

Argument structure and compositionality in idiomatic constructions*

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1. Introduction

The present paper is about idioms, argument structure and the compositional meaning determined by argument structure representations. We focus on the debate whether idiomatic expressions have compositional and noncompositional characteristics, and provide support for a type of hybrid model for idiomatic constructions that accomodates a lexico-syntactic analysis of the compositional meaning associated to argument structure with a non-syntactically transparent analysis of conceptual content.¹

For the purposes of presentation, some preliminary questions about idioms, mainly questions (i) and (ii), can be taken into consideration:

- (i) What is linguistically relevant from the study of idioms? What do we know about them?
- (ii) Do idioms have compositional meaning?

In fact, over the last decades the study of idioms has proved to be relevant for identifying constituenthood and for justifying certain transformations in the history of generative

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¹ An hybrid view on idiom representation and processing is supported in Titone – Comine (1999).

grammar. In addition, with regard to the question whether idioms have compositional meaning, there are basically two answers: A and B.

- A. Most idiomatic expressions do not have compositional meaning
- B. Most idiomatic expressions have compositional structural meaning

The most common answer is A. In accordance with it, an idiom is usually defined as a constituent or a series of constituents for which the semantic interpretation is not a compositional function of the formatives of which it is composed. Hence, according to the classical view received from generative grammar (Katz & Postal 1963, Fraser 1970, Chomsky 1980), idioms are situated at the periphery of grammar as special lexical phenomena, and lexical insertion of idioms as X^0 is postulated in order to get appropriate derivations.

A different sort of answer, also associated with type A, is provided by Jackendoff (1997a, 2002), who on the one hand claims that idioms are part of language, since they have phonological structure, syntactic structure, and conceptual structure, and on the other hand believes that what makes a syntactic structure idiomatic is that not all of the syntactic constituents correspond to conceptual constituents. Therefore, he supports the hypothesis that idioms are conceived as constructional, as complex lexical items whose meaning is not syntactically determined, but rather is to be dealt with at the syntactic structure – conceptual structure interface component. Lexical licensing of units larger than X^0 is postulated in his representational modularity approach to the faculty of language.

A second significant answer to question (ii) is B. Such a position is held, among others, by Nunberg, Sag & Wasow (1994), who make a distinction between idiomatically combining expressions (e.g. *take advantage of*), which are claimed to be compositional, and idiomatic phrases (e.g. *kick the bucket*), which are claimed not to distribute their meaning to their components. These authors argue that several parts of an idiom can be assigned an interpretation, and that “modification, quantification, topicalization, ellipsis, and anaphora provide powerful evidence that the pieces of many idioms have identifiable meanings which interact semantically with other” (Nunberg – Sag – Wasow 1994:503). Therefore, according to them, conventionality should not be identified with non-compositionality.

A similar answer is held by Marantz (1996), who supports the position that all idioms are compositional. According to him, syntactically complex elements always carry with them their associated compositional meaning, even through idioms (e.g. *kick the bucket* has the punctual completive aspect of a transitive verb like *hit* with a definite direct object). Similarly, McGinnis's (2002) position is that the aspectual meaning of idiomatic VPs is completely systematic and compositional. In particular, she puts forward the point that idiomatic VPs (e.g. *kick the bucket*) show syntactically derived aspectual properties.

Keeping these antecedents in mind, in this paper we wish to focus on the following two hypotheses.

- (i) The study of idioms is relevant to support a well-known typological distinction between verb-framed languages like Catalan and satellite-framed languages like English (Talmy 1991, 2000) in syntactic argument structure terms (Hale – Keyser 2002).
- (ii) The study of idioms is relevant to make a distinction between syntactically encoded meaning, which is compositional, and conceptually encoded meaning, which is non-compositional.

Our goal is twofold. First, we will show that the syntactic encoding of the compositional meanings associated with some idiomatic constructions follow the dictates of linguistic typology, in particular, the ones described by Talmy (1991, 2000). Second, we will show that the syntactic form of an idiom underdetermines the interpretation conceptually associated with that idiom. Rather than focusing on a semantic taxonomy that describes how idioms differ in their compositionality, and how these differences may have implications for process models of idioms comprehension, we identify the argument structure associated with different lexicalization patterns, and select the concepts associated with the various syntactic positions in argument structure representations. This procedure allows us to predict, on the one hand, their syntactically encoded meanings and, on the other, the different degree of productivity of specific idiomatic constructions among type-specific natural languages.

The outline of the paper is as follows. First, we will present the relevant data, more particularly, we will describe an interesting contrast between English (Germanic language) and Catalan (Romance language) idioms. Second, we will introduce the theoretical background on the basis of which we will present our analysis of the data. This analysis will allow us to put forward in the third part of the paper a clear distinction between compositional and non-compositional meanings associated with the data. The paper will end up with some concluding remarks.

2. Data of interest

The starting point is the English paradigm illustrated in (1) and (2), a class of idioms we name the EX-DIS class (for EX(cessively) D(etachable) I(diom)s). It is characterized by the fact that the *excess* meaning associated with the detachment of a part of the human body is conceptualized as proportional to the excess meaning that turns out to be associated with an activity at the time of utterance interpretation.

