The paradoxical success of *can (-ed) not help but V*: When the extragrammatical meets the non-compositional

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Abstract

This paper is a study of the expression can help, *meaning 'can refrain/ avoid'. It focuses on the polarity and the fixedness of this expression and on its complex complementation. A diachronic corpus study shows that this item is no longer best described as a negative polarity item and that it has undergone a process of lexicalization. The second half of this article deals with the complex complementation of* can (-ed) not help *and, more specifically, with the* can (-ed) not help but V-*structure. This structure is extragrammatical because there exists no similar construction in contemporary English. However, as will be shown, its use has recently increased at the expense of* can (-ed) not help + *gerund. This paper will demonstrate that a combination of sociolinguistic, semantic and pragmatic factors, coupled with criteria related to processing ease, may have played a decisive part in this somewhat paradoxical success.*

Keywords: idiom; lexicalization; negative polarity item; complementation; extragrammaticality.

1. Introduction

Multi-word expressions are pervasive in natural speech and writing and more than half of word choices are in fact predetermined by the word's appearance in a prefabricated expression (Erman & Warren 2000). In this paper I provide a case study of a particular instance of a multi-word expression, in the hope that a detailed analysis of this rather peculiar but frequently used sequence may shed some light on the processes of phrasal lexicalization.

The following sentence:

(1) *I couldn't help but cry.*

is semantically unambiguous and is used quite freely by most English speakers. Yet, straightforward as it may seem to most native speakers, it exhibits several particularities which are of interest to phraseologists. Firstly, it is noticeable that the verb *help* is not used in its core meaning here (this particular meaning of *help* will be referred to as $help_2$, as opposed to the core meaning of *help*, hereafter called $help_1$). Secondly, the presence of *can* + a negation seems to be a pre-requisite for this particular meaning to occur. However, it is obviously possible to use *can* + a negation with the meaning of $help_1$ (e.g. *Sorry, I can't help you with this.*), which shows that the type of complement clause used after *help* is also essential to bring about this particular meaning.

These basic facts give rise to a number of questions:

– How can the meaning of $help_2$ be accounted for?
– How fixed is this verb phrase?
– Why is *but* used here to introduce a complement clause?
– How does this type of complement differ from the gerund?

A corpus study based on a variety of sources, both diachronic (*Lexicons of Early Modern English*, *Old Bailey Proceedings*, *Corpus of Historical American English*) and synchronic (*British National Corpus*, *Corpus of Contemporary American English*), seems to be the most suitable way to probe these issues. I will address the first two questions in the first half of this paper, which is devoted to the string *can (-ed) not* $help_2$ itself, and in particular to the question of the +/– compositionality (Section 2) and the gradual lexicalization (Section 3) of this multi-word expression. The second half of this paper will broach the complex complementation of *can (-ed) not* $help_2$ and will focus more specifically on the extragrammaticality of *can (-ed) not help but V* as well as the sociolinguistic distinction between *can (-ed) not help but V* and *can (-ed) not help V-ing* (Section 4). The final section (Section 5) covers the semantic and pragmatic distinctions between the two variants.

2. *Can (-ed) not* $help_2$: status and +/– compositionality

Can (-ed) not $help_2$ is a verbal word combination that exhibits some degree of semantic opacity. It is an idiom in Huddleston and Pullum (2002)'s

sense and is often included in dictionaries of idioms (e.g. Ammer 1997; Makkai 1987; Cowie, Mackin & McCaig 1983; Henderson 1954).

Compositionality is a semantic measure which refers to the degree of predictability of the meaning of a whole from the meaning of its component parts (Langacker 1987). The meaning of the string *can (-ed) not help*$_2$ is not fully predictable, as it describes the subject's inability to refrain from performing the process encoded in the complement clause. It does not correspond to the association of the meaning of *can* with that of *not* and that of *help*$_1$, namely the 'inability to assist or succour'. Indeed, the replacement of *help* with one of its synonyms in example (1) does not produce the intended meaning and is even impossible to decode, as is shown in example (2).

(2) **I couldn't assist/aid but cry.*

This string is, however, more compositional than the classic idiom *kick the bucket*, which is entirely unpredictable. Contrary to this idiom – or to less non-compositional, metaphorical idioms, such as *spill the beans* or *pull strings* – it is quite clear that the lack of predictability of *can (-ed) not help*$_2$ is attributable to one item alone, the verb *help* itself. One may therefore hypothesize that the non-compositionality of *can (-ed) not help*$_2$ is in fact due to a semantic shift which has affected the verb *help.* A close examination of an Early Modern English corpus, such as the *Lexicons of Early Modern English* (LEME), helps us to understand how the meaning of *help*$_2$ ('avoid/refrain') arose. This corpus is a collection of multilingual dictionaries, technical lexicons and, more importantly for our purposes, medical treatises, which proved essential in understanding this semantic shift.

Originally, the verb *help* was prototypically followed by an animate recipient in the dative, to which was optionally added an adverbial clause denoting purpose. Then, it became a ditransitive verb, as the possible *wh*-extraction of (a part of) the object suggests (cf. Chomsky 1980):[1]

(3) *He helped [you] [to build a house].*
(4) *What did he help you to build?*
(5) *You need his help [(in order) to build a house].*
(6) **What do you need his help (in order) to build?*

In Early Modern English, a monotransitive use started to appear. From the original meaning of *help* derived the sense 'to facilitate', present in (7), and 'to alleviate/cure', present in (8):

(7) *Myrtles are […] verye profitable to helpe the restoring of broken bones,* (Lanfranco of Milan, *Chirurgia,* 1565)
(8) *If it be strened, it helpeth and swageth the sores in a mannes mouthe* (Anonymous, *Banckes's Herbal*, 1525)

The latter meaning is particularly transparent in the following sentence, where *help* is used as a ditransitive verb:

(9) *[This herb] shall helpe hym of the yelowe euyll.* (Anonymous, *Banckes's Herbal*, 1525)

In (9), the use of an indirect object introduced by *of* (*of the yelowe euyll*) indicates that the sentence can be paraphrased as:

(10) *[This herb] shall cure hym of the yelowe euyll.*

From this meaning derived the passive form *It can't be helped*, meaning *It can't be remedied*.

