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Seriously, Where Do Illocutionary Adverbs Come from? – A Corpus-Based Assessment of the Main Hypotheses*

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Abstract
This chapter reports on a corpus-based reappraisal of the two main hypotheses about the development of (content-related) illocutionary adverbs from lexically related narrow-scope readings: The reanalysis hypothesis, which relies on contexts in which the adverb is ambiguous between a narrow-scope and an illocutionary reading (bridging contexts), and the ellipsis analysis, which relies on structural reduction and the ellipsis of the verbal element *speaking* in the specific pattern [manner adverb + *speaking*]. The two hypotheses cannot be empirically corroborated as both bridging contexts and the pattern [manner adverb + *speaking*] are conspicuously absent from our data. Our empirical findings, however, are compatible with a more indirect ellipsis scenario that builds on collocationally induced semantic change: The manner adverbs *frankly*, *honestly*, and *seriously*, through frequent cooccurrence with communication verbs, absorb the illocutionary feature of the communication verb (and its external argument feature), which allows the adverbs to be merged and licensed in the CP-domain.

1   Introduction
Researchers from various theoretical backgrounds seem to agree that English speaker-oriented adverbs have developed through the processes of grammaticalization and subjectification from related narrow-scope adverbs which modify VPs, typically manner adverbs, or XPs, i.e. other types of phrases, most typically AP. However, the mechanisms behind this development remain a matter of debate, with "reanalysis" ([Swan 1988](#); [Traugott 1989](#)) and "ellipsis" ([Fischer 2007](#); [Berry 2011](#), [2018](#)) being the main contestants.

In this chapter, we discuss whether any of the two mechanisms may have been at work in the development of illocutionary adverbs in English. These are adverbs which focus on the speech act either by expressing the speaker's attitude toward the content of the utterance (1a) or by characterizing the form of the utterance (1b) (cf. [Bellert 1977](#)):[1]

(1)	a.	*Frankly*, I used you as an illustration of the evils I abominate. (GIS-OW, NCF, 1893)
	b.	*Briefly*, I have a bad tongue and a bad heart. (REA-CH, NCF, 1861)

Like other speaker-oriented adverbs, illocutionary adverbs have most probably developed from polysemous narrow-scope adverbs:

(2)	a.	I will answer you *frankly*. (RIC-SCG, ECF, 1754)
	b.	I narrated *briefly* what had occurred since I had seen her last. (DOY-SF, NCF, 1890)

The paper discusses the development of three content-related illocutionary adverbs, viz. *frankly*, *honestly*, and *seriously*. On the basis of quantitative corpus data, we argue that the development of these adverbs is more likely to be the result of ellipsis than reanalysis.

Section 2 provides background information about some distributional properties of illocutionary adverbs in general (section 2.1), about the three adverbs selected for study (section 2.2), and about previous analyses and the hypotheses to be tested (2.3). Section 3 provides information about data sources and methodology. In section 4, we present our data, while section 5 provides a discussion and some conclusions.

2 Background

2.1 Illocutionary Adverbs – Distributional Properties

Illocutionary adverbs take scope over adverbs with which they co-occur, e.g. evaluative adverbs such as *unfortunately* in (3) or aspectual adverbs such as *always* in (4). Since speaker-oriented adverbs are wide-scope adverbs, they necessarily take scope over narrow-scope adverbs, e.g. manner adverbs such as *beautifully* and *elegantly* in (5) (e.g. Cinque 1999, 2004, 2006; Ernst 2002):

(3)	a.	*Honestly* I am *unfortunately* unable to help you. (Cinque 1999, 33)
	b.	**Unfortunately* I am *honestly* unable to help you.
(4)	a.	*Honestly*, I *always* pay my taxes. (Cinque 2006, 168)
	b.	**Always*, I *honestly* pay my taxes.
(5)	a.	*Honestly*, she sang *beautifully*.
	b.	*Honestly*, everyone dressed *elegantly*.

While illocutionary adverbs are perfectly acceptable in initial position in negative clauses and interrogative clauses, they cannot be contained within these clauses, as shown in (6) and (7) (see, among others, Ernst 2002, 98–99).[2] Note that in interrogatives as in (7) the illocutionary adverb shifts orientation from the speaker to the addressee, i.e. the designated next speaker (cf. e.g. Schreiber 1972; Ernst 2002, 70–73; Woods 2014):

(6)	a.	*Honestly*, I cannot congratulate you upon it. (DOY-SF, NCF, 1890)
	b.	*I cannot *honestly* congratulate you upon it.
(7)	a.	*Honestly*, Tess, do you love any other man? (HAR-TU, NCF, 1891)
	b.	*Tess, do you *honestly* love any other man?

The canonical position of illocutionary adverbs is the sentence-initial position in matrix clauses (cf. (3)–(7)), but they can also be found in postverbal/sentence-final position (8)[3]:

(8)		Meeting her sharp glance, which was as sharp as ever when she asked me, I could not on
		that short challenge answer no, *quite frankly*. (DIC-PHDC, NCF, 1850)

In the following section, we address lexically related narrow-scope readings of *frankly*, *honestly*, and *seriously*.

2.2   *The Various Meanings of the Adverbs under Study*
As mentioned above, illocutionary adverbs have lexically related narrow-scope readings. However, the adverbs under study here also have some historical meanings which may be unknown to many

present-day speakers of English. Some of these are VP-modifying manner readings. Others are wide-scope readings, such as "subject-oriented" readings and so-called "intensifier" readings (Greenbaum 1969). As subject-oriented adverbs, they give "a judgment of the speaker about the subject referent with regard to its participation in the event denoted by the sentence" (Pittner 2004, 274).[4] The contrast with manner adverbs is brought out clearly when the event is negated, as in *She wisely did not drink all the wine*. Here *wisely* does not characterize the manner in which an activity is carried out but instead ascribes a characteristic – wisdom – to the subject based on her choice *not* to carry out an activity. Wide-scope intensifier readings, which have not been widely discussed (but see Greenbaum 1969, 85–88), have a speaker-oriented dimension in that they express the speaker's incredulous or exasperated stance toward the event. An example is *seriously* in *Did she seriously drink all the wine*? According to Greenbaum (1969, 86), such intensifier readings are "roughly synonymous with *really*".

Below we give a brief overview of the various readings, present and past, of each of the adverbs under study.