- (1) a. *cry one's eyes **out***
 b. *argue one's heart **out***
 c. *work one's guts **out***
 d. *stick one's neck **out***
- (2) a. *{laugh, blow, sing, talk, drink, cook, knit, swim, program, read, work, etc.}
 one's head **off***
 b. *shoot one's mouth **off***

2.1 Properties of the English data

What is characteristic of this well-established English class is that it makes manifest a set of syntactic and semantic properties, namely:

- The number of these idioms seems to be very large and even productive.²
- The number of possible verbs seems to be highly free.³ This notwithstanding, an important syntactic restriction (not noted in the literature) applies: only unergative (e.g. *laugh*) or unergativized (e.g. *drink*) verbs can in principle occur in this structure. Unaccusative and obligatory transitive verbs do not seem to enter into this pattern (cf. **John disappeared his head off*, **John frightened his guts out*).
- The D must have a possessive form.
- This class of idioms always expresses a binding relationship in such a way that the data in (1) and (2) show the usual (non-idiomatic) way of expressing inalienable constructions in English:⁴ they have a possessive determiner, which is coindexed and correferential with the subject. This possessive specifies the part-of-the-body noun, in such a way that the noun is interpreted as a semantic dependent entity and encodes an anaphoric interpretation. What we have just said is illustrated in (3), whereas (4) is a rough approximation to the syntactic argument structure involved in this class of idioms.

(3) SUBJ_i laugh *one*'s_i head off

(4) [VP V_{unerg} [SC/PP [DP poss_i [NP part-of-the-body N]] {out / off}]]

- A telic path particle (either *out* or *off*) is required at the coda of the idiom.
- Finally, from an interpretative perspective, the object noun is figuratively interpreted as denoting a part of a human body which is detached from the body as a result of doing an activity to excess. That is, the conceptual interpretation is: DO some activity excessively / {too / very} hard.

² The examples in (1) and (2) are gathered by Jackendoff (2002), but further examples could easily be added to this list.

³ According to Jackendoff (2002:173), “the verb is totally free, within pragmatic constraints”.

⁴ That is, the EX-DIS class makes manifest the same pattern we find in non-idiomatic inalienable constructions, as in (ia), but not in (ib).

- (i) a. He_i raised *his*_i hand. – inalienable
 b. He raised *the* hand. – alienable

There is still something more interesting with regard to the English paradigm. Compare an example of the EX-DIS class such as (1b) (repeated in (5a) for convenience) with the rest of the constructions illustrated in (5).

- | | | |
|--------|----------------------------------|---------------------------------|
| (5) a. | argue one's heart out | - EX-DIS construction |
| b. | cook the pot black | - resultative construction |
| c. | twist the night away | - <i>time away</i> construction |
| d. | laugh one's way out of the room | - <i>way</i> construction |
| e. | work oneself into a frenzy state | - fake resultative construction |

It happens to be the case that English has this whole set of constructions (originally described all together by Jackendoff 1997b).⁵ What is even more interesting is that none of these constructions exist in Romance languages. As will be shown in section 3 below, we along with Talmy (1985, 2000) suggest that the set of constructions in (5) does not exist in these languages for exactly the same reason that they lack examples like the one illustrated in (6).

- (6) float out of the cave

⁵ The data in (5) share some common properties:

- The V is free.
- The definite DP is not an internal argument of the verb, in spite of the fact that it occupies the direct object position. The data in (5) correspond to unselected object constructions (cf. Rappaport Hovav & Levin 1998; Mateu 2002).
- The V only has an external argument: the subject. Notice that it is the presence of the resultative Part / PP / AP that licenses the direct object. Therefore,
- The definite DP is a syntactic and a semantic argument of the Part / PP / AP.
- Finally, the possessor included in the specifier position of P is necessarily coindexed with the external argument (i.e. the Causer) of the V.

According to Goldberg (1995) and Jackendoff (1997b, 2002), the set of properties just mentioned can be easily accounted for under a constructional analysis. For example, Jackendoff claims that the constructions in (5) are instances of a more general abstract *Verb Subordination Archi-construction*, which associates [_{VP} V ...] with 'act (by) V-ing' (1997b:555). However, we think that Jackendoff doesn't capture exactly what is going on in these data. We are convinced of the fact that idiomatic constructions like those in (1) and (2), as well as the rest of constructional idioms in (5), can be accounted for under appropriate syntactic argument structure analyses, which are needed independently in the theory of grammar. This is important, because -if true- it indicates that a special theoretical device such as the technical notion of *construction* should neither be postulated to account properly for the above set of properties, nor for the typological differences they make manifest. We show that the solution is to be provided in terms of syntactic argument structure configurations (cf. section 3.2 below).

Germanic examples containing directional particles (cf. *out* in (6)) are typically expressed in Romance via directional verbs as in (7).

(7) exit the cave floating

Accordingly, instead of the constructions given in (5), in Romance we find a different pattern which is illustrated by means of the Catalan data in (8).

