

Comparing the VVingly and VVing constructions in two centuries of American fiction (1810-2000)

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Abstract (italiano)

Questo studio indaga la distribuzione delle costruzioni VVingly e VVing nella narrativa americana (per esempio, *He looked pleadingly at them* vs. *He stared unmoving at it*) nel XIX e XX secolo. Viene mostrato che VVingly ha una preferenza per l'uso soggettivo, mentre VVing ha una forte preferenza per l'uso oggettivo. Inoltre, VVingly preferisce i verbi principali che riguardano azioni eseguite con la testa (per esempio, *nod, say*), mentre VVing occorre tipicamente con verbi di stato e di movimento (per esempio, *stand, come*). Tuttavia, si verifica un'attrazione tra le due costruzioni come dimostrano 'coppie minime' quali *said laughing(ly)*, *said smiling(ly)*, *stood smiling(ly)*. In altre parole, VVingly può essere descritto come un caso di morfologia stravagante rispetto a VVing.

Parole chiave

Avverbi in *-ingly*, verbi in *-ing*, verbi di stato, verbi di movimento.

Abstract (English)

This paper investigates the distribution of the VVingly and VVing constructions in American fiction (e.g. *He looked pleadingly at them* vs. *He stared unmoving at it*) in the 19th and 20th centuries. It shows that VVingly has a preference for the subjective use, while VVing has a strong preference for the objective use. Also, VVingly prefers main verbs involving actions performed with one's head (e.g. *nod, say*), while VVing typically occurs with state and motion verbs (e.g. *stand, come*). Still, there is some degree of attraction between the two constructions as is shown by 'minimal pairs' such as *said laughing(ly)*, *said smiling(ly)*, *stood smil-*

ing(ly). In other words, VVingly may be described as an instance of extravagant morphology in relation to VVing.

Keywords

-ingly adverbs, *-ing* verbs, state verbs, motion verbs.

1. Introduction

A construction which is not uncommon, especially in English fiction, is the VVingly construction illustrated in (1):

- (1) a. *Neville looked pleadingly at Harry, Ron, and Hermione.* (J.K. Rowling)
b. *He stared unmovingly at the sea.* (Gerald Hensley)

This construction contains a main verb, *looked* and *stared* in (1), which profiles a ‘material’ process (in the sense of Halliday and Matthiessen 2014)¹ and which will be abbreviated as V here. This verb is followed by an adverb ending in *-ingly*, *pleadingly* and *unmovingly* in (1), whose root is a verb, *plead* and *move* in (1). Since the adverbs illustrated in (1) have a verbal root, they will be referred to as Vingly adverbs in this paper, although they are also known as ‘Harry Potter adverbs’, see Broccias (2012), because of J.K. Rowling’s penchant for their use in the Harry Potter novels. As (1b) illustrates, a negative prefix (un-) may be attached to the Vingly adverb; in other words, both ‘positive’ and ‘negative’ forms of Vingly adverbs are possible in the VVingly construction.

Usually, Vingly is analysed as a form derived from an adjective ending in *-ing* by the addition of the *-ly* suffix. This is, for example, the analysis found in the Oxford English Dictionary (OED), see s.v. *pleadingly*, adv., and *unmovingly*, adv. It is however important to stress that the verbal nature of the root of the Vingly adverb is clearly manifest when the following paraphrases are used:

- (2) a. *Neville {seemed to be/*was} pleading (with Harry, Ron, and Hermione) as he looked at them.*
b. *He {was not/*did not seem to be} moving as he stared at the sea.*

¹ Material processes are processes of doing and happening (see Halliday and Matthiessen 2014, Section 5.2 and, in particular, Table 5.5 on pp. 234-236).

In both cases, the verbal root of the Vingly adverb depicts a process that is predicated of the main clause subject (Neville, he). In other words, Vingly adverbs are ‘subject-oriented’ adverbs in the sense of Geuder (2000), see also Himmelmann and Schultze-Berndt (2005). There is however an important difference between *pleadingly* and *unmovingly*. In the former case, the speaker assesses subjectively the process profiled by the main verb (*looked*) as a clue to the subject referent’s emotional state: the way in which Neville was looking at Harry, Ron and Hermione is interpreted by the speaker as suggesting that Neville was pleading with them. This is why a paraphrase with *seemed*, see (2a), is felicitous while one without is not. To put it differently, *pleadingly* is a subject-oriented ‘subjective’ adverb in (1a). By contrast, in (1b), the verbal root (*move*) of the Vingly adverb, coupled with the negative prefix *un-*, describes a process, that of not moving, which unfolded simultaneously with the process profiled by the main verb (*stared*). There is no subjective assessment of the process of staring. Rather, *unmovingly* is a subject-oriented ‘objective’ adverb in (1b) because it describes the objective fact that the referent of the pronoun *he* was not moving while staring at the sea. This is why a paraphrase without *seemed* is felicitous, see (2b).

The subjective use of Vingly can be subsumed under the ‘manner adverb’ umbrella, while it is debatable whether this label is appropriate to the objective use of Vingly (e.g., is being motionless a way of staring?). As this is ultimately a matter of definition, we will refrain from using the label ‘manner’ and only use the labels ‘subjective’ and ‘objective’. The difference between the two uses can also be captured graphically as in Figure 1a vs. Figure 1b. In the subjective use, two processes, one profiled by the main verb (rendered as a straight blue line in Figure 1a) and the other by the (root of the) Vingly adverb (depicted as a squiggly red line in Figure 1a) are blended (in the sense of Fauconnier and Turner 2002) into one single process, hence the squiggly blue line in Figure 1a. In the objective use, the main verb process and the process profiled by the (root of the) Vingly adverb are just superimposed upon each other: they unfold simultaneously but are kept separate so that the interpretation of superposition of the two processes is temporal rather than ‘manner’-like in an obvious sense. Clearly, the potential for blending along the lines of Figure 1a is there also for the cases captured by Figure 1b and this may justify the uncertainty in the use of the label ‘manner’ for (at least some of) the objective uses.

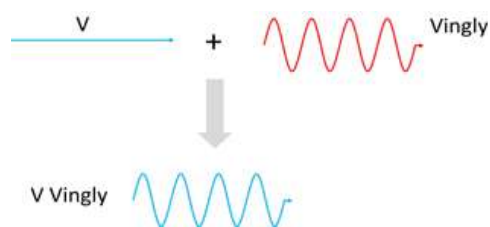


Figure 1a.

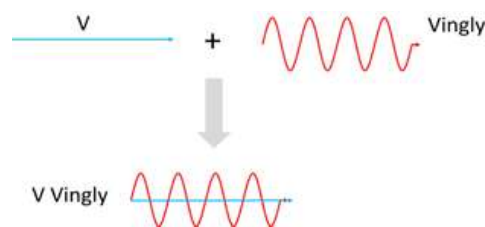


Figure 1b.

Importantly, the VVingly construction, whether used subjectively or objectively, may be in parallel distribution with the (‘material’) VVing construction (see Broccias and Torre 2018). This construction contains the same type of main verb as the VVingly construction (viz. a material verb) plus a participle (Ving) instead of a Vingly adverb, as in shown in (3). Hence, we will refer to the type in (3a) as a ‘subjective’ VVing construction and the type in (3b) as an ‘objective’ VVing construction.

- (3) a. *He now looked pleading at both Tyler and Tanya.* (C.J. Long)
 b. *Lambent stared unmoving at the boat for a few seconds.* (Francis Hardinge)

Considering the VVingly and VVing constructions together, it follows that the use of a Vingly adverb in place of Ving may be viewed as an instance of extravagant morphology, as a morphologically simpler option, namely Ving, is, at least in cases such as (3a)-(3b), available, see Haspelmath (1999: 1055). Obviously, this characterization is a simplification because it does not take into account either frequency or diachrony. For example, very basic Google searches for the ‘minimal pairs’ in (1) and (3), *looked pleadingly at* vs. *looked pleading at* and *stared unmovingly at* vs. *stared unmoving at*, return the approximate results shown in Table 1 (searches carried out on 8th May 2020).

looked pleadingly at	34,200
looked pleading at	1,020
stared unmovingly at	457
stared unmoving at	1,240

Table 1. Search results in Google for the strings *looked pleading(ly) at* and *stared unmoving(ly) at*.

These data may suggest that the subjective VVingly construction is more common than the subjective VVing construction while the opposite holds true in objective cases. Further, they may lead us to ask whether the differences in frequency may reflect diachronic trends, e.g. are the subjective VVing and objective VVingly constructions more recent than the subjective VVingly and objective VVing constructions and have there been any changes in their relative frequencies over time?

In order to try to answer such questions, it is advisable to rely on large historical corpora. Thus, in the present study, we will investigate the evolution of the two constructions over two centuries of American fiction (1810-2000), by using COHA and COCA (Davies 2010, 2012).

This chapter is organized as follows: Section 2 will provide a brief summary of the state of the art on *-ingly* adverbs. Section 3 will outline the data extraction process used in the present study and present an analysis of the results. Finally, section 4 will draw the conclusions.