2.2.1   Frankly

As mentioned above, the illocutionary reading of *frankly* in (1a) is assumed to have developed from semantically similar narrow-scope readings like the one exemplified in (2a), which may be paraphrased as "[w]ithout concealment, disguise, or reserve" (OED, frankly, *adv.*). However, *frankly* has other manner meanings as well, such as "unconditionally, unreservedly" (9a), as well as obsolete VP readings such as "in liberal or abundant measure" (9b). *Frankly* may also modify other types of phrases than VPs, such as APs, as in (10). Finally, *frankly* has a subject-oriented reading, which may be paraphrased as "generously" ("it was generous of the subject to do X"). A candidate is given in (11) but note that all the corpus tokens which may mean "generously" may also mean "unconditionally"; hence, the relevant tokens have been classified as ambiguous between a subject-oriented and a manner meaning.

(9)	a.	and he sent me a Bill for the Money by a Person who brought with him a general
		Release for me to sign, and which I *frankly* sign'd; and thus, tho' full sore against mywill, a final End was put to this Affair. (DEF-MF, ECF, 1722)
	b.	Following the countriemans custome in this, which doungeth his grounde, *franckly*
		casteth his seed in the furrowes, to haue it restored in haruest with Usurie
		(GOS-EP, EEPF, 1579)

(10)		You are not reserved. You are *frankly* communicative. (BRO-S, NCF, 1849)
(11)		Most of them were ill then; none were the men they had been once. They *frankly* offered
		their assistance and advice, and, leaving him for that time, went Sadly off upon their
		several tales. (DIC-LAMC, NCF, 1844)

2.2.2   Honestly

Like *frankly*, *honestly* has an illocutionary reading (12) and a related manner reading (13a), which may be paraphrased "truthfully, without lying". However, there are other manner meanings as well, such as "respectably" (13b) and "virtuously" (13c). *Honestly* may also, like *frankly*, modify other types of phrases than VPs, such as APs, as in (14), and express a characterization of the subject, as in (15) ("it was honest/respectable/virtuous of the poor fellow to discharge …"). Example (16) is an instance of a wide-scope intensifier reading of *honestly*. This example illustrates the fact that intensifiers are "restricted to positions before the auxiliary or the lexical verb" ([Greenbaum 1969](#), 86), positions which are not accessible to illocutionary adverbs. *Honestly* in (16) differs from the related manner adverb in that it precedes sentential negation and in that it collocates with a stative verb, which are general properties of intensifiers.[5] As shown in (17), *honestly* may also occur alone, in which case it expresses "remonstration or exasperation: for heaven's sake!" (OED, honestly, *adv*.). This way of using *honestly* may represent a further development of Greenbaum's *honestly* intensifier. There are no examples of it in our corpus, and the OED examples are from the 20th century, so here we may be dealing with a rather recent phenomenon. One may argue that *honestly* is here closer to evaluative adverbs, which express the speaker's evaluation of the event expressed by the sentence, than to illocutionary adverbs that express the speaker's or addressee's honesty. Supportive evidence for this assumption comes from cooccurrence facts: As shown in (18), the wide-scope intensifier *honestly* may cooccur with an illocutionary adverb, provided it follows the illocutionary adverb:

(12)		*Honestly* I don't think I am sorry. (HAR-JO, NCF, 1896)
(13)	a.	Here she stands; speak *honestly*, Girl, did ever I bid you be disobedient to me?
		(FIE-TJ, ECF, 1749)

	b.	To consent, and take Earnest, as I may say, to live with a Man, who did not pretend to
		marry her!—How inexcusable this!—What a Frailty!—Yet so modest in Appearance, so *honestly* descended, and an Example so much better—forgive me to say—before her—Dear, dear! how could it be! (RIC-P, ECF, 1741)
	c	nor the yong gentleman, neuer thinking vpon any other meanes then *honestly* to
		enioye his desire, without touche or breache of her honor: … (RIC-RFMP, EEPF, 1581)
(14)		and he looked so *honestly* glad to hear that his information was all wrong, that old Panton
		at the moment believed in his integrity, … (EDG-P, NCF, 1814)
(15)		The poor Fellow *honestly* discharg'd the Trust reposed in him, and brought her seven
		hundred Crowns … (MUN-Z, EEPF, 1580)
(16)		He says I must come to Bartram, and stay a night, and promises to lodge me
		comfortably; about which last, I *honestly* do not care a pin, when the chance of a comfortable evening's gossip with you is in view. (SHE-US, NCF, 1864)
(17)		*Honestly*! More rain. I'll be going stir-crazy ... cooped up in here. (OED, honestly, *adv.*,
		1970 'D. SHANNON Unexpected Death (1971) ii. 24)

(18)		He had expected exactly this when he would be giving her this news. *Frankly* he
		honestly thought she would through a bigger fit and maybe throw her food at him.
		(www.wattpad.com/546869417-selcouth-chapter-1, accessed Feb 11, 2022)

2.2.3 Seriously

Seriously shares a number of characteristics with *frankly* and *honestly*. It has an illocutionary reading (19) and a semantically related manner adverb with the meaning "with serious intent, in earnest" (OED, seriously, *adv*. 2), exemplified in (20a).[6] It has other manner readings as well, such as "in a grave, solemn, or serious manner" (OED, seriously, *adv*. 2), cf. (20b). Obviously, the two meanings in (20) may be hard to keep apart as serious intent is naturally accompanied by a serious facial expression and tone of voice.[7] *Seriously* may also modify other types of phrases than VPs, such as PPs, as in (21). Finally, *seriously*, like *honestly*, has an intensifier reading and an independent reading, as shown in (22) and (23). (23) is from the OED and is described as being "a sentence adverb, emphasizing the sincerity or importance of a statement or question: really, in all seriousness" (OED, seriously, adv.2).[8]

(19)		But, *seriously*, do you think we have any innate Fears of these Matters? (BRO-FQ, ECF,1765)
(20)	a.	We advise you therefore in Love, and counsell thee in Affection and Charitie, to consider *seriously* with thy selfe, that wee are thy Sisters, not thy Servants, … (REY-
		TGR, EEPF, 1635)

	b.	"[…] I 'm afraid it's no use." She *seriously* shook her curls, and looked up at him. (MER-ORF, NCF, 1859)
(21)		… Lady Lambton, however, expressed some fears to Louisa, lest her grandson should
		become *seriously* in love with her, … (SCP-MH, ECF, 1762)
(22)		Joe, do you *seriously* think all the wisdom in the world is lodged in male skulls? (BRO-S, NCF, 1849)
(23)		Mr. Morel.—War is declared. Mr. L.—What! *Seriously*? (OED, seriously, *adv.*2, 1848 L. P.R. Fenwock de Porquet New Ital. & Eng. Conversat. 89)

2.3   *Previous Analyses*

2.3.1   Reanalysis

Reanalysis is a "change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation" (Langacker 1977, 58) but changes in surface manifestations may materialize later (Hopper and Traugott 2003, 3, chapter 3). Reanalysis is widely believed to be an important mechanism in the development of speaker-oriented adverbs from narrow-scope adverbs. The claim has been made for epistemic and evidential/modal adverbs by Hanson (1987), Traugott (1989), and Simon-Vandenbergen and Aijmer (2007), for *naturally* by Haumann and Killie (2019), and for all classes of "sentence adverbs" by Swan (1988) and Fischer (2007).[9] To Fischer, however, reanalysis is just one out of two main mechanisms, where the second one is ellipsis, as we will see below.