- (8) a. *treure's els ulls* (de tant discutir)
 get+out+CL the eyes of much arguing
- b. *ennegrir l'olla* (cuinant)
 black the pot cooking
- c. *passar la nit* (ballant)
 pass the night twisting
- d. *sortir de l'habitació* (rient)
 go+out of the room laughing
- e. *entrar en un estat delirant* (després de tant treballar)
 enter into a state frenzy after of much working

It should be noticed that the constituents within parentheses correspond to adjuncts, whereas in English they correspond to the main verb (i.e. *argue, cook, twist, laugh, work*), as seen in (5).

2.2 Properties of the Catalan data

What we have just seen suggests that an interesting contrast between English and Catalan constructions exists which in fact seems to reflect a systematic typological partition between Germanic and Romance languages. In order to prove this hypothesis, we selected from a conceptual data base of Catalan idiomatic expressions those which contain a

directional main verb plus an object noun which denotes a detachable part of a human body, as exemplified in (9).⁶

- (9) a. *treure* *el fetge per la boca* (de tant treballar)
 get+out the liver through the mouth (of much working)
 “work one’s guts out”
- b. *sortir-li* *els ulls de la cara* (a algú) (de tant plorar)
 go+out+CL the eyes of the face (to somebody) (of much crying)
 “cry one’s eyes out”
- c. *petar-se* *el cul* (de tant riure)⁷
 break+out+CL the butt (of much laughing)
 “laugh one’s butt off”

What is important about this paradigm is that it shows a set of interesting properties, namely:

- The number of these idioms is characteristically very small in any Romance language (about the 0.13% of the above mentioned data base)
- The number of verbs is also very small, reduced basically to directional verbs (e.g. transitive *treure* and unaccusative *sortir* in Catalan)
- The D must be definite, with an expletive denotation (Vergnaud & Zubizarreta 1992:621, 629)

⁶ With regard to the Catalan data we started from the description of a wide range data base of idiomatic expressions used in contemporary Catalan. This data base made possible the elaboration of a conceptual dictionary of Catalan idioms (Espinal 2004a) which provides relevant grammatical information (form, syntactic category, definitions, examples, lexical relationships with other idioms: synonymy, antonymy, argument inversion, semantic extension) plus extensive linguistic information (dialectal, prescriptive, etymological) for each idiom associated with a conceptual entry. We are persuaded that this empirical study offers the possibility to check linguistic hypotheses on the syntax-semantics interface of idiomatic expressions.

⁷ Notice that, although (9c) does not contain a directional verb, as in (9a-b), it has a verb which denotes a change of state. Following common assumptions, we hold that changes of state should be conceived as abstract changes of location.

- These data make explicit a binding relationship, characteristic of inalienable constructions (V&Z 1992). Accordingly, part-of-the-body nouns (i.e. *fetge* ‘liver’, *eyes* ‘eyes’) are conceived as inherent inalienable expressions, which means that they are semantic dependent entities and encode an anaphoric interpretation. The subject or the dative is the possessor which binds the corresponding part-of-the-body nouns, as illustrated in the pattern in (10).⁸

- (10) a. SUBJ_i *treure* *el fetge_i* *per la boca*
 SUBJ get+out the liver through the mouth
- b. *sortir-li_i* *els ulls_i* *de la cara* (a algú)
 go+out CL the eyes of the face (to somebody)

The idiomatic expressions in (9) are associated with the informal argument structure in (11).

- (11) $[_{VP} V_{trans/unac} + PATH [_{SC/PP} [_{DP} D_{def} [_{NP} part-of-the-body N_i]]]]]^9$
-

Singular definite nouns allow a plural, distributive interpretation, because they are semantically dependent expressions. Accordingly, *fetge* ‘liver’ in (12), in spite of its singular form, is bound by ‘teachers’, thus encoding linguistically the liver of each one of the teachers.

- (12) Els professors_i de secundària *treuen* {*el fetge_i* / **els fetges*} *per la boca*.
 the teachers of high-school get+out the liver / the livers through the mouth

⁸ From a purely descriptive perspective it should also be noticed that the idiomatic pattern illustrated in (9) is similar to the non-idiomatic inalienable paradigm in (i).

(i) SUBJ_i Va aixecar *la mà_i*
 PAST raise the hand

They are similar in the sense that some binding effects are involved. The idiomatic data make explicit a binding relationship, between a part-of-the-body noun and an external argument, which is similar to the binding relationship that shows up whenever a body-part noun occurs in object position in non-idiomatic expressions.

⁹ The symbol + stands for a conflation operation in Hale & Keyser’s (2002) sense (cf. Section 3.2 below).

- Finally, it should be pointed out that, interestingly enough, the Catalan idiomatic data in (9) share with the English data in (1) and (2) a conceptual interpretation which involves an excess meaning.

So far we have pointed out an interesting contrast between the English EX-DIS idiomatic class and their corresponding idioms in Catalan, on the basis of a correlation, already described for English (Jackendoff 1997a, 1997b, 2002), between those constructions presented in (5) and (8). In the next two sections we would like to consider the following questions: (i) what do these differences tell us about the syntax of these languages?, (ii) which part of an idiom's meaning is compositional?, and (iii) how argument structure relates to syntactically transparent compositional meanings?