2. Background

2.1 Previous studies on *-ingly* adverbs

In this study, we are interested in Vingly adverbs, i.e. adverbs whose root is clearly verbal, as shown by the paraphrases in (2) above. This may not be obvious for all adverbs ending in *-ingly*, such as *willingly* and *accordingly* (see also below). Thus, we will consider Vingly adverbs as a subcategory of *-ingly* adverbs which have a clearly identifiable verbal root. Although *-ingly* adverbs have not been extensively studied so far, a few scholars have investigated the phenomenon, both synchronically and diachronically. In a study of lexical innovation in the British broadsheet newspaper *The Times*, Baayen and Renouf (1996) point out that *-ingly* adverbs are relatively common in Present-Day English and, in a diachronic study, Killie (1998) observes that *-ingly* adverbs have been common since the Early Modern English period. While she recognizes that *-ingly* adverbs were already present in Old English, using data from the Helsinki Corpus, she argues that *-ingly* adverbs were rare before the Early Modern English period and dates the beginning of their expansion to the 14th century. Possibly related to the expansion of *-ingly* adverbs is the observation by e.g. Swan (2006) that, over time, *-ly* adverbs, rather than *-ingly* adverbs specifically, expanded substantially from their prototypical manner usage. In particular, Killie (2000, 2007) observes that the use of subject-oriented *-ly* adverbs increased considerably over the last two centuries. The example in (4), adapted from Killie (2007), illustrates the subject-oriented use for *-ly* adverbs.

(4) *Finn blushed {hotly/hot}.*

The adverb *hotly* is in parallel distribution with the adjective *hot* and does not depict the manner in which Finn blushed but rather describes a property of the subject (Finn), that of being hot. Indeed, we have already observed that, similarly, *-ingly* adverbs do not necessarily have a manner interpretation.

Broccias (2012) concedes that Early Modern English does display an increase in the use of *-ingly* adverbs, but he points out that those that expanded at this early stage tended to be adverbs such as *willingly* and *accordingly*, where the verbal nature of the root is not obvious. Instead, Broccias (2012) argues that the use of Vingly adverbs

proper only became established in the Late Modern English period, from the 19th century onwards. Illustrative examples (from ARCHER) of such cases are given in (5), which are intended to show that Vingly adverbs typically occur with verbs of saying (*said* in (5a)), verbs of motion (*lay* in (5b)) and verbs of looking (*glanced* in (5c)).

- (5) a. [...] *said Jem soothingly*. (1847gask.f5b)
 b. [...] *laying her hand coaxingly on Lucio's arm*. (1895core.f6b)
 c. *He glanced at me furtively and unsmilingly* [...]. (1895core.f6b)

It is important to stress that the range of syntactic structures considered in Broccias (2012) is much broader than the one studied here, as the examples in (5) implicitly show. In none of these examples does Vingly immediately follow V, which, instead, is only the word-order considered in this paper; hence, the label VVingly used in the present paper, which suggests that the adverb immediately follows the main verb.

The claim that the real expansion of Vingly adverbs took place in the Late Modern English period is disputed by Iyieri (2018), whose study of Middle and Early Modern English data shows that Vingly adverbs can already be found at earlier stages in the history of English. Indeed, she argues that their presence can also be detected in materials from as early as the 15th century. To be sure, the size of the corpora used may influence such conclusions. It is therefore important, as was observed at the end of the previous section, to rely on large and balanced corpora in order to come to accurate conclusions.

2.2 Mechanisms of language change

We have seen that the VVingly and VVing constructions may overlap with each other. This is an important point because it is usually assumed that functionally similar forms compete for long-term survival in language history by striving towards isomorphism, i.e. a one meaning-one form correspondence. In other words, over time, the degree of overlap between competing forms would tend to be minimized (Anttila 1972; Haiman 1980; but see Itkonen 2011 for some criticism). In a recent article, De Smet *et al.* (2018) propose that there are in fact three possible outcomes when functionally similar forms interact with one another, namely substitution, attraction, and differentiation (see also Broccias and Torre 2020), which are represented in Tables 2 to 4².

²The three processes are not represented graphically as in Tables 2 to 4 by De Smet *et al.*

Given two hypothetical constructions (we could of course have more than two, their functions are represented by way of letters in Tables 2 to 4. Those in parentheses are meant to be optional and not to be affected over time while those in bold are the ones that are going to be relevant to our discussion. Substitution occurs when a given function (function B in Table 2), which is originally associated with both constructions, comes to be associated with only one of them (Construction 1 in Table 2).

	Stage 1	Stage 2
	Functions	Functions
Construction #1	(A) B (C)	(A) B (C)
Construction #2	(D) B (E)	(D) (E)

Table 2. Substitution.

A case of substitution is the regularization of some irregular plurals, whereby a form such as Early Modern English *kine* was replaced by the corresponding regular form *cows* (see Hock 1991: 168). Similarly, in Middle English, the verb *can* could be used with the meaning of ‘to have practical knowledge’ (cf. also Old High German *kan*), thus overlapping with the verb *know* (e.g., *to know a language*) as both verbs derive from the Old English verb *cnāwan*, but over time the former lost this function in favour of the latter³.

Differentiation occurs when the functional domain competed over ends up being divided, with each expression filling a unique functional niche, i.e. the functions are redistributed among the existing forms. In Table 3, our hypothetical constructions have two identical functions associated with them (functions B and C). Over time, each construction only comes to be associated with one of the two functions (Construction 1 with B and Construction 2 with C in Table 3).

(2018). The representations in Tables 2 to 4 are instead taken from Broccias and Torre (2020).

³ In Scots, *ken* has retained this function, as in *I dinnae ken her* ‘I don’t know her’ (see Corbett and Stuart-Smith 2012).

	Stage 1	Stage 2
	Functions	Functions
Construction #1	(A) B C (D)	(A) B (D)
Construction #2	(E) B C (F)	(E) C (F)

Table 3. Differentiation.

An instance of differentiation is represented by the two Old English words *scyrte* (Present-day English (PDE) *shirt*) and *skyrta* (PDE *skirt*), which both were used to refer to garments for both the upper and the lower parts of the body, but over time *shirt* specialized for the former and *skirt* for the latter. Although substitution and differentiation are two different processes, they share a reduction in the functional overlap between two forms, thus leading to isomorphism.

Rather than taking for granted that over time the functional overlap between two forms necessarily decreases, De Smet *et al.* (2018) suggest that a closer look at large amounts of data such as from COHA may reveal that the opposite development is also possible, namely that two constructions become more functionally similar as time passes. This is a process that the authors label ‘attraction’, which is ultimately an instance of analogy⁴ and is illustrated in Table 4. The two hypothetical constructions originally only share one function (function C) but, as time passes, they end up sharing two (functions B and C).

	Stage 1	Stage 2
	Functions	Functions
Construction #1	(A) B C (D)	(A) B C (D)
Construction #2	(E) C (F)	(E) B C (F)

Table 4. Attraction.

De Smet *et al.* (2018) exemplify attraction by detailing the (recent) history of the catenative verb *begin*. This verb was originally followed by a *to*-infinitive but, since the early 19th century, has increasingly been attested with *-ing* clauses, at the expense of the *to*-infinitive. While De Smet *et al.* admit there is a substitution

⁴ The reader is referred to Kuryłowicz’s laws of analogy for some historical background (Kuryłowicz 1947, 1960; see also Anttila 1977; Hock 1991).

process underway, they also emphasize that it is not taking place as would be predicted by traditional competition models.

They notice that initially *-ing* clauses are preferred with *begin* when the matrix clause subject is an agent, while *to*-infinitives with *begin* typically have a non-agentive subject, see Table 5. This contrast is apparent in the two examples below (from De Smet *et al.* 2018: 207-208):

- (6) a. *She ignores him and begins gathering her stuff.*
 b. *The gloom had begun to gather under the tangled branches.*

	Stage 1	Stage 2
	Functions	Functions
<i>begin</i> +		
<i>to</i> V	non-agentive agentive	non-agentive agentive
<i>Ving</i>	agentive	non-agentive agentive

Table 5. *Begin* + *to* V vs. *begin* + *Ving*.

Over time, *begin Ving* increases in frequency, at the expense of *begin to* V, but not in uniform fashion. In the 1840s, *begin Ving* is only found with agentive subjects, but in the 20th century it is increasingly found with non-agentive subjects as well. At the same time, in the 1840s *begin to* V is mostly found with non-agentive subjects, but in later decades it is increasingly found with agentive subjects. In other words, the two constructions have been undergoing *attraction*: they have exchanged features, becoming more alike. While the *-ing* option is overall gaining ground at the expense of the *to*-infinitive, the functional overlap between the two constructions has increased.

3. Data extraction and analysis

Our working hypothesis is that, in the case at hand, extravagant morphology may be a by-product of attraction: VVingly may have taken on a purely temporal (i.e. objective) use and VVing may have taken on a subjective use. In other words, the two constructions may have become more similar because both involve the merger of two events, the event portrayed by V and the event depicted by the root of Ving(ly). Keeping in mind the need for large corpora, we therefore study the VVingly and VVing constructions in the Fiction section of the COHA, thus investigating American narrative texts of the 19th and 20th centuries (1810-2000).