The numerous medical treatises included in LEME offer various indications as to how the sense 'to cure' could lead to a notion of protection or prevention, as the following sentence suggests:

(11) *The floures of Lavander […] mixed with Cinnamon, Nutmegs, and Cloves, made into pouder, and given to drinke in the distilled water thereof, doth helpe the panting and passion of the heart.* (Thomas Johnson, *The Herbal or General History of Plants*, 1633)

It is possible to imagine that such a remedy, used primarily to treat tachycardia and shortness of breath, was thereafter used to prevent such symptoms from occurring. Indeed, nothing in the syntactic structure of the sentence explicitly specifies if the beverage is used to cure such conditions or if it is supposed to stave off their occurrence. Similarly, in the following sentence, with a prepositional object, it is not made explicit whether the medicine is used for its curative or for its preventive properties.

(12) *It helpeth against the bitings of any venomous beast, either taken in drinke, or outwardly applied.* (Thomas Johnson, *The Herbal or General History of Plants*, 1633)

Although it would seem more logical to use this drug after an insect bite, it is not specifically encoded in the sentence. Furthermore, the use of the preposition *against* resembles the syntax of the verb *protect* and this suggests some ambiguity regarding the precise moment when the medicine should be used.

One can therefore hypothesize that the lack of semantic explicitness of such structures, coupled with the frequent use of therapeutic drugs for prophylactic purposes, led to the advent of *help*$_2$.

The semantic ambiguity between *help*$_1$ and *help*$_2$ is also conspicuous in other types of discourse, as can be seen in the following excerpt from a multilingual dictionary dating back to 1574,

(13) *To decaie: to go to naught [e.g.] To helpe the common weale falling in decay*. (John Baret, *An Alveary or Triple Dictionary, in English, Latin, and French*, 1574)

The original in Latin reads as follows:

(14) *F re præsidium labenti Reipublicae.*
Bring-IMP thing-ABL protection-ACC stumbling-DAT republic-DAT
Bring true protection to the stumbling republic.

Literally, *praesidio* means 'to sit in front of something' and, by extension, 'to watch over, to protect', so there seems to be a certain ambiguity between the two meanings of *help* here. The republic is said to be "stumbling", so it has already experienced difficulties, but if it needs protection, it means that further difficulties are still expected and may still be avoided.

The course of action intended to improve a situation can be taken either subsequently or prior to the unfortunate event(s). The common semantic feature between *help*$_1$ and *help*$_2$ lies in the euphoric denotations associated with this verb and could be conceived as a kind of *problem-solving* concept. Whether a problem was solved after it occurred or solved by avoiding its occurrence was considered irrelevant and was conceptually backgrounded at the time when the semantic shift took place.

Finally, the secondary meaning of *help* became clearly distinct from its core meaning, as can be seen in the following sentence (from the *Old Bailey*), which unambiguously corresponds to the meaning 'avoid/prevent':

(15) *I do not believe the prisoner could help the accident.* (*Old Bailey*, 1834)

3. Gradual fixation

Today, *help*$_2$ prototypically occurs in the string *can (-ed) not help*, but it is important to ascertain to what extent this item is actually fixed and to understand the processes of fixation resulting in this sequence. One of the most complex issues related to this expression is the question of polarity.

3.1. *Polarity*

As Bybee (2010) explains,

> [i]n general, we expect affirmative uses to be more common than negative ones, based on the cross-linguistic finding that all languages 'mark' negative with an overt marker, but no languages mark affirmative and leave the negative unmarked. As markedness relations correlate very highly with relative frequency (Greenberg 1963), we expect to find more affirmatives than negatives in any batch of data examined. (Bybee 2010: 152)

However, in the case of *can help*$_2$, the proportion of negative cases is much higher than that of positive cases.

3.1.1. *Free combination and lack of polarity sensitiveness.* As can be noticed, examples (11) and (12), which were identified as potential sources of this particular lexical shift, did not involve negative polarity. This is also the case in example (16):

(16) *One thing there is […] which I fear will touch me; but I shall help it, I hope.* (Pepys, *Diary*, 1668).

This type of sentence is nevertheless very rare and only a few cases of free combinations can be observed in corpora, becoming extremely infrequent in the 19th century.[2]

3.1.2. *Licensing contexts.* Rather early on, *can (-ed) not help*$_2$ became a collocation and may even be considered a colligation, since it displays a high degree of compatibility not only between individual graphic units but also between lexical and syntactic items.[3] Indeed, the collocation *can help* colligates with a negation and can even be deemed a Negative Polarity

Item (NPI). NPIs are items which never occur in positive assertions using the simple past (Giannakidou 1998). Conversely, such items occur when they are in the syntactic scope of a) a negative particle (including cases of non-clausemate negation), b) a restrictive particle, c) a subject containing a negative quantifier, d) a subject containing a restrictive quantifier. They are also licensed by e) a negation with inverse scope, i.e. when the item is "within the semantic scope of an expression which does not c-command it at S-structure" (de Swart 1998: 179), f) *wh-* and *yes/no* questions, g) *if*-clauses, h) *than*-clauses and i) *before*-clauses. All these licensing contexts can be found in the case of *can (-ed) not help*$_2$, as can be seen in the following examples, which illustrate each type of licensing context:

(17) a. *He couldn't help crying.*
a'. *I don't think that she can help doing what she does.* (Linebarger 1980: 24) (negative raising)
b. *He could hardly help knowing it*. (COCA 2008, FIC)
c. *No one can help but be shocked.* (COCA 1996, SPOK)
d. *Few who followed the unraveling details could help but wonder…* (COCA 1992, NEWS)
e. *She can help doing none of those things.* (de Swart 1998: 179)
f. *How can you help but hate such people?* (COCA 1990, FIC)
g. *Never climb shale or slate if you can help it.* (COCA 2009, FIC)
h. *They could not help it any more than his skin could help what was happening to it.* (COHA 1955, FIC)
i. *The curtain whooshed back. Caitlin tensed before she could help herself.* (COHA 2009, FIC)

Yet, this list of licensing contexts does not accurately reflect acceptability judgements.