In the next section, after sketching out Talmy's (1985, 1991, 2000) typological work on conflation processes, on which we base our analysis, we will provide an l-syntactic explanation of the crosslinguistic contrasts between English and Catalan we have been describing so far.

3. Conflation processes in idiomatic constructions

Our analysis of the idiomatic constructions under study is based on Talmy's (1985, 1991, 2000) typological work on the conflation processes involved in so-called *lexicalization patterns*. In particular, here we assume Mateu's (2002) and Mateu & Rigau's (2002) generative implementation of his descriptive work into Hale & Keyser's (1993, 2002) configurational theory of argument structure. Accordingly, first we will briefly review Talmy's descriptive approach (section 3.1) and then we will translate them into Hale & Keyser's (2002) theoretical framework (section 3.2).

3.1 Talmy's (1985, 1991, 2000) typology of lexicalization patterns

According to Talmy (1985, 2000), languages can be classified as to how semantic components like Figure, Motion, Path, Manner, or Cause are conflated into the verb. In

particular, he points out that a lexicalization pattern typically found in Germanic languages like English involves conflation of Motion with Manner, whereas a lexicalization pattern typically found in Romance languages like Catalan involves conflation of Motion with Path. Some relevant examples are given in (13) and (14).¹⁰

- (13) John *danced* into the room.
 (14) En Joan *entrà* a l'habitació (ballant).
 D John entered to the room (dancing)
 “John entered the room.”

In Talmy's typology (1991, 2000), English and Catalan can be regarded as two poles of a typological dichotomy that he characterizes as 'satellite-framed' *versus* 'verb-framed languages'. Given this distinction, languages like English do not typically conflate the Path (e.g., *into* in (13)) into the verb, but leave it as a satellite around the verb. This option is found in the majority of Indo-European languages, Romance being excluded. By contrast, there are languages like Catalan which encode the Path into the verb; consider, for example, directional verbs like *entrar* 'go in(to)', *sortir* 'go out', *pujar* 'go up', *treure* 'get out', etc. Given these assumptions, the appropriate way of dealing with the English data in (1), (2), and (5) appears to be as follows: the Manner/means component (e.g., *working*, *crying*, *laughing*) is allowed to be conflated into the verb because the Path (e.g., *out*, *off*) element remains as a satellite around the verb.¹¹ By contrast, the lexicalization pattern corresponding to Catalan in (8), (9) and (14) involves conflation of the Path into the verb. Therefore, in Catalan (and more generally, in verb-framed languages), the Manner component is forced to be expressed as an adjunct, if informationally necessary (cf. (8), (9) and (14)).

¹⁰ Notice that the English translation of the Catalan directional verb in (14) belongs to the Romance lexicalization pattern: both Cat. *entrar* and Eng. *enter* come from the Latin lexicalization *intra+ire*, i.e., 'IN+GO'.

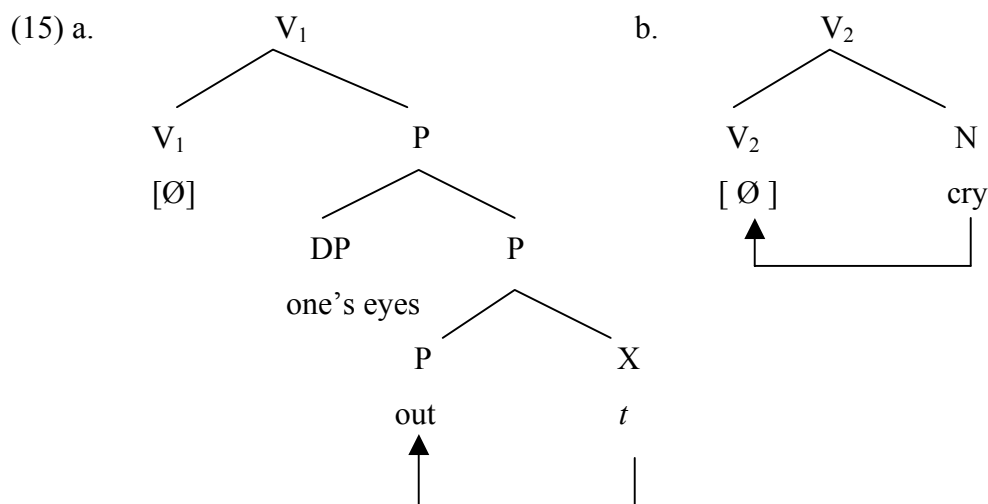
¹¹ Interestingly, notice that the Germanic lexicalization pattern (i.e., *Motion + Manner*) is to be related to the well-known *elasticity* of verb meaning in English (cf. Rappaport Hovav & Levin 1998, Mateu 2002), which can be nicely exemplified in the data in (5) above.