3.1. The VVingly construction

In order to compare maximally similar cases and make our research manageable timewise, we imposed various restrictions on data extraction and analysis.

1. We limited our searches to those cases where the main verb occurs in the past simple. This is reasonable because the constructions under investigation are typical of the narration of events in fiction, which usually employs past tense forms for main verbs (Frey 1947).
2. As was pointed out in Section 2.1, we only considered the fixed word order VVingly, thus excluding instances where Vingly is not immediately adjacent to V, as in (5) above. Although it would be useful to consider all possible syntactic environments (as in Broccias's 2012 study), in this paper we are interested in zooming in on two constructions (a) which differ minimally from each other (i.e. they exhibit the same word order but differ in terms of presence vs. absence of the -ly morpheme on the second element) and (b) examples of which can be retrieved relatively easily from existing corpora. Importantly, we ignored any intonation differences between examples, which may be signalled by punctuation in writing. That is, differences between cases such as *she said grudgingly* and *she said, grudgingly*, where the absence vs. presence of a comma may be taken as signalling graphically the use of one vs. two intonation units in speech, were ignored and both types were analysed as instantiations of the same VVingly construction.

It is also worth pointing out that the string VVingly does not necessarily only include intransitive examples. Verbs of saying (or construable as such like *laugh*) are often found after a direct object as in (7), where the direct object is the string between inverted commas. This means that VVing may also include transitive examples.

(7) «*You want 'em both to go*», *Henrietta said accusingly*.

3. We instructed the corpus-query system to return a limit of 1,000 hits or types from the fiction subsection of COHA, using the search string `_vvd *ingly`, i.e. any lexical verb in the past simple followed by an element ending in *-ingly*. A screenshot of the first 24 types retur-

ned is shown in Figure 2. It is immediately apparent that some of the types returned by the query are not relevant. For example, the most frequent type (*became increasingly*), as well as the fourth, twelfth and nineteenth types (see also below for one more case), do not instantiate the VVingly construction⁵. A type was deemed relevant if a verbal paraphrase along the lines of (2) was feasible. Thus, an example such as *she said soothingly*, which instantiates the most frequent VVing type in the corpus (see no. 2 in Figure 2, with 216 tokens), is relevant because it is amenable to the paraphrase ‘she seemed to be soothing (someone) as she said (something)’. Whether a type is relevant or not, however, may not be straightforward. For example, are the root verbs *know* and *charm* in types such as *smiled knowingly* (see no. 16 in Figure 2) and *laughed charmingly* salient enough (cf. ‘(she) seemed to know (something) as (she) laughed’, ‘(she) seemed to charm (someone) as (she) laughed’)? The decision may be not agreed upon by all analysts and/or may be anachronistic, as we are dealing with a temporal span of two centuries. In what follows, we will therefore provide statistics both including and excluding such questionable cases. Manual inspection of the 1,000 types (corresponding to 6,323 tokens) resulted in 726 relevant types (for a total of 4,787 tokens), excluding questionable cases, or 799 cases (for a total of 5,226), including questionable cases⁶. Table 6 lists all the relevant Vingly adverbs. Those marked as ‘y’ are in our opinion more or less amenable to a verbal paraphrase along the lines of (2), while those marked as ‘y?’ are less so, at least in the contexts in which they are used. Obviously, this dichotomous distinction is a convenient fiction, useful for analytical purposes, and reality may be much more a matter of degree. Each Ving adverb in Table 6 is followed by the number of its occurrences and whether it is used subjectively (‘s’) or objectively (‘o’).

⁵ Verb forms are sometimes mistagged. For example, *raised* in the following example,

(i) *The animate, living Shape of metal on which we stood, with its forest of hammer-handed arms raised menacingly along its mile of spindled length.*

is tagged as a past tense rather than a past participle.

⁶ Occasionally, COHA reported the same token twice; consequently, these had to be removed manually.

	CONTEXT	ALL	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
1	BECAME INCREASINGLY	369				1	3	1		1	6	3	6	16	22	23	41	32	48	63	64	39
2	SAID SOOTHINGLY	216			3	1	3	1	6	6	2	20	10	18	10	21	23	20	20	29	7	16
3	LOOKED INQUIRINGLY	202		2	10	4	17	15	19	24	20	13	18	6	11	11	11	5	5	8		3
4	GREW INCREASINGLY	116								1	2	1	2	8	10	8	5	5	16	19	18	21
5	NODDED APPROVINGLY	111				1	1	5	1	4	5	11	8	7	8	7	8	10	9	9	7	10
6	LOOKED SEARCHINGLY	76					3	9	4	5	5	8	5	11	6	2	9	3	2	1	2	1
7	LOOKED LONGINGLY	73			1		1	1	1	9	2	9	3	5	6	2	7	5	4	6	5	6
8	LOOKED QUESTIONINGLY	71							1	2	3	5	10	6	9	4	9	5	7	3	5	2
9	LOOKED WONDERINGLY	70				2	6	10	9	10	9	4	9		6		1	1	2	1		
10	SAID ADMIRINGLY	70								1	1	1	1	6	6	6	7	12	5	13	8	3
11	SAID ACCUSINGLY	66										1	2	1	3	7	8	19	10	10	4	1
12	BECAME EXCEEDINGLY	63		6	4	6	6	5	3	5	5		5	4	5		2	1	3		1	2
13	SAID APPROVINGLY	63				1	2		2	1	3	2	4	1	5	1	10	8	5	6	5	7
14	SAID LAUGHINGLY	62				1	1	2		8	10	7	7	2	5	4	7	3	4	1		
15	NODDED UNDERSTANDINGLY	60							1		2	5	12	11	3	5	6	2	5	3	2	3
16	SMILED KNOWINGLY	59				2	1	2	2	1	3	1	9	4	4	2	2	3	5	3	8	7
17	SAID HESITATINGLY	58			1		1	3	3	9	6	8	4	11	4	2	5				1	
18	SAID MUSINGLY	55				1	1	1	3	3	1	7	6	1	2	6	6	12	2	3		
19	VOTED OVERWHELMINGLY	55													6	6	9	6	16	3	5	4
20	SAID MOCKINGLY	53							1		2	1	7	2	2	5	8	6	9	2	3	5
21	SAID ENCOURAGINGLY	52					1	1		5	6	2	5	3	2	1	10	4	2	1	3	4
22	SAID WONDERINGLY	52								1	1	4	3	5	3	7	10	8	1	3	5	1
23	SMILED REASSURINGLY	52							1	2		5	7	3	4	9	5	1	5	8	2	
24	SAID REASSURINGLY	50									2	4	4	5	1	4	9	2	1	9	5	4

Figure 2.

V

accusingly (114, s), admiringly (226, s), adoringly (8, s), appealingly (81, s), appraisingly (21, s), approvingly (246, s), assentingly (7, s), assuringly (2, s), banteringly (5, s), beamingly (2, o), beggingly (1, s), begrudgingly (1, s), beguilingly (2, s), belittlingly (1, s), beseechingly (23, s), bewitchingly (4, s), bitingly (8, s), blindingly (6, o), blushingly (2, o), boastingly (1, s), bracingly (2, s), braggingly (1, s), broodingly (3, s), bullyingly (1, s), cajolingly (7, s), caressingly (32, s), challengingly (7, s), cheeringly (6, s), chidingly (6, s), chillingly (3, s/o), chokingly (21, s), coaxingly (23, s), comfortingly (28, s), commandingly (12, s), commiseratingly (1, s), complainingly (7, s), comprehendingly (10, s), concedingly (1, s), conciliatingly (4, s), condoningly (1, s), confidingly (17, s), consideringly (2, s), consolingly (29, s), cooingly (1, s), creakingly (2, o), croakingly (1, o), crushingly (6, s), dazzlingly (10, o), deafeningly (4, o), deprecatingly (63, s), depreciatingly (2, s), despairingly (99, s), despondingly (5, s), disapprovingly (25, s), disarmingly (20, s), disbelievingly (5, s), discouragingly (2, s), disparagingly (6, s), distractingly (1, s), doubtingly (14, s), droopingly (3, o), enchantingly (5, s), encouragingly (139, s), engagingly (16, s), enquiringly (7, s), entertainingly (3, s), enticingly (3, s), entreatingly (8, s), estimatingly (2, s), exultingly (21, s), falteringly (26, o), flashingly (2, o), flatteringly (2, s), forbearingly (2, s), forbiddingly (5, s), forgivingly (7, s), frowningly (11, s/o), fumblingly (6, o), gaspingly (8, o), glancingly (2, o), glowingly (5, s), gratingly (2, s), gropingly (6, o), growlingly (3, o), grumblingly (1, s), half-admiringly (1, s), half-doubtingly (1, s), half-jestingly (1, s), half-jokingly (1, s), half-laughingly (1, o), half-menacingly (1, s), half-teasingly (1, s), haltingly (73, o), hesitatingly (167, s), hurtingly (1, s), imploringly (61, s), infuriatingly (2, s), ingratiatingly (20, s), inquiringly (343, s), insinuatingly (12, s), insultingly (7, s), invitingly (38, s), jeeringly (9, s), jestingly (8, s), jokingly (25, s), kiddingly (1, s), laughingly (108, o), lingeringly (11, o), lispingly (1, o), longingly (124, s), long-sufferingly (1, s), meltingly (1, s), mincingly (1, s), moaningly (2, o), mockingly (137, s), movingly (2, s), murmuringly (2, o), musingly (116, s), nudgingly (1, s), obligingly (6, s), pacifyingly (1, s), palpitatingly (2, o), pantingly (6, o), patronizingly (21, s), perseveringly (4, s), pityingly (52, s), placatingly (16, s), pleadingly (82, s), ponderingly (2, s), propitiatingly (1, s), protestingly (3, s), provokingly (7, s), quaveringly (1, o), questioningly (107, s), raspingly (1, o), reaffirmingly (1, s), reassuringly (154, s), rebukingly (1, s), refreshingly (9, s), relentingly (1, s), remindingly (1, s), remonstratingly (1, s), reprimandingly (1, s), reprovably (50, s), resoundingly (3, o), ringingly (4, s), rumblingly (2, o), scathingly (13, s), scoldingly (1, s),

