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The diachrony of stance constructions with *'no' chance* and *'no' wonder*

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1. Introduction

This paper compares the diachronic development of stance constructions containing the noun *chance* preceded by a negative quantifier (e.g. *no, little, not … any*), henceforth *'no' chance*, with that observed for stance constructions featuring *'no' wonder*, focusing on their formal and semantic-discursive properties. The two central nouns are semiotic nouns or "shell nouns", i.e. abstract nouns that are used to "characteriz[e] and perspectiviz[e] complex chunks of information which are expressed in clauses or even longer stretches of text" (Schmid 2000: 14). The two *'no'* + semiotic noun strings studied differ in semantic type of stance or attitudinal assessment. Those with *'no' wonder* qualify the proposition in their scope in terms of mirativity (DeLancey 2001: 369), specifically, not as unexpected, but rather as 'not surprising' (cf. Simon-Vandenbergen & Aijmer 2007: 37; Gentens et al. 2016),[1] cf. (1). Those with *'no' chance*, by contrast, express epistemic modal meaning, qualifying the propositional content in their scope in terms of likelihood, cf. (2), i.e. as highly unlikely or downright impossible (cf. Van linden & Brems 2017). Not only do the constructions in (1) and (2) all express stance, they also show similar surface structures.

(1) (a) Then the herring stocks collapsed, fished to oblivion. Barely one per cent of the coastal population still works in fishing. *It's no wonder* Norwegians hunt whale. There's nothing else left to catch. (WB 2003, BB-RM032284)[2] (Van linden et al. 2016: 385)

(b) And his wife was an alcoholic, and *no wonder*, if she knew what kind of man he was. (WB 1986, BB-cF86--29) (Gentens et al. 2016: 126)

(2) (a) Until some agreement is reached between the two parties, *there is little chance* of the interim government extending its authority outside the capital. (WB 1990, SB2--901014)

(b) You would have thought Hoddle might have learned something during his time out of the game, that he might have quietly reflected on his past errors of judgment and resolved to tread a little more warily in future. *No chance*. Within minutes, he had committed two classic blunders and reconfirmed the old belief that […]. (WB 2000, NBA--000129)

[1] It should be noted that in the typological literature the category of mirativity is generally taken to subsume "sudden discovery, surprise and unprepared mind of the speaker (and also the audience or the main character of a story)" (Aikhenvald 2012: 435, cf. DeLancey 2001), but not the opposite meaning of lack of surprise. As positive strings with *wonder* have also developed grammatical meaning (only recently), expressing surprise (and typically a concessive relation between proposition and justification) (see Section 3.1; Van linden et al. 2016), we had rather keep these two opposite values within the same category. In addition, for the meaning of lack of surprise, an alternative analysis in terms of assumed evidentiality, as suggested by an anonymous referee, would group the *'no' wonder* expressions together with structures like parenthetical *needless to say*, which Blanco-Suárez & Serrano-Losada (2017) analyse as an assumed evidential marker but which – in our view – has a semantic-discursive profile very different from that of the grammatical *'no' wonder* expressions studied here.

[2] Examples marked with WB have been drawn from Wordbanks*Online* and are reproduced with the permission of HarperCollins. For each example, I provide the date and document identifier. For examples found on the Internet with Google, the url is given.

In (1a), for example, *no wonder* occurs in a main clause, with the proposition in its scope (that is, the information it characterizes as 'no wonder') coded as a zero *that*-clause; the construction as a whole expresses the speaker's lack of surprise at Norwegians hunting whale. This mirative assessment is justified on the grounds of there being no other marine animals left to be caught, mentioned in the next clause (cf. Van linden et al. 2016: 385-386). While in (1a) the proposition under assessment follows the stance construction, in (1b) it precedes the mirative stance construction, which now takes the shape of an anaphoric adverbial. The justification for the assessment is rendered in the *if*-clause. In (2a), the stance construction (with near-negative quantifier *little*) is realized as a main clause again, and the propositional content it applies to now takes the form of an *of*-gerundial complement clause. The speaker uses the *'no' chance* string to express that they deem it unlikely that the interim government of Liberia will extend its authority outside the capital until some agreement is reached. Note that here the context does not provide an explicit justification for this epistemic assessment. In (2b), the epistemic stance construction is an anaphoric adverbial like the mirative qualifier in (1b), which retrospectively qualifies the proposition in the preceding sentence. Specifically, the speaker qualifies the proposition that Glenn Hoddle might have learned something from being sacked as manager of the England soccer team (because of controversial views on reincarnation and the disabled) as impossible, and offers as a justification for this assessment their observation of two blunders as soon as Hoddle returned to the game – this time as manager of Southampton FC.

