highly depend on the linguistic and extralinguistic context surrounding them. Most occurrences with an inchoative interpretation within the group we are analyzing include some type of oblique linguistic complementation (the circumstance that depicts an external cause in externally caused verbs), which is a clue for us to opt for an inchoative reading: in (55), *A white cat petrifies at the sight of her*, it is obvious that 'the sight of her' is the causer of the petrifying event and the cat is the undergoer, or in examples like *The students panicked when told that final exams were less than a week away*, the subordinate clause is the causative element that brings about the state of affairs. These examples get an inchoative interpretation whose causative counterpart can be retrieved from the linguistic context. These examples and those in (53)–(56), involve one entity, the undergoer, which goes through a change of state. We might wonder why some verbs like *break* alternate and others, like causative *frighten* verbs, resist integration into the inchoative construction. Some verbs are endowed with two senses, a causative one, which contains a causative element, and another sense, which does not. Note that we are focusing only on the causative sense of *frighten* verbs. According to formal approaches like Levin and Rappaport Hovav's (1995), the lexical semantic representation or template for this externally caused kind of verb makes explicit an external cause of the frightening event denoted by the verb in a causing subevent and a resulting change of state in a change of state subevent. These two subevents are linked through the element CAUSE. Causative *frighten* verbs call for an external argument (the syntactic subject) and a direct internal argument (the syntactic direct object) because of their marked causative character. From the foregoing discussion, it logically follows that the external argument, an inherent constitutive element in causative *frighten* verbs, can hardly be omitted unless the context clearly shows the underlying action, and consequently the logical subject, depicted by the purported state of affairs. Occurrences (53)–(56) can only be understood within a latent action frame that is recoverable by means of context. In other words, the

already conflated into the meaning of the verb and is only expressed when more details about the usual object apply.

causative frame[20] prototypical of externally caused verbs requires the presence of the external argument, the syntactic subject, in order to bring the whole action into focus, while the inchoative frame prototypical of internally caused verbs only focuses on the resulting change of state (or position), as argued by scholars like Hodgson (2006) or Cortés (2007, 2009) in terms of the telic character of inchoative patterns.

Another construction related to apparent intransitivity is the deprofiled object construction (Goldberg 2005: 28–32). Consider the following examples:

(57) *Some advertisements may inform, others persuade, cajole, frighten, shock, worry, arouse.*

(58) *I mean, the purpose of terrorism is to terrorize.*

(59) *He is a fraction of my father, powerless to terrify.*

The objectless construction, a notion coined by Lemmens (2006), is a cover term for the implicit theme and the deprofiled object constructions proposed by Goldberg (2005). The verbs eligible for occurrence in the implicit theme subconstruction belong to the group of verbs of emission and contribution. They share as common features the conflation of the theme or patient argument into the meaning of the verb and the inclusion of an overt directional.[21] For instance,

20 Regarding the notion of *frame* used in this paper, we follow Lakoff's (1987) lead. According to him, frames and links among frames structure conceptual domains. Domains are structured in terms of frame structures. A fine-grained frame-structure analysis is not relevant to the main point made in this contribution, which especially focuses on higher-level constructs, also originally identified by Fillmore as semantic roles specifying relations among frame elements. Moreover, in consonance with Ruiz de Mendoza and Galera (2014: 74), we concur that the term frame can been replaced with the notions of high-level and low-level non-situational and situational cognitive models. They acknowledge that all these constructs are frames within FrameNet. But their analysis is even more specific than the one carried out within FrameNet since it provides a full-fledged classification of frame-like structures. Ruiz de Mendoza and Galera stipulate that a low-level cognitive model captures sets of properties of entities and the relations that hold among them within a scenario (e.g., a bull, a bullfighter, the bullring, the arena, onlookers, etc., in a bullfight). A high-level frame (e.g., action, process, event) generalizes over the properties and relations specified for a number of low-level frames. A situational frame integrates properties and relations into a single structure and sequences the way in which entities relate. Generalizations over low-level situational scenarios give rise to high-level ones.
21 Even though Goldberg (2005: 23) describes the implicit theme construction at the syntactic level as a configuration comprising a verb of emission or contribution which requires two compulsory arguments, the subject and the oblique complement codifying direction, the latter is shown to be optional by examples like *He pressed his face into the ground and* sneezed, *feeling*