3.1.3. *Acceptability judgements.* In order to analyse native speakers' reactions towards these licensing contexts, I conducted a pilot study on twenty Anglophones, asking them to evaluate the acceptability of these sentences from 1 ("perfectly normal") to 5 ("wrong") and I calculated the average grade obtained for each of these sentences. Three different groups of sentences emerge from this study. Sentences (17a), (17a') and (17g) have a low score (1.1 to 1.4) and are therefore considered very acceptable; sentence (17e) has the highest score (3.5 "very strange"); the remaining sentences have an intermediate score, ranging from 2.5 to 2.7 ("a bit

strange"). As a result, it appears that *can help*$_2$ is only totally acceptable when it is in the scope of a negative particle – with or without negative raising – or when it occurs in an *if*-clause.[4]

It also appears that the sentence made up by de Swart, with inverse scope, is problematic. It was labelled "wrong" by nearly one quarter of the informants.

These results confirm that a distinction needs to be made between grammaticality and acceptability. Most of these sentences are grammatical but they are very rarely employed. As Bybee (2010) explains,

> in usage-based theory, […] acceptability judgements within a language are postulated to be based on familiarity, where familiarity rests on two factors: the frequency of a word, construction or specific phrase, and similarity to existing words, constructions or phrases. Items will be judged as acceptable to the extent that they are frequent in the subject's experience or similar to frequent items.
>
> (Bybee 2010: 214)

This is precisely why a corpus study is essential at this stage. An analysis based on COCA shows that all of the above contexts are in fact statistically marginal (around 2%), with the exception of prototypical cases of negative particles (cf. De Beaugrande [2008], who only finds *can help*$_2$ in negative contexts in his corpus).[5] One may therefore question to what extent it is appropriate to label this item an NPI. Indeed, several elements indicate that it would be more adequate to consider it a lexicalized verb phrase.

3.2. *Lexicalization*

"Lexicalization is the change whereby in certain linguistic contexts speakers use a syntactic construction or word formation as a new contentful form with formal and semantic properties that are not completely derivable or predictable from the constituents of the construction or the word formation pattern. Over time there may be further loss of internal constituency […]" (Brinton and Traugott 2005: 96). The first element that suggests that this item is undergoing lexicalization is the fact that in earlier periods the expression of inability exhibited some variation which no longer appears today.

(18) *This was a heavy piece of news to my nephew, but <u>there was no way</u> to help it but to comply.* (William Defoe, *Robinson Crusoe*, 1719)

(19) *The Prisoner deny'd the Fact, as to the Murther of the Child, and said, that she knew not that she was so near her Time and that it dropp'd from her at the Vault, when uncapable to help it. Upon a full Hearing of the Matter, the Jury acquitted her.* (*Old Bailey*, 1729)

(20) *[T]o say all in a word, he doats upon you; and I begin to see it is not in his power to help it.* (Samuel Richardson, *Pamela*, 1740)

(21) *It is impossible to help lamenting the unhappiness of Sir Edward.* (Charlotte Smith, *Ethelinde*, 1789)

This suggests that non-prototypical expressions of inability have decreased over time and that the use of *can (-ed) not* has become obligatory. For an expression to become obligatory is, indeed, one of the characteristics of its being lexicalized (see, for instance, Heine and Narrog 2009: 404).

Furthermore, it can be noticed that the incidence of the negative adverb *never* with *can help* is significantly lower than that of *not*. The use of *never* is not ungrammatical, but its compatibility with *can help*$_2$ is in no way comparable to its incidence with a typical NPI such as *anything*. The figures found in COCA demonstrate that *anything* is as compatible with *never* as it is with *not* ($N_{not\ x\ anything}$ = 3842; $N_{never\ x\ anything}$ = 4038). By way of contrast, in the same corpus, *can (-ed) not help*$_2$ appears 1288 times, while only 3 instances of *can (-ed) never help*$_2$ can be found.[6] The fact that *never* is so rare with *can help*$_2$ raises serious doubt as to the legitimacy of labelling *can help*$_2$ a prototypical NPI.

These two elements – earlier variation in the expression of inability and the extremely low frequency of *never* – demonstrate that the item under scrutiny is fairly frozen and that it exhibited more variability in the past. One may therefore wonder whether the proportion of the non-prototypical licensing contexts mentioned above has also decreased over time.

I have conducted a diachronic study on COHA, to see whether the proportion of non-prototypical licensing contexts is stable. If the item in question is an NPI, there is no reason why it should have evolved over time. Conversely, if cases which differ from the prototypical *can (-ed) not help*$_2$ are declining in number, it would suggest that this item is no longer a true NPI but that it is lexicalizing into a fixed phrase. This study is based on instances of "help [vvg]", i.e. uninflected forms of *help* followed by a *V-ing* form.[7] The sentences are coded as prototypical if they contain the exact string *can (-ed) not help*$_2$ (and contracted forms) and as non-prototypical if they correspond to licensing contexts (17a') to (17i) or to any other alternative forms, such as other negative constructions (e.g. *Nor/ neither could he help laughing*), affirmative forms (e.g. *I can help crying*)

or alternative expressions of inability (e.g. *It was impossible to help thinking*). Strings which are interrupted by a constituent (e.g. *I could not, despite my fears, help laughing*) were also coded as non-prototypical because the adjacency of verbal components is another characteristic of lexicalization. The non-prototypical cases were subsumed under a) interrogatives, b) non-prototypical negatives and c) other non-lexicalized cases. Figure 1 shows the diachronic tendency which can be observed in COHA.

As can be seen, in the 1830s–1840s, non-prototypical cases accounted for 16% of all occurrences of *help$_2$ V-ing*. Since then, the proportion of non-prototypical cases has steadily decreased and only amounts to around 2% today.

