

The anatomy of a verb: *tear*, *rasgar*, and lexical equivalence

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Abstract

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Figurative polysemy, in which a word’s original meaning is extended into domains for which it did not originally apply, is a pervasive property of human language. Previous research using cross-linguistic (English/Spanish) data has shown that an important set of similarities and differences in patterns of figurative verb polysemy between counterpart verbs in two languages can be explained by detailed analysis of the event structures of each verb (McNally & Spalek 2022). Here we treat a complementary case involving counterpart verbs in two languages which share the same basic event structures but differ in details of conceptual (or “root”) content, most importantly in the semantic restrictions on their participants. We show how, in this sort of case, the verbs will describe the same types of situations and be amenable to similar figurative extensions as long as their respective semantic restrictions can be met, but not otherwise. Teasing apart contrasts due to variation in event structural vs. conceptual content can shed light both on debates about the relation between root and grammatical content, as well as on the challenges of establishing lexical equivalences for verbs, be it for purposes of translation or for cross-linguistic comparison and the creation of lexical resources.

1 Introduction

Verb-based event descriptions in language provide rich information about the type and number of participants in an event, the internal structure or Aktionsart of the described event, as well as fine-grained details that help to differentiate the described event from other, similar types of events. However, there has been considerable debate about how these different components of verb meaning are conventionally encoded in language, and specifically whether they are fully separable from each other and can be neatly partitioned between the verb root (as we will refer to the core, idiosyncratic component of a word) and the morphosyntax in which the verb root appears. Goldberg (1994), Borer (2003), Ramchand (2008), Mateu & Acedo-Matellán (2012), Spalek (2014), Beavers & Koontz-Garboden (2020), and references cited below exemplify different positions on what these respective elements contribute to the meaning and behavior of verbs.

While it is well known that verbs are able to describe different sorts of events depending on the morphosyntactic configuration in which they appear (*walk*, for instance, can describe an atelic activity when intransitive (1a) or a telic event when it has a direct complement expressing a fixed distance (1b), see e.g. Dowty 1979), the influence of semantic components contributed by the verb root are considerably less studied.

- (1) a. After lunch we walked for about an hour [COCA]¹
- b. twice he has walked 20 miles in one day [COCA]

However, verb roots can impose specific, sometimes fairly idiosyncratic conditions on their participant roles (or thematic roles) which can, in turn, constrain the sort of event structures

¹Indicates an example from the Corpus of Contemporary American English (COCA, Davies 2008; see also section 2).

that the verb is compatible with. The verb *splash* exemplifies such conditions: It describes a particular sort of movement produced by contact, and therefore requires a participant capable of that movement; see the contrast in (2). (2b) sounds odd unless one can imagine a large enough volume and density of dust hitting the wall with enough force to produce the sort of contact that water produces, due to its distinct physical properties; and indeed, a collocates search for *dust* with the lemma for *splash* within a 4-word window to the left and right turned up no hits in COCA.

- (2) a. Water splashed the windows and the sliding glass door [COCA]
 b. ??Dust splashed the windows and the sliding glass door

The debate over the encoding of verb meaning in the formal linguistics literature has largely focused on issues such as whether roots contribute grammatically relevant content at all, as opposed to purely encyclopedic content (see e.g. Carston 2019 for recent discussion and references); or, assuming that roots do contribute such content (Alexiadou et al. 2006; Beavers & Koontz-Garboden 2020), whether it restricts event structure and whether there are universal constraints on it (e.g. Levin & Rappaport Hovav’s 1991 Manner/Result Complementarity thesis or Embick’s 2009 Bifurcation thesis). Recently, Ausensi (2021, 2024) has presented an extended argument that conditions on agent participants involving manner components can indeed influence event structure. The findings we present in what follows will also be relevant for this debate, as we discuss in section 4.1.

A different, contrastively-oriented approach to the semantic components of verbs is found in Fillmore & Atkins (2000). Fillmore and Atkins exhaustively analyzed dictionary definitions and corpus examples for the English verb *crawl* and its French counterpart *ramper*. While they observed considerable overlap in their literal uses, they also found important divergences, and showed that the observed patterns extend to figurative uses.² Fillmore and Atkins note that *crawl* in its various figurative uses typically preserves the inference that limbs of some sort move in order to displace some kind of body. This use is found even with inanimate entities with limb-like articulation (e.g. ‘a branch of ivy may be said to crawl up a wall’, p. 107). Their semantics for *crawl* involves proactivity, as in the figurative extension *to crawl to somebody*, which describes an intentional action (though not necessarily physical movement) whose goal is to gain somebody’s approval or help. In contrast, *ramper* generally implies covering an increasingly large surface, without implication of limb-like movement. As a result, the expansion of puddles of mud, fire or darkness can be described using *ramper*, despite sounding odd with *crawl*. Also, unlike *crawl*, *ramper* does not entail any proactivity, which leads to figurative uses that are better expressed by the English verbs *drift* or *creep*. This difference also affects the interpretation of figurative uses such as *ramper devant quelqu’un* ‘crawl in front of someone’, which they claim (ibid.) implies acquiescing and abandoning all initiative (similar to *grovel*), again in contrast to the related expression involving *crawl*. Fillmore and Atkins’ careful description points to the importance of carefully examining root content and the conditions it imposes on the participants of an event, as it has implications for patterns of figurative uses.

Extending Fillmore and Atkins’ approach, in this paper we use a contrastive study of the verb *tear* and one of its principal Spanish counterparts, *rasgar*,³ to draw attention to another sort of case where fine-grained conditions on participant roles – independently of general event structure and agency or proactivity – have a pervasive effect on the sorts of events a verb can describe. We include patterns of figurative polysemy because, as Fillmore and Atkins’ work suggests, taking these patterns seriously yields nuanced insights into verb meaning.