3.2 A l(exical)-syntactic explanation of conflation processes

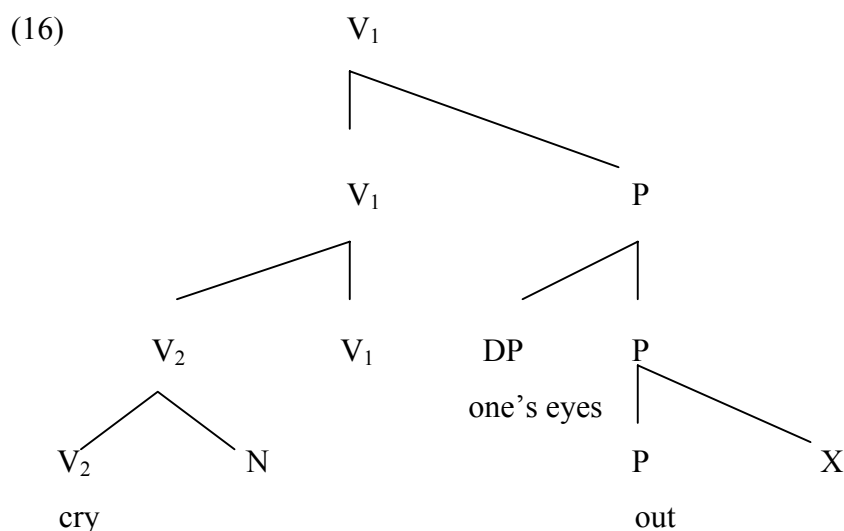
The absence from Romance languages of idiomatic constructions like those in (1) and (2), as well as of non-idiomatic ones like those in (6) and (13), can be argued to be due to the very same morphosyntactic explanation. As a result, we want to show that there is nothing special in the syntactic structuring of the meanings of the idiomatic constructions in (1) and (2). Indeed, if the syntax-semantics mapping was assumed to be unpredictable when dealing with the idiomatic constructions in (1) and (2), one could also expect to find parallel idiomatic constructions in Romance, which is clearly not the case. We take this result as compatible not only with the one of those linguists who claim that most of idioms are compositional (Nunberg et al. 1994) but, more interestingly, with the one of those who claim that the compositional meanings of both idiomatic and non-idiomatic constructions are read off from their relevant (morpho)syntactic structures (Marantz 1996, and subsequent work).

Being sympathetic to the latter's approach, we aim to show that a syntactic approach to the constructions in (1), (2), and (5) can be argued to be more explanatory than the semanticocentric one found in Jackendoff (1997b, 2002). In particular, following Hale & Keyser's (2002) l(exical)-syntactic theory of argument structure, we claim that the formation of complex constructions such as the ones in (1), (2) and (5) involves two different l-syntactic structures: the main syntactic argument structure is transitive, and the subordinate one is unergative.

Let us exemplify it with the analysis of (1a) (e.g., *(John) cried his eyes out*): the transitive structure in (15a) is associated with a location event, while the unergative structure in (15b) is associated with an activity, i.e., that of *DOing cry*. (15a) is an l-syntactic structure similar to that corresponding to transitive locative verbs (like *shelve*) and transitive locatum verbs (like *saddle*) (cf. Hale & Keyser 2002). We posit that the null transitive V₁ subcategorizes for a 'Small Clause'-like PP: the specifier of this PP (e.g., *one's eyes*) is interpreted as *Figure* and the complement as *Ground*, these terms being borrowed and adapted from Talmy (1985, 2000). Following Hale & Keyser (2002:230), we also assume that intransitive particles like *out* and *off* in (1) and (2) have their Ground complement conflated into them (see (15a)).



According to Mateu's (2002) and Mateu & Rigau's (2002) l-syntactic accounts of Talmy's (1991, 2000) typological distinction between verb-framed vs. satellite-framed languages, it is precisely the non-conflating (i.e., satellite) nature of the P element in (15a), which encodes a terminal coincidence relation expressing directionality, that allows the unergative verbal head in (15b) to be merged into the phonologically null verb in (15a). Drawing on an important insight from Hale & Keyser (1997: 228-229), Mateu (2002) argues that the formation of complex resultative-like argument structures involves a 'generalized transformation'. See (16) for the resulting adjunction process of (15b) into (15a).



Moreover, as noted in (17), the external argument is assumed not to be introduced by a lexical category projection, but rather by the relevant functional one (cf. Hale & Keyser 1993, Chomsky 1995, Kratzer 1996, Pylkkänen 2002).