A reanalysis takes place in specific contexts, so-called "bridging contexts" (Heine 2002) or "critical contexts" (Diewald 2002), in which both the older (narrow-scope) and the newer (wider-scope/speaker-oriented) interpretations are possible. Thus, (24) shows a potential bridging context where *fortunately* may be reanalyzed from a VP-modifying (manner) adverb to a speaker-oriented (evaluative) adverb, while (25) illustrates a context in which *naturally* may be reanalyzed from an AP-modifying adverb to a speaker-oriented (evidential) adverb.

(24)	I am guardian to his boys; they are but ill provided for. I have *fortunately* obtained a	
	partnership in a good house for the second son. (EDG-B, NCF, 1801)	
→	VP-modifier (manner):	"by/with good fortune" or "successfully"
→	speaker-oriented (evaluative):	"luckily"
(25)	Sensible men have been known to say that the straightener should in strict confidence be	
	told of every physical ailment that is likely to bear upon the case; but people are *naturally* shy of doing this, for they do not like lowering themselves in the opinion of the straightener, ... (BUT-EOR, NCF, 1872)	
→	AP-modifier:	"by nature"
→	speaker-oriented (evidential):	"of course"/"as we both know"

Swan (1988, 524–525) argues that the reanalysis of narrow-scope adverbs into speaker-oriented ones takes place in "mid-field" but that the resulting speaker-oriented adverb must subsequently be moved clause-initially to "stabilise" as a speaker-oriented adverb. By contrast, Fischer (2007, 275) argues that the reanalysis takes place in initial position. According to Fischer, this reanalysis may or may not be preceded by ellipsis of neighboring material. We come back to this ellipsis scenario below.

2.3.2   Ellipsis

Berry (2011, 2018) argues that illocutionary adverbs develop through the multistepped process in (26), where the shift from (26b) to (26c) is significant because the clause containing the adverb changes status from matrix to adverbial clause, which is then subject to internal structural erosion from finite clause (26c) via nonfinite clause (26d, e) to adverb (26f), with the final shift involving ellipsis of the verbal element (Berry 2018, 153–154).

(26)	a.	"May I speak *frankly*?" Farrell nodded. "Always, Pete." "Well, sir …"
	b.	I must speak *frankly* now and tell you that I see no reason for you …
	c.	If I might speak *frankly*, there's others [sic] still aboard more sickish …
	d.	To speak *frankly*, Barbara, do you think that this can be accepted …
	e.	*Frankly* speaking, if you're looking for good nutrition in a hot dog …
	f.	*Frankly*, in the spirit of free speech, that's good.

Berry refers to the final step in the ellipsis process in (26) as "lexicalization", which he defines as the creation of a new word from a frequent lexical collocation (2011, 33). According to Berry (2011, 175, 2018, 150):

[t]he ellipsis of the other lexical items in the clause has shifted the meanings of those items to a covert level, understood by speaker and audience alike (i.e., available in Logical Form), but no longer spelled out (in Phonetic Form).[10]

A comment to the same effect is provided by Ernst (2002, 70), who analyzes illocutionary adverbs as "manner adverbs modifying a covert predicate of expression".

The claim that the relevant context for lexicalization is the *-ing* clause in (26e) and not the clause type in (26d) rests on the assumption that final verbs are more easily elided. Berry argues that there is empirical support for this claim as the collocation *frankly speaking* outnumbers the collocation *speaking frankly* by a ratio of 23:1 in the Corpus of Contemporary American English (COCA) (2011, 175), which then covered the period 1990–2009. In this connection, we may note Bellert's observation that all illocutionary adverbs (as opposed to other classes of speaker-oriented adverbs) "cooccur with the participle *speaking*, which is implicit in the sentences containing those adverbs" (Bellert 1977, 349).

Berry (2018, 146–149, also 2011) backs up the scenario in (26) by arguing that the little evidence available in diachronic corpora "points to the early association of *frankly* with verbs of speech […] that prefigures its later use as a speech-act adverb" (Berry 2018, 146). His investigation of the verbal collocates of *frankly* in the *TIME* Magazine Corpus shows that, in the period 1920s to 2000s, the adverb collocates predominantly with communication verbs, and frequently in "speech-act related uses" (2018, 148). However, the evidence presented by Berry in support of stages (26d) and (26e) of

his lexicalization scenario is not very solid. The Corpus of Historical American English (COHA), which at the time covered the period 1810–2009 and contained some 400 million words, was found to contain 7,333 tokens of *frankly*, among which there were only 47 relevant occurrences of *to speak frankly* and 20 of *frankly speaking* (Berry 2011, 176–177).

Fischer (2007) agrees that ellipsis has played a role in the development of illocutionary adverbs (and other sentence adverbs in -*ly*); however, her account of this process is different from Berry's:

From [the] historical and comparative details, it becomes clear that the

wide-scope sentence adverbial/pragmatic marker must originally have

been placed outside the main clause, in the form of a prepositional phrase,

a reduced clause or a predicative clause followed by a "that"-complement.

…These clauses function as sentence adverbials and have scope over the

"that"-clause. When reduced to an adverbial, they would resemble other

adverbials but retain their scope over the original "that"-clause which now

becomes the main clause. (Fischer 2007, 296)

An example given by Fischer is that Old English *we secgað nu sceortlice þæt* "we will now say more briefly that" has developed into the illocutionary adverb *shortly* "briefly" (cf. Fischer 2007, 286). Thus, through the ellipsis of material, an adverb with only local scope has acquired scope over a whole proposition. Such an ellipsis scenario also involves reanalysis of the adverb but in this case, the reanalysis takes place *after* ellipsis. Fischer (2007) does not present any systematic or quantitative evidence in favor of her hypothesis.