²In the following, we understand ‘figurative’ uses to be those in which a word’s original meaning is extended into domains for which it did not originally apply. It is not crucial to our discussion to be able to draw a sharp distinction between ‘literal’ and ‘figurative’ uses, and indeed, we are skeptical that such a distinction can consistently be drawn.

³The choice of *rasgar* as a counterpart is based on the Intercontinental Dictionary Series (IDS) (Key & Comrie 2015), a typological lexical database designed for comparative studies. See sections 3.2 and 4.2 for additional comments.

We proceed as follows: after presenting the method used to collect our data (section 2), we compare the event structural properties of the two verbs, focusing on the grammatical constructions in which they appear and the basic entailments of those (section 3.1). We show that these properties are identical. In section 3.2 we show that *tear* and *rasgar* contrast in that the latter imposes an specific condition on its patient argument, of a sort not typically associated with grammar; we then discuss the consequences of this contrast for other features of the verbs' meaning and use. In section 3.3 we show how these similarities and differences in meaning components correlate with similarities and differences in figurative uses. Finally, in section 4 we explore the implications of our findings for 1) the role of root content (or conceptual content – we use the terms interchangeably) and its relation to grammar in the construction of event descriptions (section 4.1); and 2) the intertranslatability of verbs and attempts to establish cross-linguistic counterparts for verbs in large concept databases (section 4.2).

2 Methodology

Our study is qualitative rather than quantitative and consists primarily of a contrastive description of the semantics of the two verbs. However, the analysis relies on data from various sources, particularly corpus data, supplemented with dictionary information and, to a very limited extent, native speaker judgments. We have used both monolingual and parallel English-Spanish and Spanish-English corpora, with distinct purposes in mind.⁴

In the case of the monolingual corpora, our goal was to empirically arrive at the claims about each verb that are discussed in section 3. The specific role of corpus data was to ensure that we identified the full range of attested uses of the verbs in a broadly representative range of genres across American English (for *tear*) and Peninsular Spanish (for *rasgar*). We extracted the data as follows.

For English, we used a copy of the COCA corpus purchased in 2016 (Davies 2008) and installed on a local server at the university of the second author. This version of the corpus contains about 520 million words, balanced across five genres (spoken, fiction, popular magazines, newspapers, academic texts). The purchased corpus, in contrast to online version available for consultation, has a random 5% of words removed by the distributor for reasons of copyright. We used the CQPWeb tool (Hardie 2012) and the search term [lemma = "tear" & pos="v.*"] to extract all instances of *tear* that are tagged as a verb, in order to exclude irrelevant uses of *tear* as a noun. This query returned 3955 matches in 3063 different texts. We downloaded the results with 20 words of context on either side and then manually filtered our data as follows. First we eliminated all occurrences involving the sense of *tear* related to crying (pronounced /t^hir/). This resulted in 3781 occurrences of the verb in all of its different forms (*tear* alone and in combination with *to*, *do*, *will*, and modals; *tearing*; *tears*; *tore*; and *torn*). We then excluded *tear*-based phrasal verbs such as *tear down*, as these are arguably distinct, if related, verbs. We used as the exclusion criterion the presence of the verb as a head word in the *Merriam-Webster.com Dictionary*⁵ in the sense attested in the example. This latter qualification is necessary because, for example, *tear off* is listed in this dictionary with the specific sense “to compose rapidly” (e.g. *tore off a whole play in three weeks*), but not with the sense “to remove by force” (e.g. *tear a cover off a box*).

For Spanish, we used a purchased copy of the 2016 release of the Web/Dialects portion of the Corpus del Español (CdE, Davies 2016), which contains about 2 billion words from 21 dialects of Spanish, 50% blog and 50% general text. Like our copy of COCA, this corpus has a random 5% of words removed by the distributor for reasons of copyright.⁶ Again,

⁴An antecedent for our methodology can be found in Devos et al's (1996) contrastive study of verb valencies in Dutch, French and English. However, their aims were specifically lexicographic in nature, while ours are fundamentally directed at the theory of verb meaning.

⁵This dictionary is consultable at <https://www.merriam-webster.com>. Specifically, we looked up all combinations of *tear* + preposition that could be considered candidate phrasal verbs.

⁶Further details about the corpora are available at <https://www.english-corpora.org/coca> and <https://>

the corpus was locally installed on the same server, and we used the CQPWeb tool and searched for [lemma = "rasgar"]. This query returned 4644 matches in 1695 different texts over the entire corpus. We downloaded the results with 20 words of context on either side. For practical purposes we limited the scope of our study to Peninsular Spanish sources. We therefore filtered our initial results by country, retaining only examples from the “España” portion of the corpus.⁷ This reduced the number of results to 3320 occurrences. We then applied two additional manual filters. First, we excluded uses that describe the strumming of a stringed instrument. According to the *Diccionario de la lengua española* (henceforth DLE, Real Academia Española 2024), this use originates in the Latin verb *rasicāre* ‘to scratch’, while the use of *rasgar* that interests us derives from a different Latin verb, *resecāre* ‘to cut’. This reduced the number of occurrences to 3180.

In addition, manual inspection of the results revealed that by far the most common use of *rasgar* involves the idiom *rasgarse las vestiduras* lit. ‘tear one’s robes’, defined in the DLE as 1) *escandalizarse* ‘to manifest indignation’ or 2) *Entre los hebreos, manifestar el duelo* ‘Among the Hebrew people, to show mourning’. The latter sense is said to derive from the practice of tearing one’s robes as an act of mourning; the former idiomatic sense, in turn, arguably derives from that use. As this idiomatic use is grounded in a very specific situational description, while our interest is in uses grounded in the verb meaning and general conditions on verb arguments, we decided not to consider it further here. We therefore then filtered out instances of *rasgar* with *vestiduras*; the final result was 1968 occurrences of the verb.