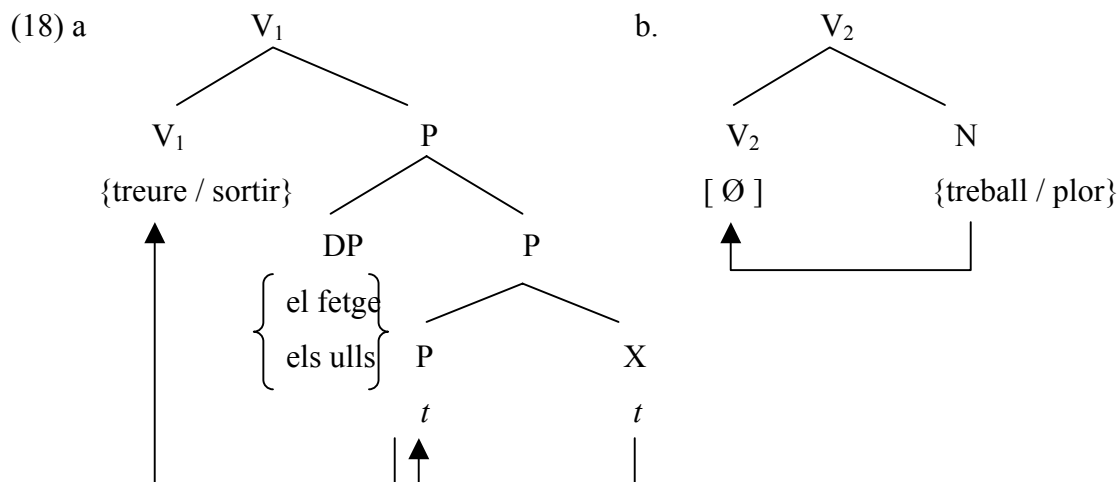
- (17) a. [_F DP [_F F [_{V1} [_{V1} [_{V2} V₂-N]-V₁] [_P DP [_P P-X]]]]]
 a'. [_F John_i [_F F [_{V1} [_{V1} cried] [_P his_i eyes [_P out]]]]]

By contrast, as pointed out above, the absence of idiomatic constructions like those in (1) and (2) from Romance languages like Catalan (and, more generally, from ‘verb-framed languages’) is assumed to be related to their corresponding *Motion+Path* lexicalization pattern. Hence, it is not surprising that a cursory look at Espinal (2004) reveals a consistent use of directional verbs like *treure* ‘to get out’ or *sortir* ‘to go out’ in the Catalan counterparts of these idioms (cf. (9)). To put this descriptive claim into the present I-syntactic terms, it is the case that in Catalan, the terminal coincidence relation associated with the P in (18a) is conflated with the main verb V₁, saturating its null phonological matrix. Therefore, what corresponds to V₁ and what to P cannot be distinguished any longer: the transitive verb *treure* ‘to get out’ and the unaccusative verb *sortir* ‘to go out’ are morphophonological atoms. As a result of this conflation process represented in (18a), it is no longer possible to conflate the V₂ in (18b) into the V₁ in (18a).¹²

We have exemplified this analysis with the Catalan idioms in (9a,b) (e.g., (*En Joan*) *va treure el fetge per la boca (de tant treballar)*, (*A en Joan*) *li van sortir els ulls de la cara (de tant plorar)*): the transitive / unaccusative structure in (18a) illustrates conflation of P (telic PATH), which has already been conflated with the *Ground* (as in (15a)), into V₁ (CAUSE / GO). Because of this, if informationally necessary, the subordinate argument structure in (18b) must be expressed as an adjunct (as already seen in (8) and (9)).¹³

¹² Notice that a Whorfian prediction follows from the present I-syntactic analysis. We expect to find fewer EX-DIS class idioms in a Romance language than in a Germanic language because in English, but not in Catalan, almost any unergative/unergativized verb could in principle occur as the main verb of the idiomatic constructions under study (cf. the data in (1) and (2)).

¹³ Assuming Hale & Keyser’s (2002) claim that adjuncts are left out from I-syntactic representations, the representation of the adjunct constituents *per la boca* in *treure el fetge per la boca*, and *de la cara* in *sortir-li els ulls de la cara* is not specified in (18a).



As noted in (19), we assume that F is the relevant functional category introducing the nominative argument, and F' the relevant functional category introducing the dative argument.¹⁴

- (19) a. $[_F \text{ DP} \quad [_F \text{ F} \quad [_V \text{ V} \quad [_P \text{ DP} \quad [_P \text{ P X}]]]]]$ Transitive argument structure
 a'. $[_F \text{ En Joan}_i \quad [_F \text{ F} \quad [_V \text{ treure} \quad [_P \text{ el fetge}_i \quad [_P \text{ X}]]]]]$
 b. $[_{F'} \text{ pro} \quad [_{F'} \text{ F}' \quad [_V \text{ V} \quad [_P \text{ DP} \quad [_P \text{ P X}]]]]]$ Unaccusative argument structure
 b'. $[_{F'} \text{ pro}_i \text{ dat} \quad [_{F'} \text{ F}' \quad [_V \text{ sortir} \quad [_P \text{ els ulls}_i \quad [_P \text{ X}]]]]]$

We conclude this section by giving some preliminary conclusions that can be drawn from the present discussion: (i) different conflation processes at l-syntax predict typologically different idiomatic patterns, and (ii) there is a syntactic derivation which is going to determine the compositional meanings attributed to these constructions.

4. Some remarks on compositional and noncompositional meanings

In this final section we provide some arguments that support the claim that the structural meaning of idiomatic constructions is composed in the syntax. In fact, what we have argued

¹⁴ See Chomsky (1995), Kratzer (1996), and especially Pylkkänen (2002), for the relevant functional categories introducing these arguments, whose detailed discussion we omit here.

so far has made explicit that there are meaning components of idiomatic expressions which are structurally determined.