Examples like (1a) and (2a) above as well as (3) below fall in the category of "stance complement clauses" in Biber et al.'s (1999: 969-970) classification of "grammatical devices to express stance", while examples like (1b) and (2b) fall under their "stance adverbials". While Biber et al. (1999: 969-970) use the term 'grammatical stance device' in a fairly broad sense, without an indication of what makes these devices 'grammatical', Boye & Harder (2007, 2012) propose a clear delineation between grammatical and lexical expressions, which would not regard the *wonder* expression in (3) as grammatical.

(3) My kids got to see that my out-of-home life was far more complex and intense than they thought. *It was a wonder to them* that I get to do all this stuff. (https://our-story-begins.com/2015/08/) (Davidse & Van linden 2019: 81)

More precisely, Boye & Harder (2012: 7) attach crucial importance to discourse prominence as "a universal feature of human understanding of complex mental content"; speakers always prioritize some parts of the information relative to other parts. Grammatical expressions, then, are defined as expressions that "by linguistic convention are ancillary and as such discursively secondary in relation to other expressions" (Boye & Harder 2012: 2), and hence cannot be addressed or focused. Lexical expressions, conversely, are potentially discourse-primary. In (1a) and (2a), complement-taking predicate clauses (CTP-clauses) containing *'no' wonder* and *'no' chance* are used grammatically: the complement clauses contain the main information (or, are discourse-primary), while the CTP-clauses convey speaker-related qualificational meanings – mirative in (1a), epistemic in (2a) – which scope over the proposition in the complement clause and thus function as interpersonal modifiers (McGregor 1997: 64-73). That is, the CTP-clauses are ancillary and discourse-secondary with respect to their complement clauses. In (1a), for example, the context preceding the *'no' wonder* string deals with the Norwegian fishing industry; the collapse of the stocks of one species, herring, caused a dramatic decline in employment in the industry. What is discourse-primary in the *'no' wonder* sentence is that Norwegians shifted to another species, viz. whale, which had not been mentioned before. In lexical uses of CTP-clauses like in (3), by contrast, the matrices convey a specific emotional or cognitive state which carries the main information of the utterance, and the complement clauses are discourse-secondary. In (3), the matrix *it was a wonder to them* expresses that the speaker's children are very surprised, and the *that*-clause contains the presupposed factive proposition that they are surprised about (Davidse & Van linden 2019).

Boye & Harder (2007: 581-585) relate this distinction between primary (propositional) status and secondary (qualifier) status to restrictions on how the CTP-clause can be 'addressed' by, for instance, interrogatives. Lexical CTP-clauses as in (3) can be probed by a wh-question such as 'how much wonder was it?', which naturally receives the answer 'it was great wonder'. By contrast, the mirative

qualifying clause in (1a) (and the adverbial in (1b)) cannot be probed by a question such as 'how much wonder is it?' (Gentens et al. 2016: 132). This paper will use the more fine-grained distinction between lexical and grammatical uses of what Biber et al. (1999: 969) indiscriminately call "grammatical stance devices."

While the examples in (1)-(2) might suggest that the two *'no'* + noun strings studied are structurally and functionally similar in Present-day English, *'no' chance* adverbials also show a different use, expressing an emphatic negative response to a question or another speech act as in (4), a use also observed for *'no' way* (cf. Huddleston & Pullum 2002: 849; Davidse et al. 2014), but not for *'no' wonder*.

(4) Whenever Nia suggests a name I always think of some tosser I knew when I was at school and say "*No chance*." (WB 2000, NBA--000211)

Study of the diachrony of the two strings will reveal further differences. Clausal uses of *'no' wonder* similar to (1a) already appeared in Old English, while adverbial uses like (1b) emerged in Middle English, taking over the discourse-rhetorical properties of their clausal counterparts (Gentens et al. 2016). By contrast, *chance* was borrowed into the language in Early Middle English; the first meaning of *chance* listed in the OED (s.v. *chance* n. I.1a) is that of "[t]he falling out or happening of events; the way in which things fall out; fortune; case", with the earliest attestation dating from 1297. The earliest complement constructions are observed in Early Modern English only (no adverbial uses yet), which show *chance* in this first meaning; i.e. they all occur in happenstance contexts, cf. (5), just like the source constructions of the stance adverbials *perhaps* and *maybe* (López-Couso & Méndez-Naya 2017).