Given that the España portion of the corpus amounts to just under 460 million words, *tear* is about 70% more frequent than *rasgar* in the respective corpora (7.27 tokens per million vs. 4.28 tokens per million). Therefore, when our consultations with native speakers suggested that a use of *rasgar* should be acceptable but was not attested in our data extracted from the Corpus del Español, we carried out complementary targeted searches of the Corpus de Referencia del Español Actual (CREA *anotado*), which is a lemmatized version of the Spanish reference corpus by the Royal Spanish Academy (Real Academia Española 2023). CREA contains over 122.5 million forms, distributed across fiction and non-fiction, the latter including mass media text as well.

We did not apply any other restrictions or filters on our searches (e.g., with respect to register, spoken vs. written language, or date of the source of the occurrences). We then carried out a qualitative semantic analysis of all the examples.

In the case of the parallel corpus data, the goal was to examine the degree to which *tear* and *rasgar* function as semantic equivalents, as revealed by their pairing in translations.⁸ To this end we used the ACTRES Parallel Corpus (P-ACTRES 2.0, Izquierdo et al. 2008; Sanjurjo-González & Izquierdo 2019), a bidirectional English–Spanish translation corpus. The ACTRES Parallel Corpus was developed at the University of Leon (Spain) Department of Modern Languages by the ACTRES research group, and was specifically designed to serve as a tool for cross-linguistic research in the areas of contrastive analysis and descriptive translation studies.

The P-ACTRES 2.0 corpus contains both original texts in English with translations into Spanish (approximately 4.3 million words), as well as original texts in Spanish with translations

www.corpusdelespanol.org/web-dial/, respectively. Note, however, that some of the information provided on the former site about COCA, such as its overall size, differs from that reported here because the documentation on the web reflects the current state of the corpus, which is now much larger than it was when the copy used for this study was purchased.

⁷We are aware of the fact that other varieties of Spanish are likely to be represented in this portion of the corpus; in cases of doubt we checked specific examples with native speakers of Peninsular Spanish.

⁸An anonymous reviewer notes that our methodology for comparing the two verbs bears resemblance to Contrastive Functional Analysis (Chesterman 1998), as our comparison begins with an initially perceived similarity between the uses of two expressions. While we acknowledge this similarity, our goals, and thus some aspects of our method, are fundamentally different from Chesterman’s. Specifically, while Chesterman takes a “meaning to form” perspective (p. 1), we are ultimately interested in the “form to meaning” perspective. Perceived similarity in meaning, as manifest e.g. in translation and in lexical databases, serves to identify two verbs as comparable; however, at that point, we focus specifically on the semantics of each verb, with the goal of using the individual semantic analyses to explain similarities and differences in the verbs’ uses.

into English (1.65 million words)⁹. We extracted all of the occurrences of *tear* and *rasgar* in both directions (English to Spanish and Spanish to English), applying the same filtering criteria for the verbs as we used to extract our monolingual corpus data.

As noted above, the primary reason we used corpus data was to substantiate theoretical linguistic claims about the semantics of verbs. To this latter end, we also provide some constructed examples below to illustrate uses that are not attested in the corpora and that native speakers have judged as anomalous. These constructed examples are clearly marked as unacceptable and do not bear indication of a source. Finally, our discussion also includes some (most likely constructed) examples taken from some of the research we discuss; the sources for these are indicated in the text. We now turn to our case study.

3 Case study: *tear* and *rasgar*

3.1 Similarity in event structures

Both *tear* and *rasgar* behave like simple result verbs in the sense of Levin & Rappaport Hovav (2013). Both have intransitive uses describing a change without any specific preceding action, which can be described as at least partially uncontrolled separation or loss of integrity of an integral whole. The following examples illustrate.¹⁰

- (3) a. Penelope’s shirt got caught and tore [COCA]
 b. Glass shattered, metal tore, and flaming liquid splashed out [COCA]
- (4) a. una malla finísima que con sólo rozar=la se rasgó
 a net very.fine that with only touch-INF=it REFL tear-PST.3SG
 ‘a very thin net that tore when just touching it’ [CREA]
 b. Se había rasgado una media
 REFL have.IMP.3SG tear.PTCP a stocking
 ‘She had torn a stocking’ [CREA]

As with many change of state verbs, both verbs also have a simple transitive use (see (5)-(6)). The subject participant can be volitional, but need not be – clearly, in the (b) examples any tearing by this participant would be unintentional, whereas in the (a) examples the opposite is the case (see Cornish 2002, citing Siewierska 1991, for a brief discussion of this aspect of *tear*; see section 3.2 for more nuances).

- (5) a. [Y]ou must never cut the lettuce. You always tear the lettuce [COCA]
 b. He carried it draped across his bony shoulders, not wanting to soil or tear the pelt on brambles getting it home [COCA]
- (6) a. Un hombre rasgando una placa de metal con herramientas obrera...
 a man tearing a plaque of metal with tools working
 ‘A man scratching a steel sheet with working tools’ [CdE]
 b. [una niña] rasgó sin querer una esquinita de el empapelado
 a girl tore without want.INF a corner of the wallpaper
 ‘[a girl] accidentally tore a corner of the wallpaper’ [CdE]

Neither verb allows naturally for a simple intransitive use where the subject is an agent rather than a patient, except in limited contexts in which what is undergoing the change is already highly salient, such as perhaps (7b). That said, in our corpus searches we did not find examples like these. Such data strongly indicate that neither *tear* nor *rasgar* describe simple activities.