scowlingly (4, s), scrutinizingly (4, s), searchingly (108, s), self-deprecatingly (1, s), self-mockingly (1, s), shiveringly (1, o), shudderingly (5, s), sickeningly (7, s), slantingly (7, o), slightly (10, s), smilingly (153, o), sneeringly (o), sobbingly (2, o), soothingly (300, s), stammeringly (1, o), startlingly (10, o), stumblingly (5, o), suffocatingly (5, s), tauntingly (18, s), teasingly (47, s), temptingly (4, s), threateningly (56, s), thunderingly (2, o), tremblingly (41, o), trippingly (3, o), trustingly (4, s), unbelievably (17, s), unblinkingly (7, o), unceasingly (19, o), uncomprehendingly (19, s), uncompromisingly (2, s), unconvincingly (6, s), understandingly (88, s), unfeelingly (2, s), unflinchingly (12, o), unhesitatingly (20, s), unrecognizingly (2, s), unremittingly (2, o), unseeingly (25, s), unsmilingly (7, o), unswervingly (3, s), unthinkingly (4, s), untiringly (4, o), unwaveringly (3, o), unwinkingly (7, o), warningly (62, s), witheringly (13, s), wonderingly (236, s), yearningly (12, s)

y?

achingly (3, s), alarmingly (6, s), charmingly (42, s), condescendingly (29, s), convincingly (2, s), cuttingly (4, s), daringly (4, s), feelingly (9, s), glaringly (1, o), grudgingly (91, s), knowingly (161, s), maddeningly (3, s), menacingly (40, s), piercingly (15, s), pleasingly (2, s), satisfyingly (2, s), winningly (25, s)

Table 6. The Vingly adverbs obtained from COCA.

4. Because of the high number of tokens, we were not able to check the data for clustering effects (i.e. the occurrence of most examples in few texts, see e.g. Evert 2006), but the use of macro semantic categories or macrotypes (see the next point) should hopefully go some way towards compensating for this.
5. We grouped the types into semantic macrotypes in two stages. First, we grouped all those types that shared the same main verb, e.g. *said* defines a macrotype that includes Vingly adverbs such as *soothingly*, *admiringly*, *accusingly*, etc. Next, we grouped such macrotypes into higher level macrotypes on the basis of ad hoc semantic categories for the main verbs. For example, *chattered Vingly*, *pleaded Vingly*, *said Vingly* are all analysed as instantiations of the SAY Vingly macrotype. More details about the semantic classification will be provided below. The main verb types and the main verbs instantiating them are given in Table 7. This table gives two figures for each type and each verb. The figure to the left of the tilde only refers to the ‘y’ cases mentioned in connection with Table 6 above, while the figure to the right of the tilde also includes the tokens marked as ‘y?’ in Table 6. With the exception of the EMISSION and OTHER macrotypes, the verbs occurring either more than 100 times or the most frequent verb per main verb type have been highlighted in bold.

Obviously, other classifications are possible and we also must point out that predicates are sometimes used metaphorically/metonymically and, hence, verbs may be amenable to two different classifications, in terms of either the metaphoric/metonymic source or the target metaphoric/metonymic domain. Consider (8) below:

(8) *And the words came falteringly.*

Here, words are conceptualised (metaphorically) as objects moving out of one's mouth. The question is whether this example should be classified under MOTION, EMISSION or SAY. Similarly, *laughed* in (9) is used metonymically to describe an event of saying accompanied by laughter, so it must be decided whether *laughed* should be categorised as SAY or HEAD.

(9) *She laughed mockingly.*

As a general principle, we opted for the most 'literal' reading of the verb, which means that (8) was classified under MOTION (note that the verb *come* only appears in the MOTION row in Table 7) and (9) was classified under HEAD rather than SAY.

Main verb type	Main verb
SAY [2164 ~ 2327]	added [112 ~ 123], admitted [0 ~ 17], agreed [3 ~ 5], announced [3 ~ 3], answered [68 ~ 68], asked [151 ~ 154], called [3 ~ 3], chattered [2 ~ 2], commented [2 ~ 2], conceded [0 ~ 6], confessed [0 ~ 2], consenedt [0 ~ 2], continued [18 ~ 18], drawled [4 ~ 4], exclaimed [18 ~ 18], explained [9 ~ 9], inquired [8 ~ 8], pleaded [2 ~ 2], remarked [11 ~ 13], repeated [16 ~ 16], replied [43 ~ 45], responded [3 ~ 3], returned [9 ~ 9], said [1482 ~ 1585], spoke [130 ~ 141], suggested [2 ~ 2], talked [16 ~ 18], urged [8 ~ 8]; (<i>inceptive</i>) began [41 ~ 41]

HEAD, including 'emission' verbs, except SAY [2081 ~ 2326]	(<i>emission of substance from mouth</i>) spit [3 ~ 3]; (<i>emission of liquid from eyes</i>) wept [2 ~ 2]; (<i>emission of sound from mouth</i>) chuckled [2 ~ 6], clucked [2 ~ 2], coughed [4 ~ 4], cried [55 ~ 55], gasped [5 ~ 5], growled [3 ~ 7], grunted [4 ~ 4], humed [1 ~ 1], laughed [104 ~ 114], murmured [14 ~ 14], muttered [4 ~ 4], sang [2 ~ 2], screamed [0 ~ 3], shouted [14 ~ 14], shrieked [2 ~ 2], sighed [5 ~ 5], sneezed [2 ~ 2], wailed [2 ~ 2], whispered [24 ~ 27]; (<i>emission of light from eyes</i>) twinkled [0 ~ 2]; (<i>facial expression</i>) frowned [9 ~ 9]; (<i>colour</i>) blushed [0 ~ 2]; (<i>eye movement</i>) blinked [4 ~ 6], winked [0 ~ 19]; (<i>buccal expression</i>) bared [0 ~ 2] beamed [4 ~ 4], grinned [26 ~ 36], smiled [294 ~ 393]; (<i>head movement</i>) nodded [209 ~ 257]; (<i>aural perception</i>) listened [16 ~ 16]; (<i>visual perception</i>) gazed [115 ~ 117], glanced [100 ~ 100], glared [7 ~ 9], glowered [2 ~ 2], leered [0 ~ 3], looked [817 ~ 844], observed [3 ~ 3], peered [10 ~ 10], stared [116 ~ 119], watched [21 ~ 21]; (<i>cognitive perception</i>) noted [9 ~ 9], noticed [2 ~ 2]; (<i>smell</i>) sniffed [3 ~ 3]; (<i>thinking</i>) reflected [3 ~ 3], thought [57 ~ 57].
MOTION [226 ~ 250]	advanced [6 ~ 9], approached [2 ~ 2], broke [4 ~ 4], came [56 ~ 56], danced [0 ~ 2], entered [3 ~ 3], fell [19 ~ 20], floated [2 ~ 2], flowed [2 ~ 2], gathered [2 ~ 2], went [11 ~ 13], lifted [6 ~ 6], moved [25 ~ 32], narrowed [0 ~ 2], nestled [3 ~ 3], opened [5 ~ 5], passed [6 ~ 6], plunged [2 ~ 2], pressed [2 ~ 2], proceeded [2 ~ 2], ran [7 ~ 7], roamed [1 ~ 1], rocked [0 ~ 2], rolled [4 ~ 4], rose [13 ~ 13], shrank [2 ~ 2], stole [2 ~ 2], struck [4 ~ 4], swayed [3 ~ 3], swept [2 ~ 2], throbbed [2 ~ 2], walked [11 ~ 11], wandered [10 ~ 10], yielded [0 ~ 2]; blew [2 ~ 2], fumbled [2 ~ 2].