In the early 19th century, *can help$_2$ V-ing* exhibited a relatively high degree of syntactic flexibility and, like prototypical negative polarity items such as *anything* or *ever*, was found in a variety of NPI licensing contexts. Today it is practically never used in licensing contexts other than the prototypical clausemate negation with *not*. Likewise, alternative expressions of inability and strings that are interrupted by a constituent have become extremely rare in recent years. Put together, these two types of non-lexicalized forms only represent 0.5% of all occurrences of *help$_2$ V-ing*.

The lexicalization of this string is probably linked to a general tendency towards improved processing. For instance, it has been demonstrated (Drenhaus, Błaszczak and Schütte 2007: 190) that interrogative sentences

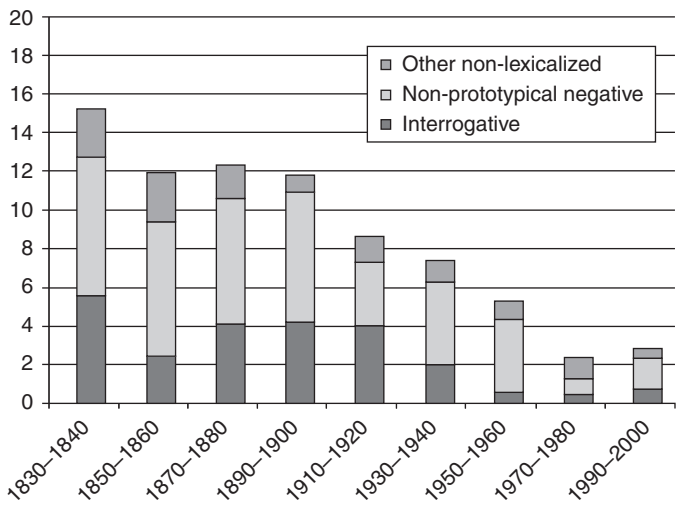

Figure 1. *Percentage of non-prototypical forms of* help$_2$ + V-ing *(COHA)*

containing an NPI are harder to process than negative sentences containing an NPI. This probably explains why interrogative contexts are, on the whole, less frequent and are disappearing more rapidly than non-prototypical negative contexts, as can be seen in Figure 1.

Moreover, questions of proximity (cf. Hawkins 2004, Rohdenburg 1996) are also paramount in accounting for the ease and speed of processing. It seems fairly logical that sentences like the following ones should be avoided.

(22) *He could **no** more help going on to further heights of success than his "gilt-edged" securities, stored in thick parcels in his safe-deposit boxes, **could help bearing** interest.* (COHA 1899, FIC)

(23) ***No** man, outside of a deaf and dumb asylum, who is awakened at midnight on the 3d of July with – a hideous din that he knows will grow worse and worse for the next twenty-four hours, **can help feeling** that the Declaration of Independence was a terrible mistake, and that slavery and quiet are infinitely preferable to freedom and fire-crackers.* (COHA 1876, NEWS)

Although these two sentences are interpretable, as the reader can reread them if necessary, the amount of effort required in order to process them is exceptionally high.

Today non-prototypical licensing contexts are so infrequently encountered that speakers have become unfamiliar with them. Some people are in fact so uncomfortable with these structures that they want to add an extra negation or even fail to interpret them correctly, as the following comments by native speakers show:

(17) c. *No one can help but be shocked*. "OK if the point is to say that no one was shocked."

d. *Few who followed the unraveling details could help but wonder…* "Don't you need a negation *couldn't*?"

Indeed, two out of the four interrogative sentences containing *help$_2$ but V* found in COCA 2005–2010 contain an extraneous negation:

(24) *Tyler's face and the smiles and, I mean, how can you **not** help but fall in love with this family?* (COCA 2010, SPOK)

(24') *He wanted to be me. And I? How could I **not** help but be drawn to him, his wife, his daughters?* (COCA 2010, FIC)

These developments strongly suggest that this multi-word expression is no longer an NPI but that it is on the verge of becoming a fully lexicalized verb phrase. As such, it is now "stored and retrieved whole from memory at time of use, rather than being subject to generation or analysis by the language grammar" (Wray 2002: 9). In view of this, it is clear that it has become easier to process than its NPI ancestor. As an NPI, it had to be parsed as *can* + negation + *help*, whereas it is now processed as an unanalyzable chunk, the use of which improves fluency and provides time for discourse planning (cf. Bolinger 1975, Kuiper 1996).

Another development which has contributed to the fixedness of the structure concerns the type of objects compatible with *can (-ed) not help*$_2$.

3.3. *Evolution of objects: the gradual disappearance of non-pronominal NPs*

A further change in the syntax of *can (-ed) not help*$_2$ is the type of complement that is compatible with this verbal sequence. Quite early on, gerunds started to be used as an alternative to NPs, as can be seen in the following sentence:

(25) *We cannot help acknowledging the Great and Good Creator and Governour of the Universe.* (John Rotheram The Force of the Argument for the Truth of Christianity 1653)

Many instances of *can (-ed) not help*$_2$ were still followed by full NPs in the 18th and 19th centuries, whereas today these NPs would undoubtedly be replaced by phrasal complements, as the following examples show:

(26) *This is because they call me a Molly, and say I am more like a Woman than a Man, and how can I help my face?* (Old Bailey, 1738)
(27) *I cannot help the thought which tells me thou hast not yet learned truly to decipher its language.* (COHA 1839, FIC)
(28) *But Ottila cannot help her beauty.* (COHA 1864, FIC)

These sentences would be respectively replaced by:

(26') *This is because they call me a Molly, and say I am more like a Woman than a Man, and how can I help looking the way I do?*
(27') *I cannot help thinking that thou hast not yet learned truly to decipher its language.*
(28') *But Ottila cannot help being beautiful.*

Table 1, based on the *Old Bailey Corpus*, documents the gradual disappearance of full NPs in this construction.