- (7) a. ??In the kitchen, the prep cook was tearing

⁹Further information on P-ACTRES 2.0 is available at <https://actres.unileon.es/wp/parallel-corpora/>.

¹⁰For compactness we only informally gloss gender, person, and number except in null subject contexts, where person, number, and tense morphology are indicated, following the Leipzig glossing rules.

- b. We need to prepare the lettuce for the salad. One of you will wash, and (?)the other will tear
- (8) ??Un joven rasgó
 a youth tore

We now show that the type of change involved in *rasgar* and *tear* events is a minimal change like that associated with so-called binary scale verbs, such as Spanish *romper* ‘break’ (Spalek 2013, 2014). One diagnostic for binary scale verbs is the entailment under modification by *almost* (*casi* in Spanish) that no change has yet taken place. See, for example, (9)-(10), in which the patients are entailed to still be fully intact.

- (9) a. With penstrokes that almost tore the page, he crossed them out [COCA]
 b. I took off my clothes so quickly that I almost tore them [COCA]
- (10) a. fumador tan fuerte, que en una ocasión casi se rasga un
 smoker so strong, that in one occasion almost REFL tear.PRS.3SG a
 músculo pectoral a causa de ello
 muscle pectoral to cause of this
 ‘Such a heavy smoker that on one occasion she almost tears a pectoral muscle because of this’ [CdE]
- b. un autor que la desborda con sus tintas y plumines casi
 an author that 3SG.ACC overflows with his inks and nibs almost
 rasgando el papel
 tearing the paper
 ‘an author that overwhelms [his artwork] with his ink and nibs almost tearing the paper’ [CdE]

Like *romper* and other binary scale verbs, *rasgar* and *tear* can describe durative, gradual events if the part structure of the patient allows for incremental change. Consider (11)-(12), which show that the tearing can be described as partial or complete depending on the amount of the patient that is affected.

- (11) a. [the] club got caught in a branch, and I partially tore my rotator cuff [COCA]
 b. After completely tearing her ACL, a devastating knee injury... [COCA]
- (12) Las torceduras de rodilla rasgan parcialmente las fibras tendinosas
 the twistings of knee tear partially the fibers tendinous
 ‘The twistings of the knee partially tear the fibers of the tendons’ [CdE]

Note that in such cases, even if the change is described as partial, it is still entailed that a change has taken place: (11a) and (12) respectively entail that the rotator cuff has torn and that the fibers of the tendons have torn (in Spanish, *las fibras tendinosas se han rasgado*) – this is a hallmark of binary scale verbs with the possibility of gradability based on the part structure of the patient (see Ramchand 1997, a.m.o.).

In sum, *rasgar* and *tear* have the same event structures. However, we will see below that their uses diverge more than one might expect for supposed translation equivalents. This leads us to take a closer look at details of the conceptual content contributed by each verb, whose effects have gone underappreciated.

3.2 Differences in conceptual content

According to the IDS typological lexical database (Key & Comrie 2015), *tear* and *rasgar* are counterparts, though *romper* is also considered a counterpart of *tear* (see section 4.2). That in itself is already indicative of a potential difference in the conceptual content associated with the two verbs.

As noted, both *tear* and *rasgar* denote comparable changes of state resulting in some loss of integrity via some degree of partially uncontrolled separation:

- (13) a. hungry sea lions tore the nets [COCA]
 b. sin esperar a liberar=se de las ataduras de los tobillos,
 without wait.INF to liberate=REFL of the tying of the ankle,
 rasgó la sábana
 tear.PST.3SG the sheet
 ‘without waiting to free himself from the ties around his ankles, he tore the sheet’
 [CdE]

However, closer exploration of the data reveals that the verbs differ in the range of possible objects they respectively select for and, relatedly, in the details of the produced result. *Tear* imposes few conditions on its patient, as long as irregular or uncontrolled separation of some part of it can be produced;¹¹ even thick solids can be torn. In contrast, *rasgar* requires that the patient be flimsy or insubstantial. Thus, (14a), where the patient is a thick solid, cannot be expressed as in (14b).

- (14) a. she tore a chunk off her slice of bread [COCA]
 b. ??rasgó un trozo de pan
 tear.PST.3SG a piece of bread

Rasgar does very rarely appear with patients that are thick solids in our data. In such cases, it entails a gash-like separation in the patient. In (15a), though the ball itself is not flimsy, the separation described occurs along the seam, which is a comparatively weak point on the ball. When the point at which the patient is affected is not insubstantial in this way, the result seems to be limited to a gash-like separation on the surface of the entity, without a hole being implied, as shown in the examples in (15b)-(15c).

- (15) a. El ganglión o quiste ... se puede comparar a ese balón de
 the ganglion or cyst ... REFL can.PRS.3SG compare.INF to this ball of
 fútbol que se rasga y por el descosido protuye la
 football that REFL tear.PRS.3SG and for the unsewn protrudes the
 cámara de goma del interior
 chamber of rubber of the interior
 ‘The ganglion or cyst ... can be compared with a football that splits open and
 where the rubber tube protrudes through the seam’ [CdE]
 b. Después utilizó unos alicates de la herramienta para rasgar el
 after use.PST.3SG some pliers of the tool for tear.INF the
 endurecimiento de los tendones
 hardened part of the tendons
 ‘Afterwards he used some pliers of the tool in order to make a gash in the hardened
 part of the tendons’ [CdE]
 c. Quizá baste con rasgar una de esas paredes para comprender
 possibly suffice.SBJV with tear.INF one of these walls for understand.INF
 que no son de ladrillo y de cemento, sino de un plástico frágil
 that not be.PRS.3PL of brick and of cement, but of a plastic fragile
 ‘Maybe it is enough to make a gash one of these walls in order to see that they
 are not made out of brick and cement, but out of fragile plastic’ [CREA]

Concomitant with this difference in the condition on the patient are differences in implications about how the effect is produced. *Tear* strongly implies that the separation occurs in opposing directions; *rasgar* implies a linear motion (Victoria Escandell-Vidal, personal communication; see also footnote 17, below).