(5) my *chaunce* was to be att the recoverynge off his sone me lorde Russelle (PPCEME after 1561 Underhill) [It was my hap, fortune to be at …]

This paper will trace the diachronic development of *'no' chance* structures throughout the history of English, describing their grammaticalization into stance markers, in comparison with that of *'no' wonder* structures. The synchronic-diachronic perspective adopted here will enable us to assess the explanatory power of primary versus secondary discourse status (Boye & Harder 2007, 2012), and the role of negative polarity as a trigger in the development of modal-attitudinal meaning. More generally, this study fits in with earlier work on the grammaticalization of complement patterns with semiotic nouns such as *(no) doubt* (Davidse et al. 2015), *(no) way* (Davidse et al. 2014), *(no) question* (Davidse & De Wolf 2012), and *(no) need* (Van linden et al. 2011).

The paper is organized as follows. Section 2 discusses the collection of data used for this corpus study. Section 3 summarizes the diachronic development of *'no' wonder* structures from earlier work, while Section 4 presents new data on the diachrony of *'no' chance* structures, including also discussion of structures lacking a negative quantifier (e.g. *take your chance*). In fact, whereas *'no' wonder* structures are attested as of the Old English period, *chance* regularly occurs with negative quantifiers only four centuries after its arrival in English. Section 5, finally, offers conclusions and reflections on the role of analogy and negation in the grammaticalization of semiotic nouns.

2. Data collection

The corpora and data used for the case study on *'no' wonder* have been described in Gentens et al. (2016) and Van linden et al. (2016): exhaustive samples of concordances targeting the lemma *wonder* in all its spelling variants were taken from the *York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE) (Taylor et al. 2003), the *Penn-Helsinki Parsed Corpus of Middle English* (PPCME2) (Kroch & Taylor 2000), the *Penn-Helsinki Parsed Corpus of Early Modern English* (PPCEME) (Kroch, Santorini & Delfs 2004), and the *Corpus of Late Modern English Texts* (CLMETEV) (De Smet 2005), cf. Table 1; a 500-hit random sample was taken from the British English subcorpora of Collins WordBanks*Online*.

Subperiod of English	Corpus	Number of words (millions)	Total nouns extracted	Frequency per 1,000,000 words
Old English (750-1150)	York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE)	1.45	807	556.55
Middle English (1150-1500)	Penn-Helsinki Parsed Corpus of Middle English, 2nd ed. (PPCME2)	1.16	228	196.55
Early Modern English (1500-1710)	Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME) (1500-1710)	1.79	97	54.19
Early Modern English (1710-1920)	Corpus of Late Modern English texts, Extended Version (CLMETEV)	14.97	905	60.45

Table 1: Overview of diachronic datasets for *wonder*

For *'no' chance*, all occurrences of the word *chance* were extracted from the same corpora except YCOE, but for the Early Modern English period additional data were drawn from the *Corpus of Early Modern English texts* (CEMET) (De Smet 2013: 13-15), and for the Late Modern English period random samples of 250 hits were taken for the last two subperiods of CLMETEV. Note that the queries used also captured verb forms, which had to be discarded manually. Table 2 gives an overview of the historical data.

Subperiod of English	Corpus	Number of words (millions)	Total nouns extracted	Frequency per 1,000,000 words
Middle English (1150-1500)	Penn-Helsinki Parsed Corpus of Middle English, 2nd ed. (PPCME2)	1.16	7	6.03
Early Modern English (1500-1710)	Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME) (1500-1710)	1.79	135	75.42
	Corpus of Early Modern English texts (CEMET) (1570-1710)	3.04	249	81.91
Early Modern English (1710-1920)	Corpus of Late Modern English texts, Extended Version (CLMETEV)	14.97	674	45.02

Table 2: Overview of diachronic datasets for *chance*

For Present-day English, the dataset consists of two parts. For comparison with the earlier stages of the diachronic development, I compiled a random sample of 250 tokens of the noun *chance* from the spoken British English subcorpus of Collins WordBanks*Online*. A second query retrieved instances of *no chance* immediately preceded by a punctuation mark in all the subcorpora of Collins WordBanks*Online* (550 million words), in hopes of finding disjunct adverbial stance markers (see Section 4.1). This search yielded 369 items from UK, US, Australian, Canadian, and Indian English.