Fischer's (2007) ellipsis hypothesis is less specific than Berry's (2011, 2018) as it neither identifies a particular collocation as the immediate source of illocutionary adverbs nor argues that the diachronic development of illocutionary adverbs involves a series of fixed steps. Instead, Fischer links the development of illocutionary adverbs to a general tendency for the narrow-scope equivalents of illocutionary adverbs to cooccur with communication verbs. As explained above, such a strong association has been attested for 20th-century English by Berry (2018). Fischer's (2007) hypothesis is reminiscent of some synchronic analyses of illocutionary adverbs, which derive them from manner adverbs through a transformation. For example, Greenbaum (1969, 83) argues that illocutionary adverbs can be regarded "as a truncated clause, sole unit in surface structure of one of several correspondences in deep structure". Greenbaum allows for a series of deep-structure correspondences. For example, in discussing *confidentially* in *Confidentially, she is very stupid*, he gives the following list of correspondences, which he says is not exhaustive (1969, 82):

(27)	a.	I am speaking *confidentially* when I say (that) she …
	b.	I am putting it *confidentially* when I say (that) she …

	c.	I tell you *confidentially* (that) she …
	d.	I would say *confidentially* (that) she …
	e.	If I may speak *confidentially* [I would say (that)] she …
	f.	If I may put it *confidentially* [I would say (that)] she …

In the same vein, Schreiber (1972, 321), in his "PERMANNER analysis", claims that illocutionary adverbs "derive from manner adverbs of a deleted higher performative clause". Thus, *frankly* is said to be derived from the performative clause *I tell you frankly*. From the point of view of such analyses (see also Ross 1970), the development of illocutionary adverbs involves the deletion of the superordinate performative verb, its subject (I) and indirect object (you).

3   Data Sources and Methodology

Our data cover the period 1550–1899 and are extracted from the Chadwyck-Healey fiction corpora: Early English Prose Fiction (EEPF), Eighteenth-Century Fiction (ECF), and Nineteenth-Century Fiction (NCF), which comprise roughly 59 million words of texts published between 1518 and 1903. According to Swan (1988, 513–514), illocutionary adverbs go back to the 17th century. She finds only four examples in her data from Modern English, i.e. 1500–1700. We therefore assume that combining the three corpora should allow us to trace the development of illocutionary adverbs across time. While diachronic spoken data would have been more ideal for tracing the development of such an oral feature of language, such data are, of course, not available. We therefore have to content ourselves with representations of speech in written corpora from different periods.

In testing the hypotheses under discussion empirically, a few assumptions have been made. One is that frequency is crucial: The source construction(s) of illocutionary adverbs can only be confirmed if they occur in the data at a sufficiently high rate. What this means cannot be specified, however, but depends on an overall evaluation of the data. That frequency plays a role in reanalysis is generally assumed (Haumann and Killie 2019, 205–6; Heine 2002, 84; Traugott 2012, 550; Bybee and Hopper 2001; Bybee 2003, 2006). In the words of Evans and Wilkins (2000, 550), the new meaning "often comes into existence because a regularly occurring context supports an inference-driven contextual enrichment of A to B". With respect to the adverbs under study here, the reanalysis hypothesis can only be confirmed if the data contain a relatively high incidence of ambiguous examples, such as those in (24) and (25). As for the ellipsis hypothesis, also Berry's (2011) scenario makes reference to frequency in that it involves the creation of a new word from a frequent lexical collocation.

We first extracted all tokens of *frankly*, *honestly*, and *seriously* from the three corpora, including all spelling variants listed in the Oxford English Dictionary (OED). After manual purging, this corpus (henceforth referred to as the "overall corpus") contained 3,645 tokens of illocutionary adverbs and their related counterparts (section 2.2). To test the reanalysis hypothesis, we extracted a subset of the adverbs from the overall corpus, viz. only adverbs occurring in the clausal spine of matrix clauses, i.e. within the VP-, TP-, or CP-domain.[11] This second corpus will henceforth be referred to as the "matrix corpus". This choice was governed by three considerations. First, speaker-oriented readings, in general, are available only in finite clauses with independent illocutionary force, notably

matrix clauses and the subset of subordinate clause that displays so-called main clause properties (see, e.g. Hooper and Thompson 1973; Haegeman 2003, 2006, 2012, ch.1 and 4, passim). Second, from the 141 occurrences of purely speaker-oriented readings of the adverbs in all finite clauses, 133 are in matrix clauses. In addition to the purely speaker-oriented readings, there is a total of 40 ambiguous occurrences in finite clauses, where speaker-orientation is one possible reading; of these, 24 occurrences are in matrix clauses. Third, availability of narrow-scope readings of the adverbs does not depend on the illocutionary force of the clause – they are available in all clauses (matrix or embedded, and finite, nonfinite or verbless).[12]

The matrix corpus consists of 1,861 corpus tokens. These were classified with respect to a number of factors. Only two of these factors will be discussed here, viz. adverb class and surface distribution (linear order). As for adverb class, the relevant categories are illocutionary adverb, subject-oriented adverb, intensifier, manner adverb/VP-modifier, and XP-modifier. The distributional classification system was originally very fine grained, consisting of 20 positions. However, many of these were as good as nonexistent in the data and these low-frequency categories were therefore conflated into one category ("other positions"). This left us with the following main surface positions: _S (before the subject), S_V (between subject and the main verb), M_V (between a modal auxiliary and the main verb), AUX_Vpart (between an auxiliary and a participle), V_{be}_XP (between the copula and its complement), and V_ (after the lexical verb).

Berry's (2011, 2018) ellipsis hypothesis would seem to be confirmed by high incidences of {*frankly/honestly/seriously*} *speaking* collocations in the corpus. Since the matrix corpus does not contain nonfinite clauses, the corpus cannot shed light on Berry's hypothesis. We therefore searched for the string "*ly_*speaking*" in the overall corpus. This search returned only three tokens. It is, of course, possible that a low incidence of {*frankly, honestly, seriously*} *speaking* collocations is due precisely to ellipsis. A second assumption was therefore made, viz. that Berry's hypothesis may be supported by a high incidence of the corpus adverbs in the clause pattern leading up to the ellipsis, viz. [to speak + manner adverb]. We therefore counted all instances of this pattern in the overall corpus.

Less specific versions of the ellipsis hypothesis, such as the one proposed by Fischer (2007), which consider [communication verb + manner adverb] collocations *in general* as crucial in the development of illocutionary adverbs, were tested by counting all cases in the overall corpus where the corpus adverbs cooccur with communication verbs. The collocation patterns were extracted manually.