by default the unexpressed patient argument of *sneeze* is mucus, small drops of liquid or air. If the theme argument is overtly expressed, it must be a further specification of the prototypical theme (e.g., thick/light mucus) or a different theme from the prototypical one and it is usually metaphorical (e.g., pure rocket fuel). *Frighten* verbs are not felicitous in this subconstruction since they are not members of the groups of emission and contribute predicates. Our attention is geared towards the deprofiled object construction. Both the implicit and the deprofiled object constructions stand as counterexamples to the Argument Realization Principle (ARP) devised and supported by several scholars from different strands (Grimshaw and Vikner 1993; Rappaport Hovav and Levin 1998; Wright and Levin 2000). According to this principle, each subevent in the event structure template must be expressed by means of one argument XP in the syntax. In English, an isomorphic mapping between argument number and noun phrase number does not always hold, as shown by the objectless construction. In the implicit theme construction, Goldberg argues (2005: 21), in application of the ARP, the theme argument in expressions that entail a caused change of location should be overtly expressed. The same goes for the deprofiled object construction, which challenges the ARP in the sense that causative verbs, which are supposed to compulsorily express the argument that is subject to a change of state overtly, omit the theme under certain discourse conditions (Goldberg 2005: 28–29). Some of the representative verbs with which this subconstruction combines are causative *frighten* verbs since they qualify as psychological causative predicates. Goldberg gathers and echoes the opinion of several scholars who postulate the necessity of semantic recoverability for argument omission in the objectless construction (see Goldberg 2005: 27 and the references therein). However, she argues that a second motivating factor is in order for the implicit theme subconstruction to be possible. This is related to politeness issues since verbs like *piss* (in general, verbs of bodily emission) involve theme arguments (e.g., urine) that are taboo. In contrast, their objectless counterparts are more polite. Contribution verbs felicitously fuse with the constructional semantics of the implicit theme construction and may be also motivated by politeness. *I contributed to the foundation* is more tactful than the transitive version *I contributed 1000€ to the foundation* if no contextual background information calling for an exact amount of money is envisaged. Additionally, a further discourse condition that allows for the deprofiled object construction must be

the sand and grass on his lips. Nonetheless, the directional reading is retained since *sneeze* encodes the metaphorical motion of its theme argument from a source (realized as the grammatical subject) to a destination (the oblique complement, either specified or omitted and thus probably indefinite or retrieved from context).

satisfied. This is the Principle of 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 à 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, contrastive focus, etc.)". (Goldberg 2001; quoted in Goldberg 2005: 29)

Focal elements must be expressed because they are not predictable. On the other hand, non-focal, non-topical arguments like the theme in the objectless transitive construction can be left out since they are both predictable and non-relevant from a discursive perspective. We support the applicability of this principle to the two subconstructions of the objectless transitive construction, in contrast to Goldberg (2001, 2005), who restricts it to the deprofiled object construction. In both subconstructions, the theme can be omitted because it is predictable and non-relevant.

The syntax of the deprofiled object construction specifies a predicate that requires a subject and leaves the patient argument unspecified. From a semantico-pragmatic point of view, the predicate is emphasized to the detriment of the theme or patient, which is only implicitly coded but not overtly expressed because of its non-topical, non-focal nature. Verbal emphasis is achieved by different means: repeated action (e.g., *Peter gave and gave* but *Chris* just *took and took*), generic action (e.g., *Tigers* only *kill* at night), narrow focus (e.g., *She* picked up her carving knife and *began to chop*), strong affective stance (e.g., Why would they give this creep a light prison term!? *He murdered*!), or contrastive focus (e.g., *She could steal but she could not rob*) (Goldberg 2005: 30). It goes without saying that the omission of the theme argument is sanctioned by the fusion of the construction with the lexical frame, and not only by the separate workings of either the construction or the lexical specifications or event-frames of predicates à la Boas. Levin (1993: 33–41) brings together a wide variety of alternations, named unexpressed object alternations, in which one of the occurrences presents an omitted object. These realizations cover specific cases of Goldberg's deprofiled object construction. Within Levin's alternations, the PRO-arb object alternation is interesting for this analysis. In one of the two sides of the coin, the theme or affected entity is implied but is not grammatically expressed. According to Levin (1993: 38), "this variant could be paraphrased with the transitive form of the verb taking *one*, *us*, or *people* as objects". Examples (57)–(59) portray this situation and are amenable to this interpretation. We claim that, apart from the semantic recoverability and the Patient Omission under Low Prominence principles, this is a question of cognitive economy. The same information is conveyed by using the transitive and

intransitive variants. Therefore the one that is more economic in cognitive terms is chosen versus the one that takes longer to process. We could say that the transitive verbs in (57)–(59) have undergone a process of intransitivization. However, the underlying meaning of the sentence is the transitive reading. In application of Sperber and Wilson's (1995 [1986]) Principle of Relevance, since the object does not add any extra information to the sentence, this object is not expressed. This configuration draws our attention to the activity being performed to the detriment of the object of the action, which is generic.