CHANGE (involving body position, except for HEAD) [126 ~ 128]	bent [6 ~ 6], bowed [15 ~ 15], pointed [7 ~ 7], shrugged [6 ~ 6], straightened [0 ~ 2], stretched [2 ~ 2], turned [90 ~ 90].
STATE [107 ~ 109]	(<i>holding</i>) clang [2 ~ 2], held [3 ~ 3], hung [9 ~ 9]; (<i>vertical</i>) stood [52 ~ 54]; (<i>horizontal</i>) lay [7 ~ 7], sat [2 ~ 2]; (<i>other</i>) kept [2 ~ 2], leant [6 ~ 6], lingered [5 ~ 5], rested [17 ~ 17], towered [2 ~ 2], waited [6 ~ 6].
EMISSION (not involving HEAD) [30 ~ 41]	(<i>light</i>) blazed [6 ~ 6], flashed [2 ~ 2], glittered [2 ~ 4], shined [6 ~ 6]; (<i>smell</i>) smelled [2 ~ 2]; (<i>sound</i>) creaked [2 ~ 4], crunched [2 ~ 4], echoed [2 ~ 2], hissed [0 ~ 2], rang [4 ~ 7], rapped [2 ~ 2].
OTHER [31 ~ 39]	(<i>heart</i>) beat [5 ~ 5]; died [2 ~ 2]; counted [0 ~ 2], met [2 ~ 2], mingled [0 ~ 2], played [0 ~ 2], read [0 ~ 2], toiled [2 ~ 2], worked [8 ~ 8]; suffered [2 ~ 2]; paused [6 ~ 6], stopped [2 ~ 2]; tried [2 ~ 2].

Table 7. Main verb types in the VVingly construction.

Table 7 shows a prominence of verbs describing actions performed with one's head (including one's mouth). In particular, verbs that stand out include buccal verbs of sound emission, such as *say* and *laugh*, and of motion, such as *smile*; verbs involving head motion such as *nod*; and visual verbs such as *look*.

3.2. The VVing construction

The extraction of VVing tokens was carried out in similar fashion to that of VVingly ones. The search string used was *vvd *ing*, which means that only cases where the main verb occurs in the past simple and Ving is adjacent to V were searched for. Thus, transitive examples such as *we carried them clinking down to his ship* (Madeleine Miller) were excluded. Still, as with the VVingly pattern, not all transitive examples were ignored because verbs of saying (or construable as such) are usually found after a direct object such as 'No' in (10):

(10) «No», Winnie said laughing; and they parted.

The search for 1,000 hits or types returned 38,168 tokens. Of the 1,000 types returned, only 348 were relevant, for a total of 18,231 tokens, see Figure 3 for a list of the first 24 types obtained. In the case of the VVing pattern, relevance means that Ving specifies the manner in which V takes place or describes a simultaneous event, as in *came running* and *stood looking*, respectively. By contrast, phase verbs such as inceptive *began* (as in *began talking*), continuative *kept* (as in *kept saying*), telic *stopped* (as in *stopped talking*) as well as ‘recreational’ uses (see e.g. Salkie 2010) such as *went fishing* are clearly not relevant.

A complete list of the Ving’s obtained through our search is offered in Table 8, which includes in parentheses the number of tokens for each Ving. With the possible exceptions of *admiring* and *contemplating*, all uses have been classified as objective and thus objective vs. subjective uses are not marked in Table 8. Nevertheless, as was the case with the VVingly construction, the classification of a certain Ving as subjective vs. objective may not be straightforward⁷.

	CONTEXT	ALL	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
1	STOOD LOOKING	2021		10	23	32	81	75	109	121	155	180	180	188	220	205	136	84	73	56	56	37
2	CAME RUNNING	1396		3	16	30	39	31	58	77	78	127	110	133	130	117	110	81	66	59	66	65
3	KEPT SAYING	841					3	6	5	15	22	28	32	35	80	98	83	83	81	79	82	109
4	STOOD WATCHING	731		3	12	16	20	25	36	52	41	49	55	50	77	59	55	41	35	42	35	28
5	STOOD WAITING	618		4	5	8	25	26	29	37	35	53	52	35	57	60	40	41	24	24	34	29
6	SAT LOOKING	574		3	7	12	34	25	59	51	39	33	51	38	62	50	30	23	15	21	12	9
7	KEPT LOOKING	568				5		3	8	7	13	13	22	22	60	77	67	46	53	46	69	57
8	STOOD STARING	531		2	5	10	5	9	21	24	19	68	58	42	58	44	25	23	28	33	29	28
9	KEPT COMING	451			4	1		4	9	3	2	8	18	14	33	51	37	40	50	54	57	66
10	CAME RUSHING	447		2	12	29	20	27	40	37	34	29	25	37	25	24	16	15	18	14	15	28
11	STOOD GAZING	425		8	27	64	40	19	44	27	35	36	25	31	20	13	9	8	2	9	4	4
12	BEGAN TALKING	412			5	4	11	6	8	8	24	13	28	19	41	53	26	49	20	34	32	31
13	SAT STARING	406				2	4	5	15	10	15	35	47	43	29	50	25	29	22	35	24	16
14	KEPT GOING	404			2				3	6	2	5	10	17	18	41	40	42	43	42	61	72
15	KEPT THINKING	360					1	2		5	7	6	12	7	43	51	32	34	37	31	48	44
16	STARTED TALKING	349												6	13	36	28	31	37	58	64	76
17	SAT WATCHING	330		2	8	3	22	28	27	18	14	14	19	28	29	23	23	12	16	15	15	14
18	KEPT TELLING	321		1	4					3	3	5	9	8	25	35	29	37	23	26	48	55
19	STOOD LEANING	317		11	20	18	14	22	38	24	20	24	22	16	24	10	9	6	15	11	11	2
20	STARTED WALKING	309												2	24	26	33	26	34	54	64	46
21	STOPPED TALKING	301						1	2	5	3	7	3	5	16	36	37	29	38	28	30	61
22	CAME HURRYING	290		1	2	16	6	13	8	25	30	28	36	37	20	19	18	6	9	8	6	2
23	BEGAN MAKING	284				3	4		4	14	7	6	15	27	26	26	15	27	23	28	26	33
24	BEGAN WORKING	271						2				6	12	7	14	15	17	23	34	38	57	46

Figure 3.

⁷ One complication has to do with whether the narrator’s perspective is external or internal with respect to the character being portrayed. For example, *lay thinking* is best interpreted as involving an internal perspective on the author’s part, that is, the author describes the character as being engaged in the process of thinking because the author has access to the character’s internal world. In this sense, Ving describes the process of *thinking* objectively because the author does not deduce the nature of the Ving process using some external input but has direct access to it.

admiring (16), ambling (10), asking (11), awaiting (57), banging (12), barreling (13), basking (7),
 bearing (19), bending (30), biting (7), blinking (41), blundering (7), booming (21), bouncing
 (12), bounding (191), bowing (13), breathing (8), bringing (21), bubbling (8), bursting (42),
 busting (8), bustling (18), calling (19), cantering (13), carrying (33), charging (52), chatting
 (30), circling (10), clattering (67), climbing (8), clinging (7), clutching (16), coming (7), con-
 fronting (29), contemplating (24), conversing (25), cowering (7), crashing (140), crawling (29),
 creeping (69), crouching (7), crowding (87), crying (8), dancing (60), dangling (23), darting (8),
 dashing (83), dreaming (10), drifting (54), drinking (56), driving (44), dying (69), eating (29),
 echoing (12), eyeing (20), facing (378), fainting (60), fanning (7), fingering (7), flashing (23),
 floating (149), flocking (29), flooding (21), flowing (7), fluttering (31), flying (217), fronting (7),
 frowning (36), galloping (120), gasping (19), gazing (593), getting (9), gissing (8), giving (17),
 glaring (59), gliding (34), glowering (10), grinning (19), groaning (16), gushing (11), hastening
 (14), hesitating (47), hissing (11), hobbling (22), holding (281), hurrying (285), hurtling (35),
 knitting (24), knocking (17), laughing (145), leaning (401), leaping (58), leaving (10), limping
 (43), listening (271), looking (2832), loping (23), lurching (13), marching (59), meditating (7),
 moaning (16), murmuring (7), musing (74), nodding (7), observing (7), panting (141), pattering
 (16), pealing (12), peeping (7), peering (33), picking (7), playing (21), plodding (8), plunging
 (38), pointing (20), pondering (33), pounding (11), pouring (112), prancing (13), prospecting
 (7), pulling (7), pushing (17), putting (8), racing (88), rattling (44), reading (88), reeling (23),
 resting (21), riding (199), ringing (18), rising (11), roaring (88), rocking (37), rolling (130), rub-
 bing (31), rumbling (8), running (1298), rushing (389), sailing (36), sauntering (24), saying (9),
 scampering (20), scowling (19), scrambling (18), screaming (66), scurrying (21), scuttling (7),
 seeking (9), sewing (51), shaking (23), shambling (13), shivering (75), shooting (10), shouting
 (21), shrieking (9), singing (59), sipping (50), sitting (11), skimming (7), skipping (36), skittering
 (10), sleeping (48), sliding (51), slipping (7), slouching (9), smiling (227), smoking (56), sneaking
 (13), sniffing (7), snoring (10), sobbing (14), speeding (16), spinning (36), splashing (12), spur-
 ring (14), staggering (55), stalking (14), stamping (11), staring (994), stealing (54), stepping (8),
 stomping (8), storming (13), straggling (14), streaming (27), striding (98), stroking (9), strolling
 (37), studying (39), stumbling (71), surging (25), surveying (29), swarming (13), swaying (47),
 sweeping (22), swelling (13), swimming (7), swinging (18), swooping (13), taking (14), talking
 (239), tapping (8), tearing (92), thinking (134), thronging (28), thundering (91), tiptoeing (7),
 tossing (20), tottering (7), trailing (11), tramping (33), trembling (162), trickling (8), tripping
 (46), trooping (46), trotting (82), trudging (10), trying (32), tumbling (139), turning (51), twist-
 ing (7), waddling (18), waiting (869), walking (94), wandering (20), watching (1040), waving
 (23), weeping (16), whirling (57), whistling (40), whizzing (11), winding (12), wiping (8), won-
 dering (47), working (9), writhing (10), writing (24)