Given these facts, it should be unsurprising that when some separation of a flimsy entity is involved, the two verbs are good translation equivalents, as in (16a). When a gash-like result is involved without separation in contrary direction, *rasgar*, but not *tear*, is felicitous (16b);

¹¹Even a clean tear, at a very fine level of detail, has some irregularity or local lack of control to it.

and when separation occurs in opposing directions without a gash-like effect and involving a thicker patient, *tear*, but not *rasgar*, is possible, as illustrated in (14), above.

- (16) a. Asegúrese de tener las uñas cortas [...] para evitar rasgar las
 assure=REFL of have.INF the nails short for avoid.INF tear.INF the
 lentes de contacto blandas
 lenses of contact soft
 ‘Be sure to have your nails short [...] to avoid tearing the soft contact lenses’
 [CdE]
- b. Si uno rasga el barniz nuevo se encuentra con gastados
 if one tears the varnish new REFL meet.PRS.3SG with worn.out
 cimientos
 foundations
 ‘If one scratches/??tears the new varnish one encounters a worn-out base’ [CdE]

Finally, the two verbs differ in what they imply about how much control an agent has over the performed change. *Tear* is fully compatible with an implication of sufficient control for the action to be carried out carefully, an option that we have not found attested for *rasgar*; translating *tear* as used in (17a) with *rasgar* is odd (see (17b)). Instead, *desprender* ‘detach’ is a better translation in such cases.

- (17) a. The kids who got gum carefully tore the tin foil [COCA]
 b. ??Los niños que recibieron chicle rasgaron con cuidado el papel de
 the children who received gum tore with care the paper of
 aluminio
 aluminum

Summarizing, while we have not identified relevant differences in the event structures, we see a difference in the nature of the patient, in the fine details of the entailed results, and in the degree of control that the agent can have over the event. In the following section, we offer examples of figurative uses to illustrate the implications of these differences.

3.3 Figurative similarities and differences

We assume that figurative meaning extensions involve an analogical mapping from one or more components of the domain of an existing use to the domain of the new use.¹² The fact that *tear* and *rasgar* impose different conditions on their patients, with corresponding consequences for the fine details of the action that can produce the result, is thus expected to affect the figurative extensions of these verbs.

For example, to describe an event of separation or loss of integrity figuratively in Spanish, there are several options besides *rasgar*, including *cortar* ‘cut’ and *romper* ‘break’. The choice of one over the other – whether *rasgar* offers a better analogy for the separation rather than *cortar*, for example – will depend in part on whether the nature of the action or the features of the patient of the figuratively described event are relevantly similar to those that the verb typically describes. We have seen that *rasgar* imposes very specific conditions on its patient: as a rule, it must be insubstantial or flimsy, “algo de poca consistencia” (‘something of little consistency’) according to the DLE. We might thus expect that its use be restricted to extensions with patients that figuratively fulfill this condition. This is, indeed, what we find.

The fact is that *rasgar* does not have a wide variety of figurative uses, and those it has for the most part refer to sudden disturbances in a state, as in (18).

- (18) a. un gallo de las proximidades rasgó el silencio del alba
 a cockerel of the proximities tore the silencing of the dawn

¹²See, for example, the Career of Metaphor theory of figurative meaning (Bowdle & Gentner 2005), though our approach to the data is compatible with other theories that involve analogical extension.

- ‘A nearby cockerel tore the silence of the dawn.’ [CREA]
- b. La oscuridad se rasga de improviso por la repentina llamarada que
 the darkness REFL tears of spontaneous by the sudden blaze that
 produce un poco de romero
 produces a bit of rosemary
 ‘The darkness is unexpectedly disturbed by a sudden blaze produced by a bit of
 rosemary’ [CREA]

Both states of silence and darkness are fragile in the sense that even a small sound or a small amount of light can disturb them. We have not found corpus examples of *rasgar* to describe the disruption of states that are more robust, such as, for example, a relationship. For such states, one finds *romper* or *cortar* (Spalek 2014).

Another sort of figurative use for transitive *rasgar* involves descriptions of movement through a patient which, while insubstantial, is not permanently affected. In these examples *rasgar* simultaneously describes the movement of the subject participant and the temporary disturbance it produces as it moves through the patient, as in (19). Note that this movement need not be especially fast or violent, as (19a) clearly shows. According to native speakers we have consulted, the additional, crucial implication conveyed by these uses is movement in a linear fashion – similar to the implication of a gash attested in example (15a).

- (19) a. una inquietante melodía rasgaba el silencio de las calles desiertas en
 a disquieting melody tear.IMP.3SG the silence of the streets empty in
 el estío de mi Córdoba natal. Era el soniquete de una
 the summer of my Córdoba native. be.IMP.3SG the little.sound of a
 armónica de juguete
 harmonica of toy
 ‘A disquieting melody disturbed the silence of the deserted streets in the summer
 of my native Córdoba. It was the sound of a toy harmonica’ [CdE]
- b. Una avioneta rasga el viento sobre mi cabeza
 an small.airplane tears the wind over my head
 ‘A small airplane cuts through the wind over my head’ [CdE]
- c. la bala partió con un chillido rasgando el viento
 a bullet left with a screech tearing the wind
 ‘A bullet set off with a screech tearing the wind’ [CREA]

We have found almost no other sort of figurative use of *rasgar*.