Lemmens (2006) concurs with Rice's (1988: 207) statement that "neither extremely schematic nor extremely specific verb-complement pairs encourage object omission". In accordance with this idea, the specific predicates *scare, alarm*, and *petrify* are ruled out by the deprofiled object construction. In contrast, the hypernyms *frighten* and *terrify* are not extremely schematic and thus, are readily available for integration into this construction. However, *terrorize* is very specific but, to our surprise, it is compatible with this configuration, as (58) exemplifies. This contradicts Rice's hypothesis, which should be handled as a tendency rather than as a cut-and-dried generalization. Notice should be taken, nonetheless, that there are very few occurrences of *terrorize* as an eligible candidate for fusion into the deprofiled object construction.

This section has argued for the existence of a family of constructions, the fake intransitive construction, which is part of the transitivity system. We have discussed the cognitive constraints that underlie the middle and inchoative constructions and the connection of such patterns with intransitivity, as well as the similarities and differences between both configurations. Finally the deprofiled object construction has been explored in connection with inchoatives. It has also been regarded as involving a process of intransitivization of causative *frighten* predicates that can be explained on the basis of cognitive economy, semantic recoverability, and the Principle of Omission of Patient under Low Discourse Prominence coupled with a process of highlighting the predicate.

6 The cause subject family of constructions

The so-called possessor subject alternation has received scant attention in the literature and requires a principled account of the underlying mechanisms licensing its occurrence. This section undertakes the study of the possessor subject construction as a member of the cause subject family of constructions. The common feature that this family shares is the existence of an instrument

that shows certain traits of agentivity, either literal or metaphorical. Take the following expressions, whose "b" versions illustrate the possessor subject construction in its transitive version:

(60) a. *Álvaro frightened the crocodiles with his noisy laughter.*
b. *Álvaro's noisy laughter frightened the crocodiles.*

(61) a. *The murderer terrified John with his grim laughter.*
b. *The murderer's grim laughter terrified John.*

(62) a. *Kristine jumps around the girl trying to scare her with gestures.*
b. *Kristine's gestures scared the girl.*

(63) a. *He terrorized me with threats of what he would do if I ever told anyone about us.*
b. *His threats of what he would do if I ever told anyone about us terrorized me.*

(64) a. *She alarmed me with her concerns.*
b. *Her concerns alarmed me.*

(65) a. *They scared us with their drunken antics and* petrified us with *their sober disdain.*
b. *Their disdain petrified us.*

According to Levin (1993: 77), *amuse*-type psych-verbs, among which *frighten* verbs are included, felicitously fuse with this construction. Two main entities are involved in this construction: a possessor and an attribute (or sometimes an activity) of the possessor. The attribute/activity of the possessor is regarded as the cause of the psychological state expressed by the verb (for instance, in (60b) *Álvaro's noisy laughter* is the cause of the psychological state referred to by the verb *frighten*). As evidenced by Examples (60)–(65), causative *frighten* verbs can participate in states of affairs in which the possessor and the attribute/activity are conflated into a single noun phrase that occupies the first argument position or in states of affairs in which the possessor and the attribute/activity are expressed by means of two different constituents: the possessor, which is found in subject position, and the attribute/activity, which is realized through a *with*-prepositional phrase. As pointed out by Levin (1993: 77), a relationship is established between the subject and a prepositional phrase.

However, Levin (1993: 77) observes that examples like these might well be dealt with as cases of the instrument subject alternation, which is a type of oblique subject alternation. Consider the following examples:

(66) a. *David broke the window with a hammer.*
b. *The hammer broke the window.*
(Levin 1993: 80)

(67) a. *Kumari bit him with her teeth, frightened him with a butcher knife and threatened to kill the victim.*
b. *The knife frightened her.*

(68) a. *He scared her with a knife.*
b. *The knife scared David.*

(69) a. *You terrorized me with a gun.*
b. *Your gun terrorized me.*

(70) a. *Craig Adams terrified him with a four-inch vegetable knife.*
b. *And the knife terrified him.*