This phenomenon is partly due to the general development of gerunds, but it also appears to be related to a gradual decline in nouniness on the part of the object of *can (-ed) not help*$_2$. This process can be observed in the following manipulation, based on a sentence adapted from COHA (1859):

(29) *I won't stay here and be quiet Mrs. Ralph Huntington, No. 2 […]. I tell you I feel within me that my destiny is elsewhere. I cannot help my fate.*

If one replaces the NP *my fate* with the anaphora *it*, it should theoretically be possible to interpret this proform as being co-referential with *my destiny*, which is the closest preceding salient NP. However, the use of an anaphora actually produces a different result:

(29') *I won't stay here and be quiet Mrs. Ralph Huntington, No. 2 […]. I tell you I feel within me that my destiny is elsewhere. I cannot help it.*

In this sentence, a modern reader is more likely to consider that *it* refers to the VP *feel within me that my destiny is elsewhere* than to interpret it as co-referential with *my destiny*. This suggests that the object of *can (-ed) not help*$_2$ is no longer perceived as an entity, but that it is now prototypically a process, which explains why its compatibility with full NPs has gradually diminished.

Today, the proportion of full NPs as objects of *can (-ed) not help*$_2$ is extremely low and only accounts for 1.2% (N = 10) of all cases *of can (-ed) not help*$_2$ in COHA for the period 2000–2010. The vast majority of objects are phrasal complements (*but* V and gerunds), which represent 71.3% of cases (N = 598). *It* is used 15.7% of the time (N = 132) and reflexive pronouns occur in 10.37% of cases (N = 87). The remaining objects are

Table 1. *Proportion of* can (-ed) not help$_2$ *+ full NP and* can (-ed) not help$_2$ + V-ing *in the 18th and 19th centuries (Source Old Bailey)*

	Can (-ed) not help + NP (except it)	*Can (-ed) not help V-ing*
1700–1750	41% (12/29)	59% (17/29)
1800–1840	14,3% (8/56)	85,7% (48/56)

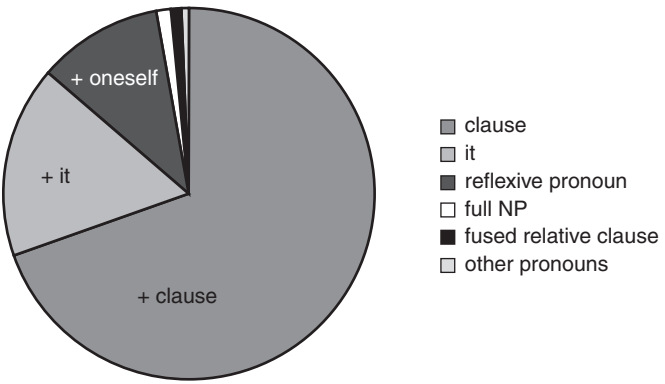

Figure 2. *Types of objects of* can (-ed) not help$_2$ *(COHA 2000s)*

pronouns other than *it* (0.6%; N = 5) and fused relative clauses (0.8%; N = 7). Figure 2 illustrates this distribution.

Let us now turn more specifically to the two types of phrasal complements that are compatible with *can (-ed) not help$_2$*, and in particular to the construction involving *but* plus a bare infinitive.

4. The use of *can (-ed) not help but V*

4.1. *The extragrammaticality of* can (-ed) not help but V

Figure 3 illustrates the success of *can (-ed) not help but V* in British and American corpora, using data from The Times and Time Magazine. As Jespersen (1917) and Thomas (1948) noticed, the *but*-version was primarily used in American English, but its proportion has increased dramatically in the two varieties over the 19th and 20th centuries.

The statistical success of the *but*-version seems somewhat astonishing given the fact that it is extragrammatical (or asyntactic [Cruse 1986]). According to Fillmore et al. (1988), an idiom is said to be extragrammatical when it does not obey the syntactic rules of contemporary English. This is, for example, the case for multi-word expressions such as *let alone* or *by and large.*

It is also the case for *can (-ed) not help but V*, since this construction is the only structure in which the morpheme *but* acts as a complementizer in unmarked contemporary English. Indeed, it is a syntactic fossil. Studies devoted to the use of *but* as a complementizer either deal with Middle and

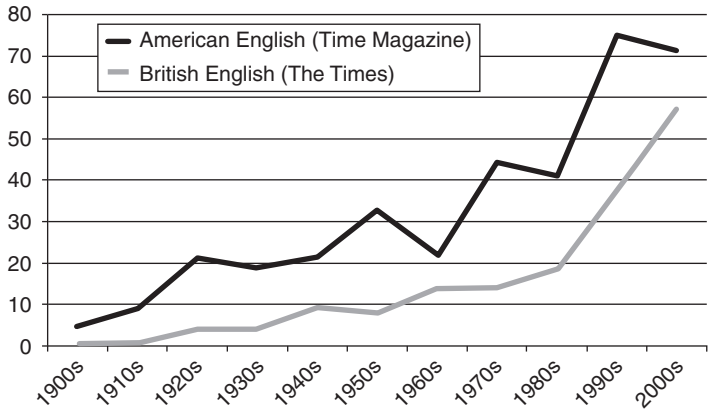

Figure 3. *Evolution of the percentage of* but V *after* can (-ed) not help*, as opposed to* V-ing*, in American English (Time Magazine) and in British English (The Times)*

Early Modern English (Lopez-Couso & Mendez-Naya 1998) or underline its markedness in contemporary English (Cotte 2004).

It is therefore rather surprising that this structure, which is unique in contemporary English, should be experiencing such a vigorous revival, particularly as there already exists a well-established alternative, the gerund form, which appears in many other verbal constructions.

4.2. But *as a complementizer*

Throughout its history, *but* has been a preposition, an adverb, a coordinating conjunction, an adverbial subordinator, a (negative) complementizer and a negative relative pronoun. Semantically speaking, *but* was (or still is) abessive, exceptive, restrictive and contrastive and was also used to express negative condition. The common feature between these different meanings clearly lies in their closeness to a negative meaning. All these different meanings are appropriately subsumed by Joly (1980) under the notion of "reversal".

As a complementizer, the use of *but* illustrates what Croft (2000) calls cryptanalysis. *But* was traditionally compatible only with inherently negative verbs such as verbs of abstention, doubt and denial. In cryptanalysis, a grammatical morpheme is employed to reinforce a particular meaning which is already encoded by the lexicon. To improve expressivity or facilitate processing, the negative meaning of these verbs is reinforced by a (semi-) negative grammatical morpheme, like *but*. The use of *but* as a complementizer after

abstention verbs resembles the Latin morpheme *quin*, and this structure may have derived from it, as Warner (1982) suggests (although see Lopez-Couso and Mendez-Naya 1998 for discussion).