First, in accordance with the above syntactic analysis, notice that there are some meaning components that come from basic elements of argument structure: most notably, the concept of *CAUSE* is associated with transitive V_1 , *GO* with unaccusative V_1 , *DO* with V_2 , and *Telic PATH* (Hale & Keyser's *Terminal coincidence relation*) with P.

A second piece of compositional meaning is mediated by the binding of inalienable DPs. Notice that this piece of meaning comes from *s-syntactic* relationships (in Hale & Keyser's (2002) sense).

Third, there are some meaning considerations regarding the nominal expressions of inalienable constructions. Notice that, even though they have been claimed to denote kinds or types (Vergnaud & Zubizarreta 1992: 625) -a reading which is associated with the distributive effect (see the comments on (12))- in the idiomatic reading part-of-the-body nouns have no extensional referent, can never be existentially quantified, and, furthermore, always have narrow scope with regard to other operators (cf. Espinal 2001). Accordingly, we along with Espinal (2001) follow the hypothesis that object nominals of idiomatic constructions are property denoting entities which form a complex predicate with the verb at some level of meaning representation (either LF, or logical form).

An additional syntactically determined meaning, not noted so far, has to do with structural aspect. We would like to point out that on the literal, compositional, non-idiomatic readings, the aspect associated with the argument structures in (16) and (18a) is resultative and, therefore, telic. This is proved by the class of time adverbial modifiers these argument structures could combine with during their derivation. See (20).

- (20) a. She worked the splinter *out* (of her finger) *in* a matter of minutes / **for* two hours.
- b. El metge li va *treure* el fetge per la boca
 the doctor CL PAST get+out the liver through the mouth
en menys d'una hora / **durant* una hora.
 in less than an hour / for one hour

get+out the face

“to take some risk”

c. *treure el fetge per la boca*

get+out the liver through the mouth

“to get too tired, to become extremely exhausted because of an excess of activity, mainly some work”

The second argument appears at the time of idiom comprehension, and is related to the fact that the set of idioms under study in (1), (2), and (9) are all reinterpreted as expressing an activity. So, beyond McGinnis’s (2002:669) predictions on the systematicity of aspectual properties of idioms, we claim that there are non-syntactically based aspectual restrictions applying on the final interpretation of idioms, in particular, we posit that there are aspectual properties of idioms which are noncompositional. It is remarkable that a reinterpretation of the aspectual properties is involved in (1), (2), and (9), so that the idiomatic meaning expresses a non-resultative, durative eventuality. That this is actually the case is proved by the fact that, as illustrated in (23), these idioms allow compatibility with durational adverbials.

(23) a. John *worked his guts out all the day along* / *in ten minutes.

b. En Jaume va *treure el fetge per la boca tot el sant dia* /

D Jaume PAST get+out the liver through the mouth whole the saint day /

**en deu minuts*.

in ten minutes

In support of the second argument, we claim that a conceptual metonymic process is activated at the final level of utterance interpretation. At the encyclopedia some detachable body-part idioms are conceptually associated with encyclopedically accessible activities not because of arbitrary syntactic-conceptual correspondences, but because of regular metaphorical and metonymic modes of thought that are dynamically activated in the

process of idiom comprehension.¹⁵ Thus, syntactically determined resultative idioms can be metonymically associated with a non-resultative eventuality as a whole, an activity that leads to a detachment of a part-of-the-human-body. In particular, the activated metonymy can be formulated as follows: the part, i.e. the resultative state of having a part of the body out, metonymically stands for the whole, i.e. a partly-motivated related activity.

5. Final conclusions

Two main conclusions are worth being drawn from the present paper: (i) the structuring of the compositional meanings of idioms in the syntax is not special at all: clearly, the same l-syntactic explanation must be given to the fact that Romance languages (and more generally, verb-framed languages) lack non-idiomatic complex telic path of motion constructions like *The boat floated out of the cave*, non-idiomatic complex resultative constructions like *John cooked the pot black*, and idiomatic constructions like those in (1) and (2). We have then shown the relevance of syntactic argument structure in structuring the compositional meaning of an idiomatic expression. (ii) Any fruitful study of the semantics of idiomatic constructions is to be based on a clear distinction between syntactically transparent compositional meanings (e.g., those determined by argument structure representations) and non-syntactically transparent conceptual ones (e.g., those non-compositional meanings obtained via general conceptual metaphoric and metonymic processes). Accordingly, we have argued against Jackendoff's (1997b, 2002) reduction of the semantics of an idiomatic construction to its conceptual meaning, and against *special* syntax-semantics correspondences.

¹⁵ Rather than claiming that idioms are bearers of interpretive anomalies, we support the idea that they are conceived as triggers of conceptual metaphors and metonymies (Gibbs 1995): Metaphorical and metonymic conceptual processes account for the final output some of these idioms are associated with (Lakoff & Johnson 1980, 1999). In the particular case of our study the basic activated metaphor is the well-settled conceptual metaphor the BODY IS A CONTAINER, for extracting a part-of-the-body from this container is conceived as an excessive, physically impossible action. As far as the idioms in (1), (2), and (9) are concerned, we would like to suggest that the detachment of a part of the human body is conceptualized as “directly proportional” to the excess meaning that turns to be associated with the class of idioms here described. For our present purposes, we leave this preliminary discussion here.