We might also postulate the similarity of Examples (60)–(65) above to examples of Levin's (1993: 81) abstract cause subject alternation, even though this scholar does not include *amuse*-type psych-verbs as combining with it. Consider "b" version of Example (71), taken from Levin (1993: 81), and those involving causative *frighten* verbs in (72)–(74):

(71) a. *He established his innocence with the letter.*
b. *The letter established his innocence.*

(72) a. *I do not want to seem as though I am trying to frighten you with my letters. For they say "His letters are weighty and strong…"*
b. *The letter frightened him.*

(73) a. *Nobody wants to scare people with their letters.*
b. *The letter scared her.*

(74) a. *He panicked listeners with a 1938 radio play of War of the Worlds.*
b. *The play panicked Broadway!*

On closer inspection, we could put forward the existence of a single construction, a more comprehensive cause subject construction with different members: possessor subject, abstract cause subject, and instrument subject constructions. These members can be simplified into two: the abstract cause subject construction (which would accommodate the possessor subject construction) and the concrete cause subject or instrument subject construction. Let's study each of these constructions in more detail. While the *with*-prepositional phrases of the possessor subject and the abstract cause subject constructions (examples "a") are abstract in nature, this does not hold for the instrument subject construction. In Examples, (60)–(65) laughter, gestures, threats, antics, disdain and concerns are abstract entities and in occurrences (71), (72), and (73) the letter and the radio play in (74) metonymically afford access to the contents of those letters and to the contents of the radio play, which are also endowed with abstractness. Thus there seems to be no reason to consider cases of the abstract cause subject construction as a separate case from the possessor subject configuration. On the face of it, this contrasts with the concrete character of the hammer, the knife, and the gun in (67)–(70). Notwithstanding this concrete character of instruments, this is only apparent in the case of causative *frighten* verbs. As was the case with the letter and the radio play in (71)–(74), the knife or the gun in (67)–(70) do not represent the objects themselves. They allow metonymic access to what could be done with those instruments (for instance, *He scared her with a knife* is understood as 'He scared her with the idea of being killed with a knife' and *The knife scared David* as 'The idea of being killed with a knife scared David'). Therefore we should not be misled into thinking that causative *frighten* verbs are eligible for constructional integration into the instrument subject configuration. The contrast between (66) and (67)–(70) proves revealing. While (66a) presents the prototypical action frame, i.e., one where an agent carries out a physical action that has a perceivable effect on an object by means of an instrument, (67a)–(70a) convey an experiential scenario where an entity (the experiencer) experiences a psychological state and the *with*-prepositional phrase is a manner specification rather than an instrument (for example, as observed, in (68a) the knife stands for the 'idea of being killed with a knife', which qualifies as an abstract manner). Thus we might conclude that causative *frighten* verbs are not compatible with the instrument subject construction, which calls for a concrete entity in the *with*-prepositional phrase, and that Examples (67)–(70) should be also classified as cases of the abstract cause subject construction. Experiential frames like *frighten* verbs show a clear tendency to select abstract causes that can play the role of *with*-prepositional phrases and subjects.

Nonetheless, whether abstract or not, we can regard all the *with*-prepositional phrases in the "a" versions of our examples of *frighten* verbs in this section as instrumental. Both cases of the possessor subject and of the abstract cause subject constructions can be analyzed as variants of the instrument subject construction where the instrument is in fact a manner specification. In the light of the preceding discussion, this might seem incongruous. However, this is a frequent phenomenon because our minds correlate instrument and manner in experience and regard them as if they were the same (this is what cognitive linguists such as Grady 1997; Johnson and Lakoff 1999, 2002 call conflation).[22] Levin (1993: 81) herself recognizes that the notion of abstract cause in what she calls the abstract cause subject alternation could be collapsed with the notion of instrument, but she does not examine the rationale behind this fact. The main reason for this is that abstract causes are expressed by means of *with*-prepositional phrases and play a role that is similar to that of a prototypical instrument since they are regarded as intermediary entities in the event coded by the verb. The same goes for the possessor subject construction, as has been observed by Levin (1993) herself, as argued above.