The use of *but* as a complementizer is very complex insofar as it may or may not be negative:

(30) *My master knows not but I am gone hence.* (= *that I am not gone*) (Shakespeare, *Romeo and Juliet*, V, iii, 1597)
(31) *I doubt not but you can put me into the best way to obtain that favour.* (not negative) (John Hawles, *Englishman's Right*, 1680)

The extreme complexity of this complementizer partly explains why it has died out. What is more, its more or less negative meaning also explains why *can (-ed) not help but V* was for a long time rejected by American purists, who considered it a case of double negation (e.g. Genung 1893: 317).

Let us now study in more detail the sociolinguistic dimension of these two variants.

4.3. *Sociolinguistic distinction between* can (-ed) not help but V *and* can (-ed) not help V-ing

The average proportion of *can (-ed) not help but V* observed in *The Times* during the 1990s is higher (37%) than that of the British National Corpus (22.7%). Seeing that the BNC includes a variety of genres (spoken, fiction, etc.), it is clearly a less formal corpus than *The Times.* This therefore suggests that the *but*-construction is rather formal in British English.

Furthermore, the comparison between contracted and non-contracted forms of *can (-ed) not* in the BNC confirms this trend, as can be seen in Table 2.

The proportion of *but* is higher (30.6) when *can (-ed) not* is not contracted than when it is (18.6).

Table 2. *Percentage of* V-ing *and* but V *after contracted and non-contracted forms of* can (-ed) not help *in the BNC*

	V-ing	*But + V*
Contracted forms	81.4% (477/586)	18.6% (109/586)
Non-contracted forms	69.4% (215/310)	30.6% (95/310)

The relative formality of *can (-ed) not help but V* is also suggested by a remark from Lawler (1996), who considers it "a little precious" and labels it a "parvenu construction".

In American English the sociolinguistic pattern is rather different. In 1948, Thomas said that the *but*-construction was fairly well implanted in American English, both in informal and formal dialects. He nevertheless stated that, "the one which appears most frequently in standard written English is *cannot help* plus gerund". In COCA the highest proportion of *cannot/could not help but V* can be found in the spoken sub-corpus, where it accounts for 90% of occurrences.[8] It is therefore evident that *can (-ed) not help but V* is not a formal construction in American English.

Nevertheless, the stylistic pattern of use observed in American English is more complex than one might expect and, under close analysis, provides us with a better understanding of the semantic particularities of *can (-ed) not help but V*.

5. Semantic and pragmatic distinctions

5.1. *Semantic distinctions*

In view of the high proportion of *cannot/could not help but V* found in the spoken sub-section of COCA, one may expect the proportion of *cannot/could not help but V* to be ranked, in decreasing order, as follows: spoken > fiction > academic. And yet, this is clearly not the case in practice, as can be seen in Table 3. The order observed actually follows this pattern: spoken (90%) > academic (68.4%) > fiction (55.2%).

These somewhat unexpected results can be partially explained when compared with the proportion of [- human] subjects used with *cannot/could not help*$_2$ in each of these sub-corpora, the figures of which are shown in Table 4.

Table 3. *Percentage of* but + V *after* cannot/could not help$_2$ *in three sub-sections of COCA*

	% cannot/could not help$_2$ but V *(as opposed to* cannot/could not help$_2$ V-ing*)*
Spoken	90% (47/52)
Academic	68.4% (193/282)
Fiction	55.2% (221/400)

Table 4. *Percentage of [- human] subject with* cannot/could not help$_2$ + *phrasal complement in three sub-sections of COCA*

	% [- human] subject with cannot/could not help$_2$ + *phrasal complement*
Spoken	7.6% (4/52)
Academic	18% (51/282)
Fiction	1.7% (7/400)

As can be seen, the proportion of [- human] subjects with *cannot/could not help$_2$* is much higher in the academic sub-corpus. This observation therefore suggests a high compatibility between the use of *but* and [- human] subjects, which, in turn, provides us with some insight into the meaning of *can (-ed) not help but V*.

According to Thomas (1948), *can (-ed) not help V-ing* and *can (-ed) not help but V* are totally interchangeable. Yet, the prevalence of *but* with a [- human] subject, together with the high proportion of *V-ing* in fiction, clearly suggest that there exists some sort of semantic nuance between the two constructions.

For instance, with a [- human] subject, the use of a gerund seems problematic:

(32) *The result is friction and ill feeling which cannot help but have unfortunate effects.* (COHA 1923, MAG)
(33) *?* The result is friction and ill feeling which cannot help having unfortunate effects.*

With *but*, there seems to be a notion of inevitable logical consequence, whereas the high proportion of gerunds in fiction suggests that *V-ing* conveys a rather subjective inability to act otherwise. One might even suggest that there exists a fundamental binary opposition between the two constructions. The use of the gerund is oriented towards the expression of subjectivity and feelings, and is more suitable for narrations, whereas the *but*-form is more objective. It is directed towards the intellect and seems particularly appropriate in argumentation. Although argumentative discourse may also rely heavily on subjectivity, speakers/writers of argumentative discourse generally seek to emphasize the objectivity of their position. The use of the *but*-form thus constitutes a powerful strategy to inconspicuously impose one's viewpoint by presenting it as objective.

This semantic distinction can be related to the fact that the bare infinitive, which accompanies *but* in this structure, prototypically refers to a

concept or a notion (cf. Chuquet 1986), while the *V-ing* form is often said to convey the inner point of view of the speaker (cf. Adamczewski 1982).

This binary opposition remains, however, a little simplistic and it would thus be fruitful to compare these two structures with a third one, *can (-ed) not but V*, in order to gain a better understanding of the meaning of these forms. For instance, it can be noticed that sentence (32) strongly resembles the following one:

(34) *That officers of the Government […] should refuse to be governed themselves by the laws, […] cannot but have an injurious effect upon a people too prone to avoid or refuse obedience to authority.* (COHA 1860, NEWS)

Other such pairs of sentences abound in COHA, as these examples illustrate.