4   The Data

We now present data which may shed light on the development of illocutionary adverbs in general and on our hypotheses specifically. Table 7.1 shows the various readings of *frankly*, *honestly*, and *seriously* in the matrix corpus:

Table 7.1 Here

We see that all three adverbs are most commonly used as manner adverbs, by far. There are, however, some differences between the adverbs. Thus, *honestly* is used more frequently as an intensifier, as in example (16) above, while *seriously* occurs more often as an XP-modifier, as in (21). The adverb which is most frequently used as an illocutionary adverb is *seriously*. As shown in Table 7.2 below (where the period under study is divided into time units of 49 years), this is also the corpus adverb which developed an illocutionary use first. The development of our content-related illocutionary adverbs seems to have taken place in a stepwise fashion, by lexical diffusion: First

seriously, then *honestly*, and finally *frankly*. All three adverbs are used as manner adverbs from the beginning of the period under study. In sum, the data in Table 7.2 support the view that illocutionary adverbs have somehow developed from manner adverbs.

Table 7.2 Here

Table 7.3 shows the surface distribution of the adverbs in the matrix corpus and how distribution correlates with adverb category. Here the surface distributional classes in Table 7.3 map onto hierarchical structure as follows. Adopting a cartographic approach (see, e.g. Rizzi 1997, 2004; Cinque 1999, 2004; Rizzi and Cinque 2016), we assume a tripartite clausal spine consisting of the CP-domain, the TP-domain, and the vP/VP-domain, with each domain hosting designated functional projections that license adverbs. For our purposes, the vP/VP-domain and the CP-domain are of prime interest since manner adverbs are merged and licensed within the vP/VP-domain, whereas illocutionary adverbs are merged and licensed in the CP-domain (see, among others, van Gelderen 2004, 130–131, 2011, 251–259; Bauke, Haumann, and Killie 2022, 59–64),[13] the latter also hosting a number of positions that are targeted by syntactic movement operations, such as the preposing of manner adverbs.

Table 7.3 Here

As shown in Table 7.3, illocutionary adverbs are only found in the canonical positions illustrated in (3)–(8) above, viz. sentence-initial position and postverbal/sentence-final. The latter is only marginally attested in our data. The same positions are accessible to manner adverbs, with the postverbal/sentence-final occurrences by far outnumbering the sentence-initial ones.

Both the illocutionary and manner adverbs *frankly*, *honestly*, and *seriously* occur sentence-initially but they do not assume the same structural position: While illocutionary adverbs are "natives" of the CP-domain, manner adverbs are raised to the CP-domain. As for postverbal occurrences, we need to distinguish structurally between manner adverbs that are merged and licensed within the vP/VP-domain and illocutionary adverbs that, despite appearances, are tied to the CP-domain.[14]

Out of the 1,861 corpus adverbs in the matrix corpus (see section 3), 24 have been classified as ambiguous, and of these, only 4 are ambiguous between a narrow-scope reading (manner) and an illocutionary reading. The other cases of ambiguity involve manner and subject-oriented readings, manner and intensifier readings, illocutionary and intensifier readings, or intensifier and XP-modifier readings. These are not relevant to the reanalysis scenario under scrutiny here and will not be discussed. The ambiguous cases which involve ambiguity between manner and illocutionary readings are shown in (28) and (29) below. Note that the ambiguity in (28a), (29a), and (29b) is fed by structural ambiguity as the adverbs may be analyzed as occurring either in postverbal position or in initial position in the consecutive clause; for (29a) it should be noted that the manner reading is tied to the nonfinite verb *ask*.

| (28) | a. | Why Madam, says Robin again, *very honestly*, do you think I'd let the poor Girl die for |
| | | Love, and of one too that is near at hand to be had. (DEF-MF, ECF, 1722) |

	b.	I felt the greatest admiration for the virtues of this young lady; and, *honestly* with the view of doing my best to prevent the good-nature of Traddles from being imposed upon, to the detriment of their joint prospects in life, inquired how Mr. Micawber was. (DIC-PHDC, NCF, 1850)
(29)	a.	And now we are by ourselves, let me ask you, *frankly*, and *seriously*, why do you
		object to patronage? (EDG-P, NCF, 1814)
	b.	"You are a very sensible young man, Ormond—you make me admire you, *seriously*—; I always foresaw what you would be …" (EDG-HTOT, NCF, 1817)

Turning now to Berry's (2011, 2018) lexicalization scenario, our overall corpus contains only the three [manner adverb + *speaking*] sequences in (30) below. The sequence [*to speak* + manner adverb] occurs with a certain but low frequency. The 16 occurrences are quite evenly distributed across the three adverbs (four with *frankly*, five with *honestly* and seven with *seriously*). The examples in (31) show the earliest occurrence of this construction for each adverb. Note that the low frequency of [manner adverb + *speaking*] and [*to speak* + manner adverb] cannot be attributed to our data predating Berry's (2011, 2018) since the hypothesized scenario should be valid irrespective of the timing of its steps.

(30)	a.	… but *honestly speaking*, Brother, have you not a little promoted this Fault?
		(FIE-TJ, ECF,1749)
	b.	Soberly and *seriously speaking*, English Property, when once debated, is merely a
		Carcass of contention upon which interposing lawyers fall as customary prize …
		(BRO-FQ, ECF, 1765)

	c.	Not so, indeed; for, *seriously speaking*, I am very sure that conscience only kept Edward
		from Harley (AUS-SS, NCF, 1811)
(31)	a.	This, my dear friend, I have found the most difficult part of my task; and, *to speak*
		frankly, I hardly expect to satisfy your less partial judgment, … (SCO-I, NCF, 1830)
	b.	I do not wonder my Niece was frightned and terrified into taking this Measure; and *to*
		speak honestly, I think my Niece will be justified to the World for what she hath done. (FIE-TJ, ECF, 1749)
	c.	*To speak seriously*; Lucilla's sense of propriety … will not allow you to remain much
		longer under the same roof, now that the motive will become so notorious. (MOR-CSW,
		NCF, 1809)

Even when we extended our search to include other communication verbs occurring in a nonfinite comment clause, viz. [to V + manner adverb] and [manner adverb + V*ing*], the catch was meager: There were four relevant instances of the former category (shown in 32 below) and none of the latter. As pointed out by one of the reviewers, the scarcity of these data in our corpus may result from their being a feature of spoken language.