Table 8. The Ving's obtained from COCA.

Once more, we focused on the main tensed verbs in semantic terms and clustering was not checked. The main verb types and the relative tokens are much more restricted in terms of their range compared to the VVingly construction, as can be seen from Table 9.

Main verb type	Main verb
STATE [9978]	hung [33], lay [578], sat [3131], stood [6236]
MOTION [7816]	came [5910], entered [9], fell [55], flied [7], returned [24], sank [19], ran [662], went [1130]
SAY	added [9], said [389]
CHANGE [39]	died [39].

Table 9. Main verb types in the VVing construction.

Unlike with the VVingly construction, which seems to prefer HEAD verbs broadly construed (i.e. also including SAY verbs), the VVing construction shows a prominence of verbs of translational motion, in particular *come* but also *go*, and postural stasis, in particular *stand* but also *sit* and *lie*. Still, SAY verbs, in particular *said*, are not uncommon. In more detail, there is some degree of overlap or attraction when VVingly and VVing are used objectively. The overlap is illustrated in Figure 4 below. In particular, the following ‘minimal pairs’ were found in the data: *added laughing(ly)*, *said laughing(ly)*, *said smiling(ly)*, *came smiling(ly)*, *came thundering(ly)*, *hung trembling(ly)*, *stood smiling(ly)*, *stood trembling(ly)*. We will return to these in the following subsection.

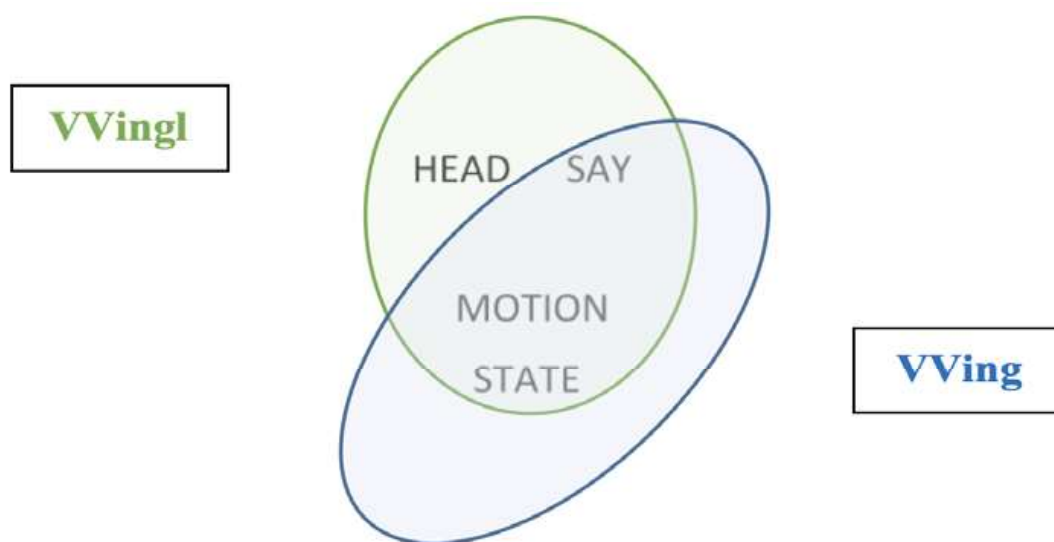


Figure 4. Verb types displaying attraction.

3.3. The two constructions diachronically

An important dimension of variation in the VVingly construction concerns the subjective vs. objective use of the Vingly adverb (e.g., *said boastingly* vs. *said smilingly*, respectively). The subjective use is on average 5.5 times more common than the objective use over the time scale considered here. Plotting this ratio by decade, as in Figure 5, shows that subjective Vingly adverbs appear to have increased over time. This point will be picked up again later.

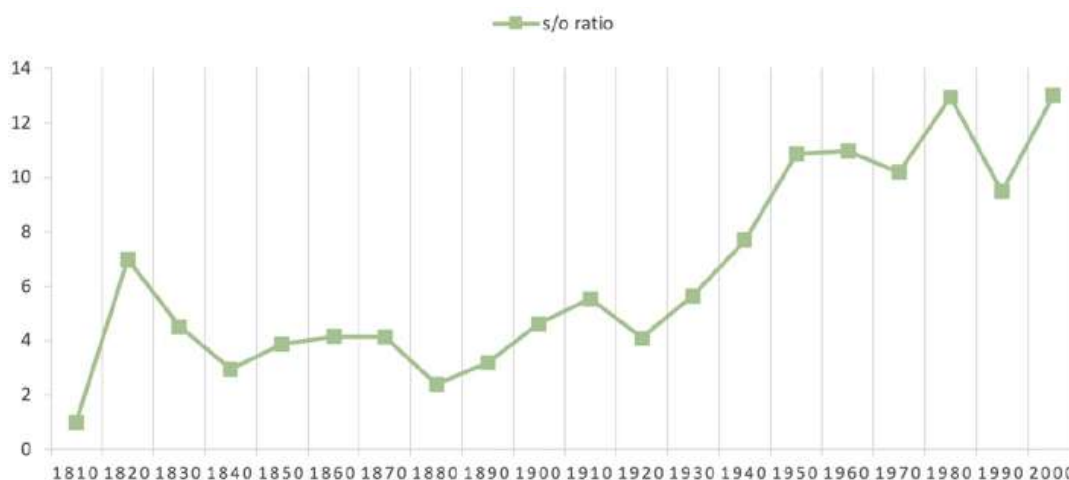


Figure 5. Subjective and objective VVingly's.

In terms of specific macrotypes of the VVingly construction, it is worth considering the HEAD and SAY types over time, as they are the two most frequent types. (The data points per decade for the other subtypes are not very numerous and so we decided to ignore them diachronically.) We considered two measures, namely (a) the ratio of VVingly to V, i.e. the ratio of all instances of the VVingly constructions where V is a past tense form of a HEAD or a SAY verb against, respectively, all past tense occurrences of the same HEAD and SAY verbs found in fictional texts; (b) the per-million-word (pmw) frequencies of each macrotype in fictional texts. Now, as was already remarked, there exist a lot of hapax legomena for the VVingly construction which were filtered out by the 1,000-hits restriction. This means that when looking at the ratio between the macrotypes and main verbs as well as the pmw frequencies of each macrotype, the figures obtained are underestimates. The results are shown in Figures 6 and 7, which include both 'y' and 'y?' cases. We refrain from including a plot for 'y' cases only, because the picture is little affected by the 'y?' cases, which are relatively few in number.

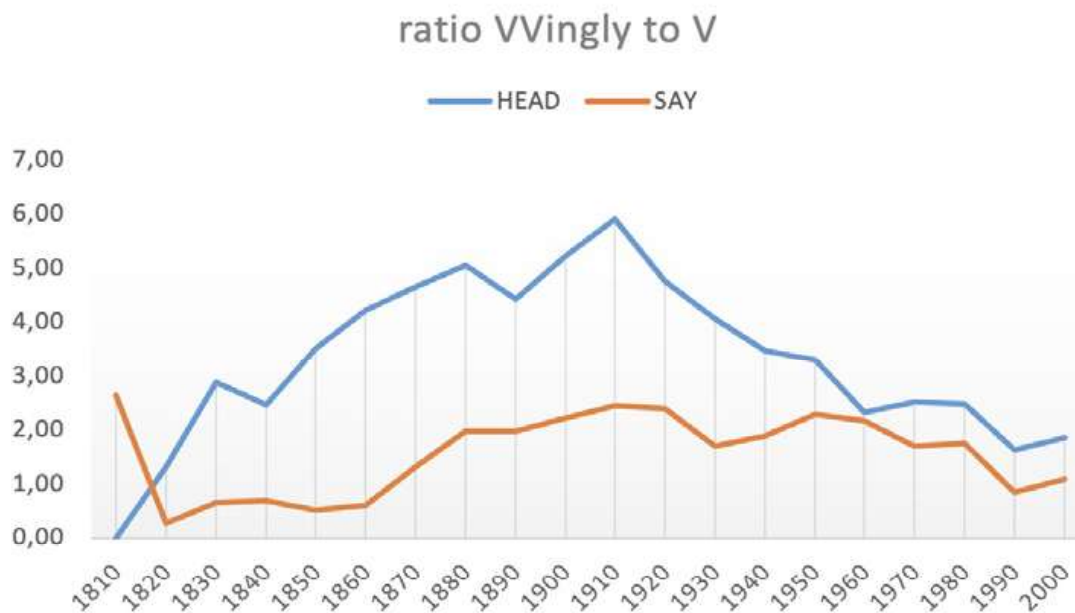


Figure 6. VVingly to V ratios over time.