The fact that versions "b" of Examples (60)–(74) are feasible should be accounted for as well. From a syntactic perspective, since agents, instruments, natural forces, or circumstances, in being causers, can fill the slot of the syntactic subject, the *with*-prepositional phrases of Examples (60)–(74), which have been argued to play an instrumental role, can occupy the subject position within the sentence. From the conceptual point of view, the high-level metaphor AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION comes into play. By way of illustration, compare Examples (60), which we reproduce below for convenience, and (75):

(60) a. *Álvaro frightened the crocodiles with his noisy laughter.*
b. *Álvaro's noisy laughter frightened the crocodiles.*

(75) a. *Jane killed John with a switch blade.*
b. *A switch blade killed John.*

As was discussed in connection with the caused-motion and resultative constructions, while (75) involves an effectual action, (60) expresses an

22 We are supposed to learn conceptual metaphors on the basis of conflations in our experience by the age of four or even earlier. The source and target of these metaphors merge in our experience. An oft-quoted example is the correlation between verticality and quantity whenever we pour juice into a glass or pile up objects (Johnson and Lakoff 2002: 245).

experiential action. If Jane kills John the physical impact on John is evident. However, in (75) the impact on the affected entity, the crocodiles, is not physical. A causative component is involved in both examples. For instance, in (75) Jane's action of killing causes John to become dead. In (60), Álvaro's action of frightening causes the crocodiles to get scared. This interpretation is licensed by the high-level metaphor AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION. The verb *frighten* (and all the causative *frighten* verbs analyzed in this paper) undergoes a change of transitivity type (from experiential to effectual) in such a way that an occurrence like (60b) (and all "b" versions in Examples (60)–(74)) is feasible. Nonetheless, this would only account for the fact that causative *frighten* verbs are eligible for fusion into the cause subject construction but not for the existence of the construction itself. In this connection, we might be misled into thinking that since the syntactic subjects in the "b" versions play an instrumental role, the metonymy INSTRUMENT FOR AGENT licenses such "b" versions. For instance, Díez (2005: 238) studies this metonymy through examples like (76) and (77):

(76) *His other hand retrieved the rose*.

(77) *His thumb touched her cheek gently*.

These examples, whose "a" versions would be *He retrieved the rose with his other hand* and *He touched her cheek gently with his thumb* respectively, would be instantiations of the metonymy INSTRUMENT FOR AGENT. In fact, *his other hand* and *his thumb* show agent-like features that can account for their first argument position in the sentence. However, this is not the case with Examples (60)–(74). In the examples above, the "b" versions present part of an action frame to allow access to the whole action frame. In (60b) (see Figure 4) the protagonist's noisy laughter is presented as the reason why the crocodiles become frightened. But the laughter is actually the means for the action to occur. What this construction does is use the means of the action as if it were the causal agent, the true agent becoming a fake possessor of the means for the action. This is a metaphorical process based on people's perception of causal instruments as agents. This metaphor, which eliminates the true agent, is the basis for a metonymy whereby the incongruent predication according to which the agent is a possessor of the causal action stands for the congruent predication where the true agent uses laughter as a way of frightening the crocodiles. The underlying reason for the subject position of the prepositional phrase, which is an external cause of the action itself, is that in English the syntactic subject is compulsory in the structure of sentences. Thus, the prepositional phrase occupies that

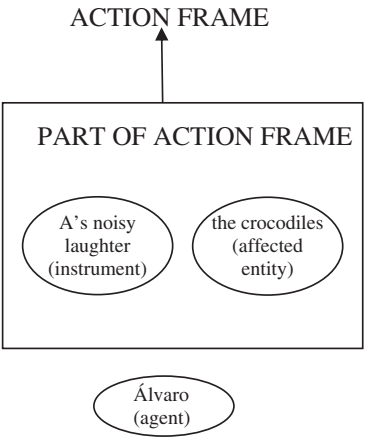

Figure 4: PART OF AN ACTION FRAME FOR THE WHOLE ACTION FRAME.

position. Summing up, the metonymy that licenses the cause subject alternation is PART OF AN ACTION FRAME FOR THE WHOLE ACTION FRAME. In terms of the syntactic consequences for the organization of the sentence, "b" versions are economic from a cognitive perspective and highlight the cause, means, or manner as prominent elements in the purported states of affairs, while the agent remains backgrounded.

At this point, we might wonder why "b" versions of our examples foreground the instrument, rather than any other element within the action frame, to the detriment of the agent of the underlying action. In application of Ruiz de Mendoza and Santibáñez's (2003) Correlation Principle, a good candidate for mapping information about the source element to the target element is one that shares the relevant implicational structure of the target element. Whenever we use some instrument in order to perform an action, this instrument is highlighted because it plays a very important role in the action. For instance, if we break a window with a bat, the focus is on the instrument breaking the window rather than on the agent carrying out the action. The instrument gains prominence due to its direct effect on the window. Similarly, this carries over to our examples, which figuratively convey states of affairs in which the experiential impact on the experiencer is seen in terms of an effectual impact on an affected object.