(32)	a.	"*To tell* you *frankly*," said the Major, "'I have my suspicions. […].'" (THA-HPFM, NCF,1849)

	b.	He was to return to Guestwick again during this autumn; but, *to tell honestly* the truth in
		the matter, Lily Dale did not think or care very much for his coming. (TRO-SMA, NCF, 1864)
	c.	And, *to tell* the truth *honestly* at once, Mr. Crosbie had been on terms of great friendship
		with Lady De Courcy's daughters … (TRO-SMA, NCF, 1864)
	d.	*To tell* the truth *honestly*, Roby, we have to rid ourselves of Sir Orlando. (TRO-PM, NCF, 1876)

The extremely low frequency of [*to speak/tell* + manner adverb] (cf. 31 and 32) and the near absence of [manner adverb + *speaking*] (cf. 30) suggest a missing structural link. However, as mentioned above, the extremely low frequency of [manner adverb + *speaking*] may be due to ellipsis having taken place.

We will now present data bearing on the less specific version of the ellipsis hypothesis, such as the one presented in Fischer (2007). As explained above, such approaches see the development of illocutionary adverbs as crucially depending on the propensity of the narrow-scope versions of illocutionary adverbs to collocate with communication verbs. Table 7.4 below shows the degree to which *frankly*, *honestly*, and *seriously* collocate with communication verbs (C-verbs) and other categories of verbs in the period under study.

Table 7.4 Here

The data suggest that communication verbs are indeed frequent collocates of all three manner adverbs: Across all periods, *frankly* collocates with a communication verb in 556 out of 753 cases (73.8 %). *Honestly* and *seriously* do so less frequently, viz. in 277 of 746 cases (37.1%) and 487 of 1,495 cases (32.6%), respectively. For *frankly*, there is a clear and consistent increase in the propensity of the adverb to collocate with a communication verb from 1550 to 1799, and the proportion of communication verbs with this adverb remains high also after this time. For *honestly*, there is a similar increase up to 1799, followed by a drop in the 19th century, while for *seriously*, the proportion of communication verbs remains stable, at approx. one-third of the cases, from 1600 onward. The differences in the verbal collocates of the three adverbs can be related to the fact that the various adverbs have different manner meanings which occur at different rates, some of which are more prone to collocate with communication verbs than others. A related observation here is that the number of communication verb collocates would probably have been even higher if all

manner meanings which are unrelated to the illocutionary meanings had been removed from the data set. However, this could not be done reliably as a large proportion of the manner adverbs are ambiguous between different manner meanings (see section 2.2).

5   Discussion and Conclusion

This article aimed at testing two hypotheses about the development of (content-related) illocutionary adverbs in English: The reanalysis hypothesis and the ellipsis hypothesis. Regarding the former, we have argued that it would gain support if the data contained a relatively large number of cases which were ambiguous between a narrow-scope and an illocutionary reading. As we have seen, there are very few such cases in our corpus. As we have seen, ambiguous contexts, or bridging contexts, are conspicuously absent from our data, which suggests that reanalysis cannot be the mechanism behind the development of illocutionary adverbs.

Regarding Berry's (2018) scenario in (26), we hypothesized that it would be confirmed if the [manner adverb + *speaking*] and [*to speak* + manner adverb] collocations were frequent. However, the data showed a very low frequency of such collocations. This seems to cast doubt on the scenario sketched. On the other hand, the low frequency of the [manner adverb + *speaking*] pattern may be due precisely to ellipsis, and it may be the case that any ellipsis scenario is hard to confirm for this reason. Widening the search to include all relevant instances of communication verbs occurring in the relevant clause patterns, viz. [to V + manner adverb] and [manner adverb + Ving], did not change the picture as the number of additional occurrences was negligible.

We will, however, argue in favor of a less specific, more indirect ellipsis scenario that crucially involves the propensity of the manner versions of illocutionary adverbs to collocate with communication verbs. As we have seen, Berry (2011, 2018) finds that manner *frankly* collocates frequently with communication verbs in the 20th-century *TIME* Magazine Corpus. The data displayed in Table 7.4 above suggest that this collocational tendency goes back to the 17th and 18th centuries.

In other words, our data allow for interpreting the development of illocutionary adverbs from manner adverbs as collocationally induced semantic change along the lines suggested by Anttila (1989, 138), who states that "[h]abitual linguistic collocations may become permanent", and if "part of the collocation is lost, the remainder changes meaning, when it takes on the semantics of the earlier phrase". Thus, once the collocation of communication verbs and manner *frankly*, *honestly*, and *seriously* is consolidated, and the adverb and communication verb cooccur in a configuration in which verbal structure can be elided (see also Fischer 2007, 275; Berry 2011, 175, 2018), the adverb absorbs the illocutionary feature of the communication verb that licenses the phrase in the CP-domain, as well as the external argument feature of the communication verb, PRO. This is compatible with the final stage in Berry's (2018, 154) analysis, where the adverb, as a consequence of structural erosion, comes to carry the discourse features originally borne by the adverbial clauses. It is also compatible with other verb-final source structures, such as those suggested by Fischer (2007) as well as the "correspondences" suggested by Greenbaum (1969, section 2.3.2). In all these cases, the collocationally induced development of illocutionary adverbs from manner adverbs takes place in a structural configuration in which the adverbial is merged and licensed in the CP-domain. The ellipsis of the verbal element is sanctioned by the consolidated collocation, which also allows the adverb to absorb the verb's illocutionary feature as its external argument, PRO. The former licenses the adverb in the CP-domain, whereas the latter allows for a syntactic implementation of the adverb's shift in orientation from speaker to addressee, as in (6) and (7) above (see Woods 2014 or an analysis of illocutionary adverbs as argument taking). An analysis along the lines suggested results in distinct lexical entries for manner *frankly*, *honestly,* and *seriously* and their illocutionary

counterpart, with the latter being specified with an illocutionary feature and an external argument feature, PRO.

Data Sources

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BNC	*The British National Corpus*. Davies, Mark. (2004–) BYU-BNC. (Based on the British National
	Corpus from Oxford University Press). Available online at http://corpus.byu.edu/bnc/.
ECF	*Eighteenth-Century Fiction*. 1996. Cambridge: Chadwyck-Healey.
EEPF	*Early English Prose Fiction*. 1997. Cambridge: Chadwyck-Healey.
NCF	*Nineteenth-Century Fiction*. 1999–2000. Cambridge: Chadwyck-Healey.