When we turn to *tear*, we find noticeable contrasts, due to the fact that, unlike with *rasgar*, there are fewer restrictions on the patient. The concomitant implication of separation in contrary direction, often with some force, in order to produce the tear, motivates many of *tear*’s figurative uses, and, interestingly, also seems to inhibit the verb for some of the uses for *rasgar* seen above.

First, uses of *tear* similar to those in (18), while not impossible, are extremely rare – we found only two examples of *tear the silence* in COCA; *tear the darkness* is unattested, and indeed sounds odd. Intuitively, the problem involves the difficulty of finding an analogy to separation via contrary motion or the need for force in such cases.

Instead, typical figurative uses of *tear* to describe disturbances in a state, in generalized integrity, or in relatively static activity imply considerable force, either with a destructive result or, alternatively, with a clear sense of contrary motion. Representative examples of the first sort appear in (20). Most of the examples that we have found include a resultative predicate which further specifies the final result state.¹³

¹³ *Tear*, as a canonical result verb, is expected to surface with resultative phrases. Space limitations preclude a detailed discussion, but see Yu et al. (2023) regarding the possible resultative complementation of change of state verbs in English and Rodríguez Arrizabalaga (2003) for a comparison of English and Spanish. Note that none of the examples in (20) or (21) can be considered to involve phrasal verbs: there is no *tear in* or *tear from*, and *tear into* as a distinct expression does not license a direct complement of the sort found in (20b).

- (20) a. not thinking had torn her heart in two [COCA]
 b. she was going to see her reputation publicly torn into pieces [COCA]

Examples of the latter sort appear in (21).

- (21) a. Rhonda tore her gaze from the television to look at me [COCA]
 b. Peter finally managed to tear his eyes from the screen that had mesmerized him [COCA]

Relatedly, the participle *torn* has a use describing a result state of metaphorical division in contrary directions, as in this example:

- (22) I was torn, but it was my decision to make [COCA]

Rasgar lacks these sorts of uses. Presumably it is a poor choice to capture disruption or separation requiring considerable force, because the insubstantial nature of *rasgar*'s patient will generally not entail such force.

Second, while *tear*, like *rasgar*, can also describe movement, the contexts in which they can be used only partially overlap. Specifically, *tear* resists uses in which the movement fails to involve considerable force, as in (19a)-(19c). Instead, typical uses need not involve genuine disruption of the space through which the movement takes place. Rather, the analogy involves the energy (typically, speed) of the entity that produces the figurative tearing. These uses systematically involve a prepositional phrase or adverbial indicating the path of motion; the examples in (23) are representative.

- (23) a. the ball tore through the rough edging the green and bounced onto the front of the putting surface [COCA]
 b. A red bus tore by, thundering toward Kochi [COCA]
 c. I tore across the yard and into theirs and veered around Aunt Verdella [COCA]
 d. He tore down the last half mile of empty, unlit street, then skidded to a stop [COCA]

Again, *rasgar* would not be felicitous in any of these uses, insofar as the event denoted by *rasgar* does not typically involve large amounts of energy or speed, because these forces are not required to disrupt an insubstantial entity.

To summarize, the features that fundamentally distinguish the two verbs and underlie the differences in their figurative uses involve the different conditions on the properties of the patient, and the consequences of these differences in the nature of the effort required by an agent to effect a change in the patient.

4 Implications

We now briefly discuss the implications of our study for two questions: 1) the ongoing debate in the literature on the syntax/semantics interface concerning the role of roots and root content in event descriptions; and 2) the question of how meaningful it is to associate verbs with cross-linguistic counterparts, whether in translation or in multilingual lexical resources such as large concept databases.

4.1 The role of roots in event descriptions

This study highlights a type of divergence in figurative verb polysemy of the putative translation counterparts *tear* and *rasgar* that complements the discussion of event structure-related contrasts in figurative polysemy identified by McNally & Spalek (2022). It illustrates how the very specific conditions on *rasgar*'s patient limit its flexibility in figurative uses, while the looser conditions on *tear*'s patient afford considerable flexibility in figurative uses.

In a complementary, theoretically-oriented line of recent research, Beavers & Koontz-Garboden (2020), Spathas & Michelioudakis (2021) and Ausensi (2021, 2024) also highlight the importance of root content in the composition of event descriptions. However, because of their theoretical goals, these works contrast with both Fillmore & Atkins (2000) and our study in focusing on entailments that could be candidates for grammatically encoded meaning, rather than on idiosyncratic ones that are often set aside in linguistic studies.

Specifically, based on several case studies involving English verbs, Beavers & Koontz-Garboden (2020) argue that there are two well-defined classes of so-called result roots in English, which differ with respect to whether they introduce an entailment of change of state (what they denominate *change of state roots*, e.g. *tear*) or not (termed *property concept roots*, e.g. *flat*). Change of state roots are claimed to describe relations between individuals and events of change into the result state that the root names. They thus predict that verbs related to these roots, under modification by *again*, necessarily entail a prior change of state, as in (24a) (the photo had to have been torn before for the sentence to be true), or not, as in (24b) (where the rug only needs to have been in a flat state before):

- (24) a. Meir tore the photo again [COCA]
 b. Mary flattened the rug again [Beavers & Koontz-Garboden 2020, p. 16, ex. (25)]

The differentiation between change of state roots and property concept roots clearly goes against the claim encapsulated in Embick’s (2009) Bifurcation thesis that roots encode no content that is introduced via grammatical mechanisms, given that change of state entailments are an attested example of such content.¹⁴ Spathas & Michelioudakis (2021) use closely related Greek data to argue that result verb roots differ in whether they carry stative presuppositions, and that this difference leads roots to interact with event structure in distinct ways. More recently, Ausensi (2021, 2024) shows that the roots of some verbs of killing in English place very specific requirements on the agent argument by restricting the external argument to entities that can carry out intentional actions.