In this section, we have put forward the cause subject construction to encompass the abstract cause subject construction (of which the possessor subject construction is a subcase) and the concrete or instrument subject construction. This broader cause subject configuration has been shown to be

feasible thanks to a metonymy whereby part of an action frame affords access to the whole action scenario. Furthermore, causative *frighten* verbs are apt for lexical-constructional compatibility with the abstract cause subject construction thanks to the workings of the high-level metaphor AN EXPERIENTIAL ACTION IS AN EFFECTUAL ACTION.

7 Conclusion

By way of conclusion, Table 3 below summarizes our main findings in connection with the constructions that license causative *frighten* verbs. More specifically, it illustrates the different families of constructions that have been explored in this paper with a view to going beyond Goldberg's generalizations and the specific causative *frighten* predicates that have been found to be eligible for lexical constructional fusion with these configurations. Jiménez (2004, 2006) has provided an excellent starting point for our discussion. However, there are some aspects that she disregards and that should be complemented by a Cognitive Construction Grammar approach such as the one adopted in this proposal. Her main focus is on the syntagmatic characterization and internal makeup of *frighten* predicates. Ours is on the underlying reasons why these verbs can participate in certain constructions and on why these constructions license some causative *frighten* verbs while others are blocked. This principled account has been spelled out in terms of high-level metaphors and metonymies. In this connection, on the basis that the power of constructions should be restricted,

Table 3: Causative *frighten* verbs and constructions.

	To cause somebody to feel fear (Constructions)						
Verbs	**Caused-motion**		**Fake intransitive**			**Cause subject**	
	Caused-motion	**Resultative**	**Inchoative**	**Middle**	**Deprofiled object (Pro-Arb)**	**Abstract cause subj.**	**Instrument subj.**
1. *Frighten*	+	+		+	+	+	–
1.1 *Scare*	+	+		+		+	–
1.2 *Alarm*	+	+		+		+	–
1.3 *Petrify*	+	+	+	+		+	–
2. *Terrify*	+	+	+	+	+	+	–
2.1 *Terrorize*	+	+	+	+	+	+	–
3. Panic	+	+	+	+		+	–

the notion of coercion has been retained (Gonzálvez-García 2011) and constraining elements alongside verbs have been foregrounded (for instance, the use of the adverb *easily* in facility-oriented middles).

Moreover, real data have supported our analysis and each construction has been abundantly exemplified in order to make up for the drawbacks inherent in a proposal like Jiménez's, which only offers a few examples to provide evidence in favor of her arguments and many of them are left unexplained.

In order to offer a fine-grained study of causative *frighten* verbs, both core and peripheral examples have been considered due to our cognitive orientation and qualitative treatment of the data. It remains for future research to conduct a quantitative analysis of the data.

Finally, we have also provided arguments in favor of the idea that the construal and acceptability of constructions in general is determined by discourse-pragmatic factors to a great extent. For instance, even in the case of argument structure constructions like caused motion the role played by context has been made prominent since, as observed by Boas (2011a), all grammars leak and this leakage requires some principled explanation.

Another concluding remark that deserves particular attention is the connection of the internal constrains proposed by Jiménez (2004, 2006) in the domain of *frighten* type verbs with the cognitive constraints discussed in this article. For instance, in her analysis of the caused-motion construction, Jiménez states that the fusion between *frighten* verbs into the middle alternation can be accounted for in terms of two principles: the first one would be the "Suppression of Variables", according to which some variables can be suppressed in the syntactic representation of a clause if the basic interpretation of the canonical lexical item is not violated. In this case, the causer of the action is suppressed; the second principle would be the "Predicate Integration Condition". This principle stipulates that the construction may introduce a new predicate into the canonical representation of the lexical item if the semantics of the added predicate is compatible with the semantic content of the lexical item. As Jiménez (2004: 128) rightly points out, "through this rule the construction introduces a new predicate that attributes a property to the subject." These two principles should be connected to the high-level metonymy PROCESS FOR ACTION FOR RESULT. For instance, we know that this metonymy allows us to express an action as a process and thus the agent of the action is suppressed and the syntactic expression becomes simpler in syntactic terms. This corresponds to the principle of Suppression of Variables. A further direction of research should be concerned with the search for these connections between internal and external constraining factors in the process of fusion between lexical items and high-level constructions.

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