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AIN-JSR, NCF, 1839	Ainsworth, William Harrison, *Jack Sheppard*
AUS-SS, NCF, 1811	Austen, Jane, *Sense and Sensibility*
BRO-FQ, ECF, 1765	Brooke, Henry, *The Fool of Quality*
BRO-S, NCF, 1849	Brontë, Charlotte, *Shirley*
BUT-EOR, NCF, 1872	Butler, Samuel, *Erewhon: or Over the Range*
DEF-MF, ECF, 1722	Defoe, Daniel, *Moll Flanders*
DIC-LAMC, NCF, 1844	Dickens, Charles, *The Life and Adventures of Martin Chuzzlewit*
DIC-PHDC, NCF, 1850	Dickens, Charles, *The Personal History of David Copperfield*
DOY-SF, NCF, 1890	Doyle, Arthur Conan, Sir, *The Sign of Four*
EDG-B, NCF, 1801	Edgeworth, Maria, *Belinda*
EDG-HTOT, NCF, 1817	Edgeworth, Maria, *Harrington, A Tale; and Ormond, A Tale*
EDG-P, NCF, 1814	Edgeworth, Maria, *Patronage*
FIE-TJ, ECF, 1749	Fielding, Henry, *Tom Jones*
GIS-OW, NCF, 1893	Gissing, George, *The Odd Women*

GOS-EP, EEPF, 1579	Gosson, Stephen, *The Ephemerides of Phialo*
HAR-JO, NCF, 1896	Hardy, Thomas, *Jude the Obscure*
HAR-TU, NCF, 1891	Hardy, Thomas, *Tess of the D'Urbervilles*
HOL-AHT, NCF, 1794-97	Holcroft, Thomas, *The Adventures of Hugh Trevor*
LYT-CR, NCF, 1871	Lytton, Edward Bulwer, The Coming Race
MER-ORF, NCF, 1859	Meredith, George, *The Ordeal of Richard Feverel. A History of Father and Son*
MOR-CSW, NCF, 1809	More, Hannah, *Coelebs in Search of a Wife.*
MUN-Z, EEPF, 1580	Munday, Anthony, *Zelavto*
REA-CH, NCF, 1861	Reade, Charles, *The Cloister and the Hearth. A Tale of the Middle Ages*
REY-TGR, EEPF, 1635	Reynolds, John, *The Triumphs of Gods Revenge*
RIC-P, ECF, 1741	Richardson, Samuel, *Pamela*
RIC-RFMP, EEPF, 1581	Rich, Barnaby, *Riche his Farewell to Militarie profession*
RIC-SCG, ECF, 1754	Richardson, Samuel, *Sir Charles Grandison*
SCO-I, NCF, 1830	Scott, Walter, Sir, *Ivanhoe; A Romance*
SCP-MH, ECF, 1762	Scott, Sarah, *Millenium Hall*
SHE-US, NCF, 1864	Le Fanu, Joseph Sheridan, *Uncle Silas: A Tale of Bartram-Haugh*
THA-HPFM, NCF,1849	Thackeray, William Makepeace, *The History of Pendennis. His Fortunes and Misfortunes, His Friends and His Greatest Enemy*
TRO-PM, NCF, 1876	Trollope, Anthony, *The Prime Minister*
TRO-SMA, NCF, 1864	Trollope, Anthony, *The Small House at Allington*

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Table 7.1. The readings of *frankly*, *honestly,* and *seriously* in the matrix corpus

	illocutionary	subject-oriented	intensifier	manner	XP-modifier[15]	ambiguous	total
frankly	29 (5.3%)	7 (1.3%)	0 (0.0%)	486 (89.3%)	8 (1.5%)	14 (2.6%)	544
honestly	22 (5.2%)	8 (1.9%)	24 (5.7%)	346 (82.0%)	17 (4.0%)	5 (1.2%)	422
seriously	82 (9.2%)	0 (0.0%)	24 (2.7%)	677 (75.6%)	107 (12.0%)	5 (0.6%)	895
	133	**15**	**48**	**1,509**	**134**	**24**	**1,861**

Table 7.2. Corpus periods in which the various readings are first attested (matrix corpus)

adverb class/reading	frankly	honestly	seriously
illocutionary	1800–1849	1750–1799	1650–1699
subject-oriented	1550–1599	1650–1699	--/--
intensifier	--/--	1700–1749	1700–1749
manner	1550–1599	1550–1599	1550–1599
XP-modifier	1850–1899	1550–1599	1650–1700

Table 7.3.   The surface distribution of *frankly*, *honestly*, and *seriously* across the various syntactic classes in the matrix corpus[16]

surface distribution	adverb class	tokens	frankly	honestly	seriously
_S (sentence-initial)	illocutionary	131 (80.4%)	28 (82.4%)	21 (67.8%)	82 (83.7%)
	intensifier	1 (0.6%)	0 (0.0%)	1 (3.2%)	0 (0.0%)
	manner	28 (17.2%)	6 (17.7%)	7 (22.6%)	15 (15.3%)

	ambiguous	3 (1.8%)	0 (0.0%)	2 (6.5%)	1 (1.0%)
	total	163	34	31	98
S_V (between subject and verb)	subject-oriented	15 (4.1 %)	7 (3.5%)	8 (11.3%)	0 (0.0%)
	intensifier	13 (3.5%)	0 (0.0%)	9 (12.7%)	4 (4.1%)
	manner	325 (88.1%)	178 (89.4%)	54 (75.0%)	93 (94.9%)
	ambiguous	16 (4.3%)	14 (7.0%)	1 (0.5%)	1 (1.0%)
	total	369	199	72	98
M_V (between modal and verb)	intensifier	20 (1.3%)	0 (0.0%)	3 (5.7%)	17 (25.8%)
	manner	130 (85.2%)	33 (100.0%)	50 (94.3%)	47 (71.2%)
	ambiguous	2 (1.3%)	0 (0.0%)	0 (0.0%)	2 (3.0)
	total	152	33	53	66
AUX_Vparticiple (between auxiliary and participle)	intensifier	5 (4.6)	0 (0.0%)	4 (12.1%)	1 (1.6%)
	manner	104 (95.4%)	14 (100.0%)	29 (87.9%)	61 (98.4%)
	total	109	14	33	62
V_{be}_XP (between copula and its complement)	intensifier	6 (4.3%)	0 (0.0%)	4 (18.2%)	2 (1.8%)
	manner	1 (0.7%)	0 (0.0%)	0 (0.0%)	1 (0.9%)
	XP-modifier	132 (94.3%)	8 (100.0%)	17 (77.3)	107 (97.3%)
	ambiguous	1 (0.7%)	0 (0.0%)	1 (4.5%)	0 (0.0%)
	total	140	8	22	110
V_ (postverbal/VP-final/sentence-final)	illocutionary	2 (0.2%)	1 (0.4%)	1 (0.5%)	0 (0.0%)
	intensifier	1 (0.1%)	0 (0.0%)	1 (0.5%)	0 (0.0%)
	manner	906 (99.6)	246 (99.6%)	204 (98.6%)	456 (100.0%)
	ambiguous	1 (0.1%)	0 (%)	1 (0.5%)	0 (0.0%)
	total	910	247	207	456
Other positions	intensifier	2 (11.1%)	0 (0.0%)	2 (50.0%)	0 (0.0%)
	manner	14 (78.0%)	9 (100.0%)	1 (25.0%)	4 (80.%)
	ambiguous	2 (11.1%)	0 (0.0%)	1 (25.0%)	1 (20.0%)
	total	18	9	4	5
Total		**1,861**			