More generally, the position defended by these authors contrasts sharply with theories that posit that roots are sharply divorced from grammar, to the point that they are “tantamount to raw material, ‘stuff’ which is poured into the structural mould to be assigned grammatical properties” (Borer 2005, p. 108; see also Borer 2003, Mateu & Acedo-Matellán 2012, a.o.). One argument offered by Borer for an impoverished root is the great semantic flexibility that roots have, as seen, for example, in the extension of nouns to uses as verbs (e.g., the extension of the noun *siren* to describe an event in *The police sired the Porsche to a stop.*).

Borer’s observations have recently been evaluated in a broader reflection on the nature of polysemy in Carston (2019, 2021). Carston points out that Borer’s view underestimates the role of conceptual content and its interaction with grammar as one examines an ever broader range of uses of *siren* as a verb. She concludes (2021, p. 23) that “the local pragmatic processes that modulate the conceptual content (senses) of words and phrases are operating within syntactic configurations that impose a particular structure of participants and relations. So when we are faced with an apparent polysemy, there is always an issue of teasing out which aspects of the overall sense are to be attributed to the rigidly constraining syntax and which to the flexible concept-modulating pragmatics (and, ultimately, to the conventionalised senses).”

Our case study contributes data which bear directly on Carston’s point. The data show how highly idiosyncratic root content is grammatically relevant, insofar as that content can impose additional conditions on participant roles, which persist through and influence figurative meaning extensions. For example, *tear* has figurative extensions supported by the particular kinds of movement or force that may be required to produce the result, leading to the verb’s appearance in motion constructions, as in (23). Such data highlight a particular sort of challenge for approaches that attempt to radically separate root and grammatical content. They are arguably more compatible with approaches to the lexicon that take verb distribution to

¹⁴For a detailed discussion on states and change of state in the semantics of result roots see also Yu et al. (2023).

be constrained by root content, which in turn determines which event structures verbs can be integrated into, such as the “verb sensitivity hypothesis” of Rappaport Hovav & Levin (2008), according to which the details of a verb’s meaning play a key role in determining its argument realization options. Conditions the verb places on participant roles are an essential part of this influence.

4.2 Verb meaning and the notion of cross-linguistic counterpart

We now turn to a second implication of our study. We have shown how apparently superficial differences in certain uses of translation equivalents across languages can reflect small but significant differences in root content between them. An important practical consequence of our observations involves the potential intertranslatability of two verbs. The complexity of translation data, in turn, offers important lessons for assumptions about the notion of cross-linguistic counterpart.

To make this point, we searched for all forms of *tear* and *rasgar* in the ACTRES bidirectional parallel corpus (P-ACTRES 2.0, Izquierdo et al. 2008; Sanjurjo-González & Izquierdo 2019).¹⁵ We then filtered the results for *tear* to exclude uses in which *tear* forms part of phrasal verbs such as *tear down*, using the *Merriam-Webster.com Dictionary*, as described in section 2; we also excluded those hits for which the verb had a fully figurative translation that did not build in any direct way on possible literal translations, such as *she was tearing her hair out* translated as *se subía por las paredes* (lit. ‘[she] was climbing up the walls’). Though the total numbers are small, the results, summarized in tables 1 and 2, show a clear difference in the translations of the verbs going in each direction.

<i>tear</i> trans.	<i>arrancar</i>	<i>desgarrar</i>	<i>rasgar</i>	<i>romper</i>	<i>partir</i>	<i>quitar</i>	Other verbs
Instances	12	8	8	4	4	3	27

Table 1: Translations of transitive *tear* in tokens

<i>rasgar</i> translation	<i>tear</i>	<i>rend</i>	<i>rip</i>
Instances	4	1	1

Table 2: Translations of transitive *rasgar* in tokens

After filtering, there were 66 instances of transitive *tear* in P-ACTRES 2.0. Among these, the most frequent translation equivalent was *arrancar* (also rendered in English as ‘pull out’) appearing 12 times and accounting for approximately 18.2% of the total of translation equivalents. Next, *desgarrar* (‘rip’) and *rasgar* were each used 8 times, representing about 12.1% each. The verbs *romper* (‘break’) and *partir* (‘divide’) appeared 4 times each, covering roughly 6.1% each. Additionally, *quitar* (‘remove’) had 3 hits (4.5%). The remaining 40.9% of the translations consisted of a large variety of verbs including *desprender* ‘detach’, *destronar* ‘destroy’, *abrir* ‘open’ and *sacar* ‘take out’ and many others. Each of these verbs appeared with only 1-2 occurrences each, and collectively totaled 27 instances. In contrast, *rasgar* is translated as *tear* in 4 out of 6 cases (66.7%).¹⁶

Although the absolute numbers are too small for the percentages to be meaningful, it is clear that *rasgar* is not the preferred translation of *tear*, nor even a frequent one in absolute terms, while *tear* would appear to be the preferred translation equivalent for *rasgar*.