(35) a. *If so, the success of the experiment* ***cannot but encourage*** *her to go forward.* (COHA 1852, MAG)
b. *Confronting indifference on a cosmic scale* ***cannot help but encourage*** *feelings of diminishment, abandonment, implacable solitude.* (COHA 1995, MAG)

(36) a. *We have described the Serpent Mound, and although we are ignorant of its object, it* ***cannot but recall*** *the important place which the symbol of the serpent held in the ancient Mexican superstition.* (COHA1849, MAG)
b. *Indeed, the panels of the inner room, which represent the arts and sciences, are entirely peopled by babies: plump, coy infant poets; chubby infant astronomers and musicians – figures which* ***cannot help but recall*** *Wendy's obsession with the possible genius of her unborn child.* (COHA 1974, FIC)

The similarity between these pairs of sentences results from the presence of a [- human] subject and from the notion of inevitable logical consequence. One may therefore suggest that *can (-ed) not help but V* and *can (-ed) not but V* are synonymous. In fact, it appears that *can (-ed) not help but V* constitutes a syncretism of the meanings of *can (-ed) not help V* and *can (-ed) not but V*, as can be seen in Figure 4.

The three constructions presented in Figure 4 span between two distinct semantic poles: involuntary physical reaction and inevitable logical consequence. The three predicates chosen (*cry*, *wonder* and *have an effect*) are illustrative of each of the three categories identified: [+ involuntary physical

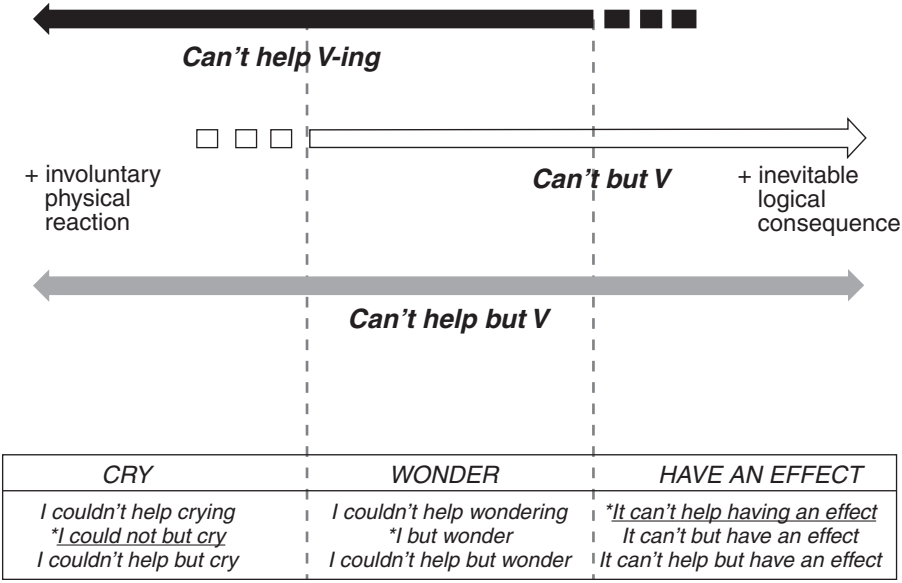

Figure 4. *A semantic representation of* can (-ed) not help but V

reaction] is exemplified by the predicate *cry*, [+ inevitable logical consequence] is illustrated by the predicate *have an effect*, while *wonder* [+P] is fairly neutral, as it can correspond to both an irrepressible subjective reaction and an inevitable objective consequence. These examples show that *can (-ed) not help but V* constitutes a syncretism of the other two structures.

To get a full picture of the competition between these variants, I have conducted a study on COHA, based on the proportion of these three structures, with 5 frequent verbs (*wonder*, *notice*, *feel*, *be* and *think*).

Data on *can (-ed) but* was also included in Figure 5, but given its very low frequency, it will not be addressed here. The overall tendency revealed by the graph reflects the total disappearance of *can (-ed) not but V* and the steady increase in the use of *can (-ed) help but V*. The first stage (1820–1900) illustrates the gradual replacement of *can (-ed) not but V* with *can (-ed) not help V-ing* (in neutral contexts). The success of the gerund form probably corresponds to the gradual loss of the object's nouniness (cf. Section 3.3), since the prior structure *can (-ed) not help* + NP was less likely to replace a structure containing a verb. Since the beginning of the 20th century, the *can (-ed) not help but V*-structure has increased and has also contributed to replacing *can (-ed) not but V*. From the 1950s onwards, the success of the *can (-ed) not help but V*-structure has notably participated in

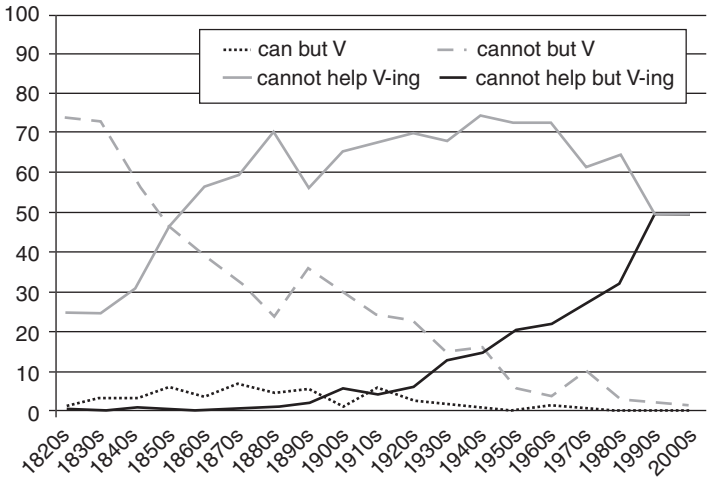

Figure 5. *Distribution of 4 alternative constructions in COHA (5 verbs)*

reducing the proportion of *can (-ed) not help V-ing* in American English.