Table 7.4. The verbal collocates of manner *frankly*, *honestly*, and *seriously* (overall corpus)

	frankly			honestly			seriously		
	C-verbs	other	total	C-verbs	other	total	C-verbs	other	total
1550–1599	15 (22.7%)	51 (77.3%)	66	4 (5.5%)	69 (94.5%)	73	0 (0.0%)	3 (100%)	3
1600–1649	2 (40%)	3 (60%)	5	2 (9.0%)	20 (91%)	22	12 (33.3%)	24 (66.7%)	36
1650–1699	16 (66.7%)	8 (33.3%)	24	3 (9.7%)	28 (90.3%)	31	21 (23.9%)	67 (76.1%)	88
1700–1749	37 (86.0%)	6 (14.0%)	43	34 (32.4%)	71 (67.6%)	105	43 (32.3%)	90 (67.7%)	133
1750–1799	123 (88.5%)	16 (11.5%)	139	68 (56.2%)	53 (43.8%)	121	87 (32.6%)	180 (67.4%)	267
1800–1849	169 (79.7%)	43 (20.3%)	212	54 (48.1%)	58 (51.8%)	112	112 (34.4%)	214 (65.6%)	326
1850–1899	194 (73.5%)	70 (26.5%)	264	112 (39.7%)	170 (60.3%)	282	212 (33.0%)	430 (67%)	642
total	**556 (73.8%)**	**197 (26.2%)**	**753**	**277 (37.1%)**	**469 (62.9%)**	**746**	**487 (32.6%)**	**1008 (67.4%)**	**1,495**

[1] Other labels that have been used for this class include *style disjuncts* (Greenbaum 1969;

Schreiber 1972), *pragmatic adverbs* (Bellert 1977), *speech-act adverbs* (Swan 1988),

and *performative adverbs* (Huang 1975).

[2] Note that (3b) and (4b) are ungrammatical only under the intended illocutionary reading of

honestly. See section 2.2 for discussion.

[3] In addition, we may point to non-canonical occurrences between the copula and its

complement:

(i)   All I can say, and I say it with the tenderness due to a Tish, and the respect due

to a guest, is *frankly*

this—if you yield, you will become a cinder. (LYT-CR, NCF, 1871)

(ii)   "A man may calculate on probabilities; and this is a moment in which I do not

wish to conceal the full   estimate which I make of my own conduct from you.

Being therefore, *seriously* and speaking to the   best of my judgment, as culpable

as Wakefield, let my course of life hereafter be what it will, I find I am to expect no

credit for sincerity from you?" (HOL-AHT, NCF, 1794-97)

[4] It should be noted that the characterization of subject-oriented adverbs as having "a speaker-

oriented dimension" (Lehrer 1975, 240) varies across authors. Whereas, for example,

Greenbaum (1969, 103–105), Quirk et al. (1972, 465), and Swan (1988, ch. 1.2.3)

classify subject-oriented adverbs (aka "subject disjunct") as speaker-oriented,

Jackendoff (1972, 57), Bellert (1977, 339–341), Cinque (1999, 11, 89–90), and Ernst

(2002, 9, 54–69) do not ascribe a speaker-oriented dimension to them.

[5] Greenbaum draws some additional generalizations about the syntactic properties of

intensifiers which are not empirically supported by our data and thus will not be

discussed here.

[6] According to Swan (1988, 533), illocutionary *seriously* has developed an evaluative reading

as well ("it is serious that"). This point is not properly explained and discussed by

Swan, but she may have in mind the example in (i) below. However, there are no

examples of this evaluative reading neither in the OED nor in our data, so it will not

be discussed further here.

(i)   More *seriously*, the manifestations of very advanced civilizations may not be in the least apparent to a society as backward as we (CC232, from Swan 1988, 500).

[7] According to the OED, *seriously* also has the apparently unrelated, obsolete manner meaning "serially", as in the example below. This meaning is not relevant to us as it is not attested in our corpus. It also has a different etymological origin, being historically related to the noun *series* (OED, seriously, *adv*.1).

(i)   1531 T. Elyot Bk. named Gouernour ii. viii. sig. Qviiv Nowe will I procede *seriously* & in a due   forme to speke more particulerly of these thre vertues. (OED, seriously, *adv*. 1).

[8] According to Greenbaum (1969, 91), also *frankly* has an intensifier reading but we disagree with this.

[9] For Swan (1988) and Fischer (2007), the category "sentence adverb" is coextensive with that of "speaker-oriented adverb" (including subject-oriented adverbs).

[10] For Berry (2018, 145), "the identification of the speaker (first person) and the addressee (second person) as well as the act of speaking ('tell') are all redundant semantically. Only the manner of the telling ('frankly') is salient and significant, and that is the only surviving element of the clause in the fully reduced version".

[11] The licensing of narrow-scope adverbs within, e.g. AP or PP, is contingent on the licensing of the phrase they are contained in; since they do not interact with the clausal spine, we do not consider them to play a role in the development of speaker-oriented adverbs.

[12] Excluded from our analysis are subsentential fragments containing our corpus adverbs. Even though the interpretation of the adverb class can be contextually inferred (notably, illocutionary in (i) and manner in (ii)), the strings in (i) and (ii) do not contain enough overt structure, if any, to establish the distribution of the adverbs:

(i)   "You could travel with them?" "Indeed I could!" "*Honestly*?" "As

affirmatively as one may protest.

Delightedly." (MER-E, NCF, 1879)

(ii)   "Shall I answer you as a Surgeon, or a Friend?" said Benjamin. "As a Friend, and

seriously," said Jones. (FIE-TJ, ECF, 1749)

[13] See Cinque (1999, 84–87) and Rizzi and Cinque (2016, 147–151) on locating speaker-

oriented adverbs in the high TP-domain.

[14] Simply put, we assume that postverbal/sentence-final occurrences as in (8) result from

syntactic movement of the clause across the illocutionary adverb.

[15] The label XP-modifier applies to the corpus adverbs with V_{be}_XP distribution.

[16] That several of the figures add up to 99.9% or 100.1% is due to our rounding off two

decimals into a one-decimal format, which we chose to do as we think two decimals

unnecessarily complicate the data.