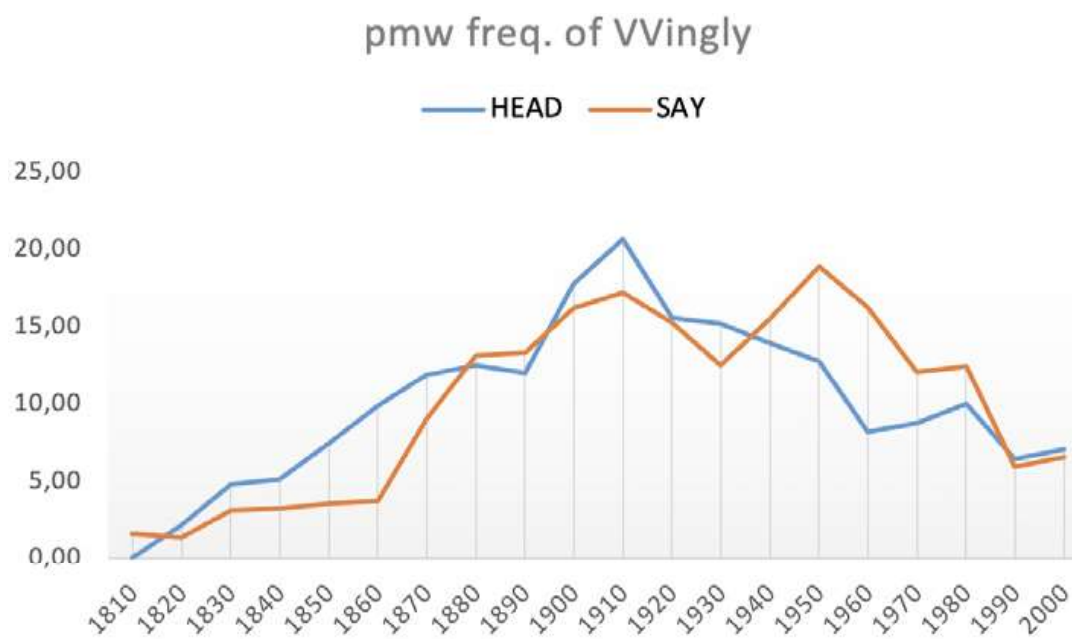


Figure 7. Pmw frequencies of VVingly.

Both measures show an increase in the use of the HEAD and SAY VVingly macrotypes in the 19th century, which peak at about the turn of the 20th century. In the case of the HEAD macrotype, this peak is followed by a more or less steady decline throughout the 20th century, while the SAY macrotype seems to start declining from after the 1950s.

If we now analyse the two major macrotypes for VVing, namely STATE and MOTION, we obtain the plots shown in Figures 8 and 9. If we consider the ratio

measure, STATE VVing shows a behaviour similar to that of HEAD VVingly: there is a peak at about the turn of the 20th century, followed by a steady decline. By contrast, if we consider pmw frequencies, STATE VVing also increases over the 19th century but starts declining after the 1940s. As for MOTION VVing, this construction seems to be relatively stable over time when considering the ratio measure but, like STATE VVing, declines in the second half of the 20th century when pmw frequencies are considered.

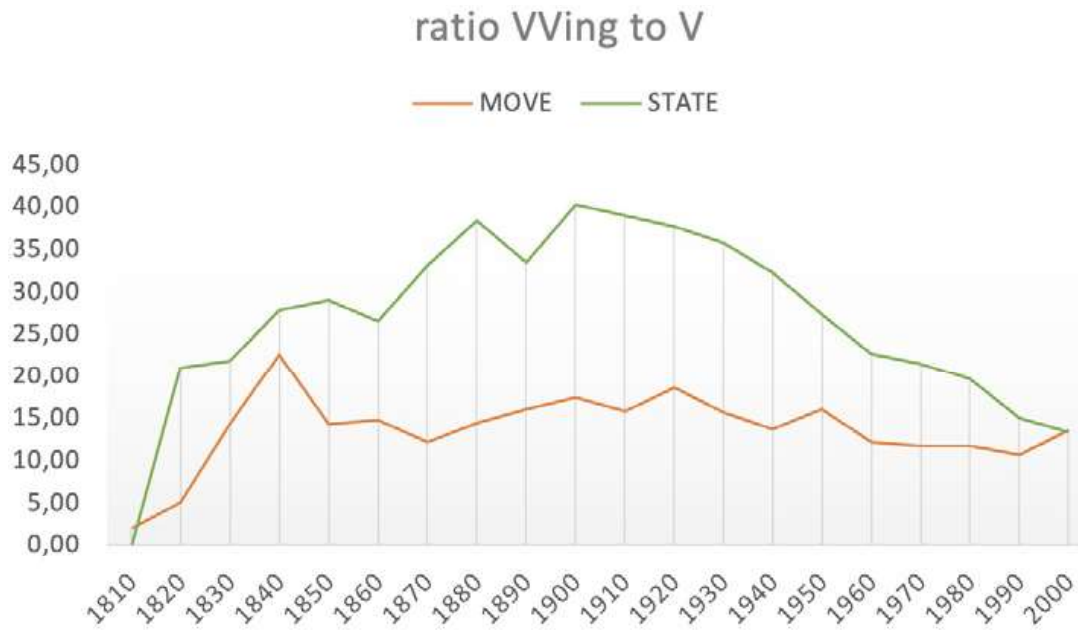


Figure 8. VVing to V ratios over time.

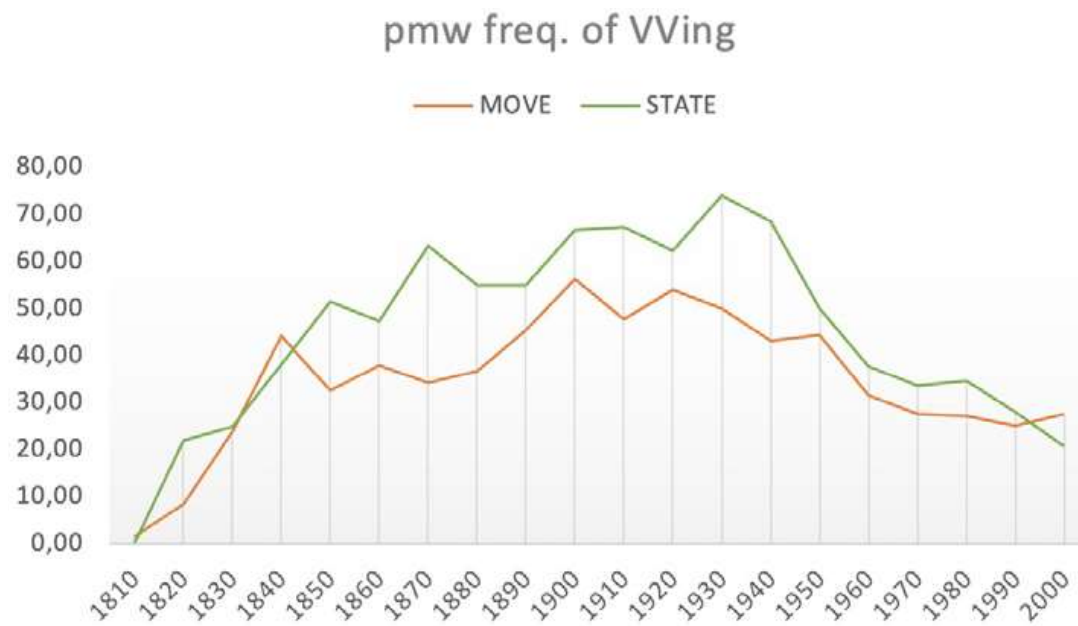


Figure 9. Pmw frequencies of VVing.

Overall, with the partial exception of the MOTION VVing macrotype (i.e. when the ratio measure is applied to MOTION VVing), both constructions seem to have been on the decline in the 20th century, in particular in the second half of the century.