Space constraints prevent an in-depth discussion of each individual translation pair, but a detailed analysis of the pairs *tear-arrancar* and *tear-desgarrar* shows that when *tear* is

¹⁵For other examples of corpus-based studies of the intertranslatability of verbs see, e.g., Ebeling (2015) on *love* and *hate* and their Portuguese counterparts *amar* and *odiar*; and Kudrnáčová (2021) on *walk* vs. Czech *jíť* and *kráčet*.

¹⁶The difference in number of hits is due to the fact that the English-Spanish corpus is much larger than the Spanish-English corpus.

translated as *arrancar* or *desgarrar*, indicating forceful removal, it often involves cases where *tear* is accompanied by a secondary result phrase or particle (e.g., *off*). The latter often carries with it a sense of force or contrary motion in the tearing, or of the object being acted upon offering resistance. Considering our analysis of the conceptual differences between *tear* and *rasgar* in section 3.2 and the stricter constraints *rasgar* imposes on its patient arguments, it is not surprising that Spanish requires alternative verbs to fully capture the range of meanings conveyed by *tear*.

The significant variety and, indeed, necessity of translation options is not immediately apparent in bilingual dictionaries or cross-linguistic lexical resources. For example, the IDS database (Key & Comrie 2015), which claims that its “lexical material across the languages of the world is organized in such a way that comparisons can be made” and that “comparative studies and theoretical linguistic research can be based on this documentation,” returns only *romper* and *rasgar* as equivalents for *tear*, while we have seen in section 3.3 and from the data in this section that these counterpart relations do not always hold, nor are they even the most frequent.

The IDS and similar resources (e.g. Lexibank, List et al. 2022) are grounded in the premise that one can readily find conceptual counterparts across multiple languages. Although assembling lexical data for large numbers of languages is important, since it offers multiple possibilities for researchers investigating cross-linguistic aspects of the lexicon of human languages, our case study illustrates an important limitation of this premise, and its crucial underestimation of the pervasiveness and complexity of verbal polysemy.

Our study of the divergence between *rasgar* and *tear* shows very clearly that conceptual counterparts can be elusive in the verbal domain. Verbs differ in the types of semantic restrictions they impose on their participants as well as in how event structures can be composed, and these are often visible only when full sentences are examined. Even when semantic equivalents are found at the sentence level, the meaning components can be distributed in different ways across the components of event descriptions in the different languages. Moreover, these differences may only emerge in the description of less prototypical events, or in figurative uses. The question thus arises as to how meaningful it is to talk about translating individual verbs. An interesting observation in this respect appears in Thompson et al. (2020), who analyzed the semantic neighborhoods of 1,010 ‘concepts’ in 41 languages. When computing large-scale semantic neighborhoods (or “semantic alignments”) of different parts of speech, they found that while number, quantity and kinship terms were among the most aligned cross-linguistically, verb-related concepts were among the least aligned, surpassed only by conjunctions and prepositions.¹⁷

This finding fits with the results of the psycholinguistic study in Gentner (1981), which indicated that verbs are less stable than nouns in translation. Gentner contrasted nouns and verbs in a double translation task, where bilingual speakers were given an English text to translate to another language, among others Spanish, and another bilingual speaker translated the text back into English. She found that more of the original nouns than verbs appeared in the final version; she attributed this to verbs denoting what she called “relational concepts” and thus being more context dependent in interpretation.

In sum, although comparative databases such as the IDS or Lexibank are valuable resources, they are limited in the extent to which they can be used to test hypotheses about theories of event structure or verb semantics involving comparative linguistic data. Thus, such resources should be used with caution and are perhaps best used as a starting point for further careful exploration – including crucially qualitative analysis – such as the study we

¹⁷Thompson et al. (2020) note that semantic alignment of words in different languages is predictable to a certain extent from culture, language history, and geography. A quick look at the respective etymologies of *rasgar* and *tear* is revealing. While, as noted in section 2, the former stems from Latin *resecāre* ‘to cut’, the latter stems from Proto-Germanic **teran*, which according to the Oxford English Dictionary is cognate with a Greek verb meaning ‘to flay’ and an Old Church Slavonic word meaning ‘to tear asunder’ – verbs which would appear to have applied to skins, for example. Thus, it seems plausible that these verbs have long been associated with objects of different natures, and the implication of forcefulness and of contrary motion is recognizable in the etymology of *tear*, while not in that of *rasgar*.

have presented here.

5 Conclusions

In this article, we scrutinized the idiosyncratic components of verb meaning by comparing figurative polysemy patterns of the putative English and Spanish translation equivalents *tear* and *rasgar*. By examining the effects of their conceptual content and how it imposes conditions on the participants in the events these verbs describe, we provide valuable insights for two larger questions: a) the debate surrounding the semantic contribution of roots and their potential relevance to event structure; and b) the challenges of identifying cross-linguistic lexical equivalents and their use in large comparative multilingual databases.

The nuanced semantic distinctions we have discerned for each verb contribute to a clearer understanding of why two verbs that cross-linguistically belong to the same semantic class – namely change of state verbs – and that have been identified as translation equivalents, nonetheless exhibit notable differences in use, and fail to be intertranslatable in certain, relatively predictable ways. By taking into account the whole spectrum of verb behavior and by including both literal and figurative uses of the studied verbs, our analysis has illuminated various factors that influence their predictability. These insights not only enhance our understanding of lexical semantics and semantic theory, but also have practical implications for how verb meaning should be approached in translation, cross-linguistic comparison and, indeed, language teaching.

We hope that future research can build upon these findings by exploring how similar patterns manifest across other languages and semantic categories, thereby broadening the scope of our inquiry. In addition, our study should inspire future refinements to multilingual databases, for example, through the incorporation of more sophisticated semantic mappings in order to capture cross-linguistic variation.

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