Selected references

- Chomsky, Noam. 1980. *Rules and Representations*. New York: Columbia University Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: The MIT Press.
- Espinal, M. Teresa. 2001. "Property Denoting Objects in Idiomatic Constructions". *Romance Languages and Linguistic Theory 1999. Selected papers from Going Romance, Leiden 9-11 December 1999* ed. by Yves D'Hulst, Johan Rooryck & Jan Schroten, 117-141. Amsterdam & Philadelphia: John Benjamins.
- Espinal, M. Teresa. 2004. *Diccionari de Sinònims de Frases Fetes*. Bellaterra, Barcelona & València: Universitat Autònoma de Barcelona. Servei de Publicacions, Publicacions de la Universitat de València & Publicacions de l'Abadia de Montserrat.
- Fraser, Bruce. 1970. "Idioms Within a Transformation Grammar". *Foundations in Language* 6. 22-42
- Gibbs, Raymond W. 1995. "Idiomaticity and Human Cognition". *Idioms. Structural and Psychological Perspectives* ed. by Martin Everaert, Erik-Jan van der Linden, André Schenk & Rob Schreuder, 97-116. Hilldale: Lawrence Erlbaum Associates.
- Goldberg, Adele. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
- Hale, Ken & Keyser, Samuel Jay. 1997. "The Limits of Argument Structure". *Theoretical Issues at the Morphology-Syntax Interface* ed. by Amaya Mendikoetxea & Myriam Uribe-Etxebarria, 203-230. Bilbao & Donostia-San Sebastian: Universidad del País Vasco & Diputación Foral de Gipuzkoa.
- Hale, Ken & Keyser, Samuel Jay. (2002). *Prolegomenon to a Theory of Argument Structure*. Cambridge, Mass.: MIT Press.
- Jackendoff, Ray. 1997a. *The Architecture of the Language Faculty*. Cambridge, Mass.: MIT Press.
- Jackendoff, Ray. 1997b. "Twistin' the Night Away". *Language* 67.320-338.
- Jackendoff, Ray. 2002. *Foundations of Language. Brain, Meaning, Grammar, Evolution*. Oxford & New York: Oxford University Press.

- Katz, Jerrold J. & Paul Postal. 1963. "Semantic Interpretation of Idioms and Sentences Containing Them". *Quarterly Progress Report of the MIT Research Laboratory of Electronics* 70.275-282.
- Kratzer, Angelika. 1996. "Severing the External Argument from the Verb". *Phrase Structure and the Lexicon* ed. by Johan Rooryck & Laurie Zaring, 109-137. Dordrecht: Kluwer.
- Lakoff, George & Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, George & Mark Johnson. 1999. *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*. New York: Basic Books.
- Marantz, Alec. 1996. *Cat as a Phrasal Idiom*, ms. MIT.
- Mateu, Jaume. 2002. *Argument Structure. Relational Construal at the Syntax-Semantics Interface*. Doctoral dissertation, UAB, Bellaterra. Downloadable: <http://www.tdx.cesca.es/TDX-1021103-173806/#documents>
- Mateu, Jaume & Gemma Rigau. 2002. "A Minimalist Account of Conflation Processes: Parametric Variation at the Lexicon-Syntax Interface". *Theoretical Approaches to Universals* ed. by Artemis Alexiadou, 211-236. Amsterdam: John Benjamins.
- McGinnis, Martha. 2002. "On the Systematic Aspect of Idioms". *Linguistic Inquiry* 33:4. 665-672.
- Nunberg, Geoffrey, Ivan Sag & Thomas Wasow. 1994. "Idioms". *Language* 70.491-538.
- Pylkkänen, Liina 2002. *Introducing Arguments*. Ph.D. dissertation, MIT.
- Rappaport Hovav, Malka & Beth Levin. 1998. "Building Verb Meanings". *The Projection of Arguments. Lexical and Compositional Factors* ed. by Miriam Butt & William Geuder, 97-134. Stanford: CSLI Publications.
- Talmy, Leonard. 1985. "Lexicalization Patterns: Semantic Structure in Lexical Forms". *Language Typology and Syntactic Description* (vol. 3): *Grammatical Categories and the Lexicon* ed. by Timothy Shopen, 57-149. Cambridge: Cambridge University Press.
- Talmy, Leonard. 1991. "Path to Realization: A Typology of Event Conflation". *Proceedings of the 17th Annual Meeting of the Berkeley Linguistics Society*, 480-519. Berkeley: Berkeley Linguistics Society.

- Talmy, Leonard. 2000. *Toward a Cognitive Semantics. Vol. II: Typology and Process in Concept Structuring*. Cambridge, Mass.: MIT Press.
- Titone, Debra & Cynthia M. Connine 1999. "On the Compositional and Noncompositional Nature of Idiomatic Expressions". *Journal of Pragmatics* 31.1655-1674.
- Vergnaud, Jean Roger & M. Luisa Zubizarreta. 1992. "The Definite Determiner and the Inalienable Constructions in French and in English". *Linguistic Inquiry* 23:4.595-652.