Finally, we considered the eight minimal pairs mentioned at the close of the previous subsection, namely *added laughing(ly)*, *said laughing(ly)*, *said smiling(ly)*, *came smiling(ly)*, *came thundering(ly)*, *hung trembling(ly)*, *stood smiling(ly)*, *stood trembling(ly)*. A summary of the analysis is offered in Table 10. With the only exception of *added laughingly*, the VVing option appears to be more common than the VVingly alternative in COHA. We also checked the distribution of these pairs in COCA but it was not always possible to find examples for each pair (hence, the label ‘nil’ in Table 10). Still, the data (or lack thereof) from COCA support the distributional facts in COHA. As a further check, we also searched for each of these pairs in Google’s American English corpus with Google Ngram and the same tendencies (in terms of the prevalence of the VVing option with the exception of *added laughingly*) were observed. Figures 10 to 12 show the diachronic development of the three more common pairs, *said laughing(ly)*, *said smiling(ly)*, *stood smiling(ly)*⁸. Although it is not possible to only select fictional texts when carrying out searches with Google Ngram, the fact that the construction being investigated is typical of fictional writing should not greatly affect the results. Indeed, we observe for both VVingly and VVing the decline in the 20th century (especially in the second half) which was found in COHA, although there is very little data for the option *stood smilingly*. What is remarkable are, however, the rises observable at the beginning of the 21st century in Figures 10 to 12, which we have not been able to find a reason for and may be due to issues with corpus design.

⁸ By «more common», we mean that the sum of the two options is very close to or over at least 100 tokens overall in COHA and that each variant has more than 5 tokens over the period considered.

			COHA (fiction)	COA (fiction)	Google Ngram (AmE)
ADDED LAUGHINGLY			14	nil	
ADDED LAUGHING			9	nil	
ratio Vingly/Ving			1.56		confirmed
CAME SMILINGLY			7	nil	
CAME SMILING			18	nil	
ratio Vingly/Ving			0.39		confirmed
CAME THUNDERINGLY			2	nil	
CAME THUNDERING			72	9	
ratio Vingly/Ving			0.03		confirmed
HUNG TREMBLINGLY			2	nil	
HUNG TREMBLING			10	1	
ratio Vingly/Ving			0.2		confirmed
SAID LAUGHINGLY			49	3	
SAID LAUGHING			93	22	
ratio Vingly/Ving			0.53	0.1	confirmed
SAID SMILINGLY			41	nil	
SAID SMILING			86	33	
ratio Vingly/Ving			0.48		confirmed
STOOD SMILINGLY			7	nil	
STOOD SMILING			92	21	
ratio Vingly/Ving			0.08		confirmed
STOOD TREMBLINGLY			4	nil	
STOOD TREMBLING			126	20	
ratio Vingly/Ving			0.03		confirmed

Figure 8. VVing to V ratios over time.

Comparing the VVingly and VVing constructions in two centuries of American fiction (1810-2000)



Figure 9.

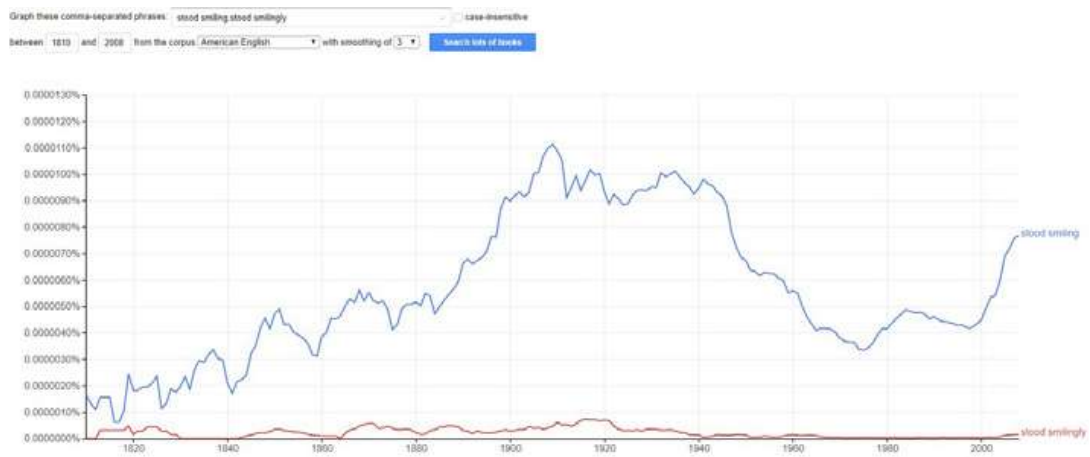


Figure 10.

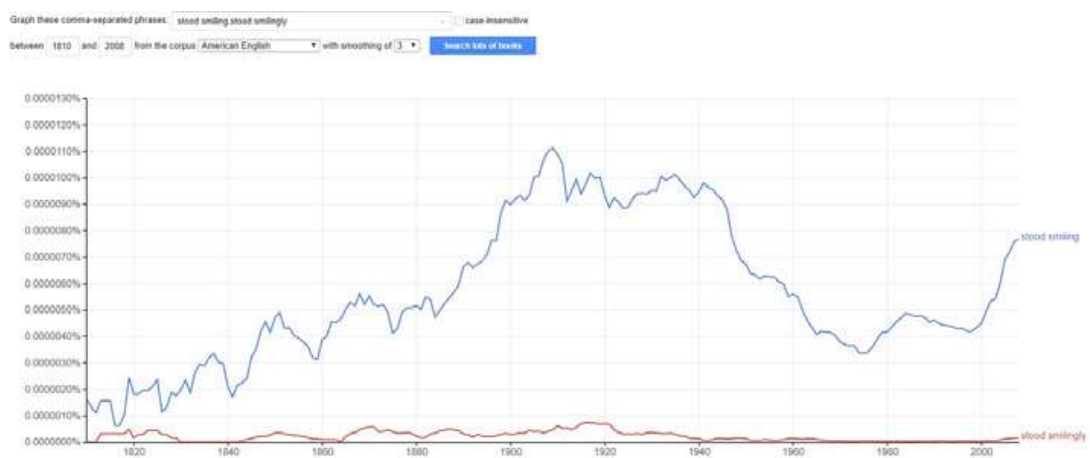


Figure 11.

4. Conclusion

The analysis of the VVingly and VVing constructions poses interesting questions such as whether the subjective VVinly construction is more common than the subjective VVing construction and whether the opposite holds true for the objective types; whether the subjective VVing and objective VVingly constructions are more recent than the objective VVing and subjective VVingly types and whether there have been any changes in their relative frequencies over time; where extravagant morphology comes from in the case of the VVingly and VVing constructions.

Based on the present study, we observed that VVing is much more common than the VVingly pattern, both in general (see the numbers of tokens in Table 7 vs. Table 9) and in objective cases. In fact, while VVing is used almost exclusively objectively in our data, VVingly occurs both subjectively (the majority of cases) and objectively. Also, we noticed important differences as to the most frequent main verbs used in the two constructions. VVingly typically occurs with HEAD verbs, broadly construed (i.e. also including SAY verbs) while VVing is typically found with STATE and MOTION verbs. Nevertheless, there is some degree of overlap or attraction between the two constructions in the case of SAY, MOTION and STATE verbs. In particular, we detected eight minimal pairs in our data, of which *said laughing(ly)*, *said smiling(ly)*, *stood smiling(ly)*, are the most common. We also noticed a general decrease in the use of both VVingly and VVing (mainly with STATE verbs) in the second half of the 20th century. Further, the observed dearth of subjective VVing cases may be indicative of their later development but the scarcity of the data does not permit to draw any conclusions about their development (or lack thereof) during the last two centuries. Instead, in the case of the VVingly construction, we observed a decrease in the number of objective VVingly cases compared to subjective VVingly ones. This may indicate that the two centuries considered here are not the time span when the objective VVingly emerged, although to actually observe a decline in the use of objective Vingly adverbs seems surprising in the light of Swan's and Killie's claims regarding adverbialization, namely the expansion of the functions of *-ly* adverbs in general in the Late Modern English period. However, the observed decline in objective VVingly cases may just be a by-product of the decline of both constructions: it may well be that we cannot see as many objective VVingly cases as before simply because they are relatively rare to start with and so the reduced number of VVingly cases found in recent times 'hides' the presence of objective VVingly cases. It should also be pointed out that, although writers such as J.K. Rowling may have

a penchant for *-(ing)ly* adverbs, the decline of both constructions observed in the present study may be the result of a change in narrative style.

As for extravagant morphology, we have proposed that, in the case at hand, it stems from the overlap or attraction between VVingly and VVing, which seems to be stronger in objective cases (cf. the most common pairs found, namely *said laughing(ly)*, *said smiling(ly)*, *stood smiling(ly)*). If these data are anything to go by, they seem to suggest that it is the VVing construction that primarily attracts the VVingly construction in the sense that we are more likely to find objective VVingly cases than subjective VVing ones. Still, we do not have enough evidence in favour of this claim and these two constructions should be investigated in much more detail. Ideally, an even larger fiction corpus would be needed to do so, not limited to the last two centuries but covering (at least) the whole of the Late Modern English period.

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