The slight semantic distinction between the two forms is associated with different pragmatic values which directly derive from the dichotomy between objectivity and subjectivity mentioned above.

5.2. *Pragmatic distinctions*

Those speakers whose repertoire includes both complement types often exploit the slight semantic difference between the two forms for pragmatic purposes. For instance, as far as politeness is concerned, one can notice a slight nuance between the two following sentences:

(37) *I couldn't help noticing that you haven't paid for your drinks.*
(37') *I couldn't help but notice that you haven't paid for your drinks.*

Given that the *but*-version is more objective, it highlights the conspicuousness of the action described in the sentence. Being more direct and therefore potentially less polite than the first, the second sentence infers that the speaker's observation is inevitable. It may even be interpreted as an insinuation that the person who forgot to pay did it on purpose.

Furthermore, the objectivity encoded by the *but*-version gives it stronger argumentative force. When *but* is used, the object of the multi-word verb is presented as an inevitable consequence, which is therefore much harder to

challenge than a mere subjective statement. The use of the *but*-form enables the speaker/writer to enforce her point of view on the hearer/reader by presenting it as an objective fact.

Similarly, when the subject of *can (-ed) not help* refers to the speaker, the notion of objectivity added by the *but*-structure also constitutes an effective strategy which enables the speaker to reinforce her lack of responsibility. In

(38) *I couldn't help doing it.*

The speaker insists on her non-responsibility, but by using

(38') *I couldn't help but do it.*

the speaker further strengthens her position of non-responsibility by suggesting that the event encoded in the object-clause was objectively unavoidable. This pragmatic effect partly explains why this form has increased dramatically in recent years.

6. Conclusion

In this paper, the multi-word expression *can (-ed) not help*$_2$ has been studied from different angles. First, it has been shown that the non-compositionality of this idiomatic expression is due to a semantic shift undergone by the verb *help*. It has subsequently been demonstrated that this string has almost ceased to constitute an NPI in its own right, since it has lost virtually all of its erstwhile syntactic flexibility and is practically never used in licensing contexts other than the prototypical clausemate negation with *not*. This string has now become lexicalized; it has gradually lost its variability and the adjacency of its components has now become the rule.

The second half of this paper has been devoted to the factors which have contributed to the success of the *but*-form. As shown in this study, *can (-ed) not help but V* possesses a broader semantic content and is therefore more economical from the point of view of production than the gerund form. In addition, compared to the *V-ing* structure, the use of the *but*-form provides the speaker with a more efficient means of strategically signalling her non-responsibility.

Moreover, the *but*-structure is more likely to obey the principle of rhythmic alternation than the gerund. This principle, which was identified by

Schlüter (2003), predicts that, all things being equal, the preferred variant is the one which displays an alternation of stressed and unstressed syllables. Schlüter demonstrates this principle in her study of the alternation between the past participles *lighted* and *lit* and the structure "determiner + *not* + adjective" *(*a* '*not* '*happy* '*person* vs. *a* '*not-ex*'*cessive* '*price*). Interestingly, this principle can also be observed in the alternation between *can (-ed) not help V-ing* and *can (-ed) not help but V*. For instance,

(39) *I couldn't help but feel…*

is more satisfying rhythmically and is easier to process than

(40) *I couldn't help feeling…*

which exhibits a stress-clash between *help* and *feel*. Given that English includes a great number of monosyllabic verbs, together with many verbs stressed on the first syllable, this factor may have played a significant role in the decrease in gerunds after *help*. This principle may also explain why the *can (-ed) not but V*-structure, which entails a stress on *but*, has disappeared,

(41) *I couldn't but feel…*

The principle of rhythmic alternation therefore proves to be a very useful tool in analysing the evolution of a variety of morphosyntactic variables. This principle is founded on neurological experiments which show that the activation of neurons is followed by a refractory phase, during which they are harder to reactivate. According to Schlüter (2003), this would explain why the immediate co-occurrence of two similar elements (here two stressed syllables) tends to be rare.

To summarize, the success of the *can (-ed) not help but V*-structure appears to be multi-causal. Indeed, it has been demonstrated that a combination of semantic and extra-semantic factors have brought about the unlikely yet vigorous revival of this syntactic fossil.

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Notes

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1. Obviously the verb *help* can still be followed by a purposive clause today, see Mair (1990) and Quirk et al. (1985) for discussion.
2. In my study of *help*$_2$ + gerund in COHA (cf. Section 3.2.), affirmative cases represent only 0.35% of occurrences in the 19th century.
3. The term colligation refers to the frequent co-occurrence of a particular lexical item with a specific grammatical category (Legallois 2008).
4. The latter context can only be found when *it* is used as the object of *can help*$_2$. The proportion of *if*-clauses with the string *help*$_2$ *it* in COCA for the period 2005–2010 is quite high: 17% (N = 61). Interestingly, most of these sentences (59/61) contain an additional licensor, such as *never* in sentence (17g). Consequently, one may conclude that *if* is not a sufficient licensor for this item. This explains why sentence (17g) was readily accepted by the informants, whereas conditionals are known to be weaker licensors than negations and interrogations. We observe a similar pattern with *than*-clauses, which are only compatible with *can help* when they appear in conjunction with a negation.
5. *If*-clauses are also fairly frequent in the case of *can help it* (cf. note 4).
6. The incompatibility between *never* and *can help* does not seem to be due to problems related to meaning, since the rare occurrences that do include *never* do not appear to exhibit any semantic incompatibility:
   (i) *I can never help marveling at people like that, who hold their own, remain themselves, no matter what.* (COHA 1969, FIC)
   (ii) *When she stopped in on her tenants to make her hated monthly call, she could never help being bemused by the fact that Isaac may have been at a particular apartment the night before.* (COHA 1993, FIC)
   (iii) *She could never help smiling when complimented*. (COHA 1970, FIC).
7. The V-*ing* form has been chosen for this study because its use has been more stable over the past two centuries than the *but*-form, as is shown in Section 4.1.
8. Most of the spoken section of COCA is composed of unscripted interactions. However, the fact that it is entirely based on TV and radio programs entails that it is far from being fully representative of spoken American English in general.

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