3. The diachrony of *'no' wonder* constructions

As mentioned in Section 1, *'no' wonder* already appears in clausal stance markers in Old English. Before we delve into the historical data (Section 3.2), we first take a look at the Present-day English data (Section 3.1). Both sections mainly summarize earlier findings reported on in Gentens et al. (2016), Van linden et al. (2016) and Davidse and Van linden (2019).

3.1 *'No' wonder* in Present-day English

Stance constructions with *'no' wonder* (i.e. grammatical uses, see Section 1) more frequently take the form of adverbials in Present-day English (cf. (1b) above) than that of extraposition constructions[3] with complement (cf. (1a) above), as detailed in Table 3. In addition to complement constructions like (1a), there is another pattern in which *'no' wonder* occurs in a clause and expresses mirative meaning, which is illustrated in (6). The pattern in (6) is termed 'juxtaposition', as the mirative clause is juxtaposed to the clause containing the proposition the mirative assessment applies to. The speaker's lack of surprise at his starting to get headaches is justified by the *because*-clause; the speaker had woken up with a massive lump on his head (which is an obvious cause for headaches).

(6) But when I started full training I started to get headaches and it's *no wonder* because I'd woken up with a massive lump on my head. (WB 2000, NBA--000114)

Besides two types of clausal realization of mirative qualifiers with *'no' wonder*, there are also two types of adverbial realization. Example (1b) illustrated an anaphoric adverbial (see Section 1); (7) below exemplifies a disjunct adverbial, which forms one sentence with the proposition it takes in its scope. In the data, disjunct *'no' wonder* always occurs in sentence-initial position, as in (7), which is – according to Quirk et al. (1985: 491, 612ff) – the normal position for "content disjuncts" expressing a speaker comment on the content of the ensuing proposition.[4]

(7) George [Clooney] […] and Renee [Zellweger] […] seemed to make the perfect couple. But the only permanent fixture in George's life would appear to be his pet potbellied pig Max, which sleeps in his bedroom. *No wonder* Renee moved out. (WB 2001, NBA--011109)

In (7), the speaker assesses the fact that Renee moved out as completely expected in view of the circumstance that George allowed his pig to sleep in his bedroom. The meaning of *no wonder* can be paraphrased by an expectation adverb such as *of course* (cf. Simon-Vandenbergen & Aimer 2008: 172). Like *of course*, *no wonder* in (7) cannot be the focus of a cleft sentence, and cannot be addressed. That is, in reaction to (7) one cannot ask the query 'really?' and intend to be understood as 'really, is it no wonder?'; in fact, *Renee moved out* represents the salient information, and the query would be understood to target that salient information: 'really, did she move out?' (cf. Boye & Harder 2012: 14-16).

The distribution of the different formal realizations of stance constructions with *'no' wonder* in the Present-day English dataset is presented in Table 3. It also distinguishes between elliptical and non-elliptical extraposition constructions. In terms of surface structure, elliptical extraposition constructions, as in (8) below, only differ from disjunct structures in the presence of an overt complementizer; in fact, they are instances of semi-insubordination (cf. Van linden & Van de Velde 2014). For non-elliptical extraposition constructions, complementizer omission does not result in structural ambiguity; Table 3 hence does not distinguish between overt and zero *that*-clauses.

(8) Even if it does agree production cuts, and its members stick to the agreement […] increases in supply by non-Opec producers mean the overall impact on oil prices may be negligible. *Little wonder*, then, that the industry has little faith in the ability of Opec to shore up prices. (WB 1998, NB2--981125)

[3] For a critical assessment of the extraposition construction from a diachronic perspective, see Davidse & Van linden (2019).

[4] Note that in Middle and Modern English *'no' wonder* disjunct adverbials showed the positional flexibility inherent in disjuncts, occurring also in clause-final and clause-medial position. However, they seem to have lost this flexibility completely in Present-day English (see Gentens et al. 2016: 137-138).

	disjunct adverbial		anaphoric adverbial		elliptical extr. + overt *that*-clause		non-ellipt. extr. + overt/zero *that*-clause		juxtaposition		Total	
	n	%	n	%	n	%	n	%	N	%	n	%
PDE	164	38.32	71	16.59	48	11.21	132	30.84	13	3.04	428	100

Table 3: Distribution of types of formal realization of grammatical uses of *(it is) 'no' wonder* in the WB data (Gentens et al. 2016: 136)

In terms of matrix types, the extraposition constructions show predominantly the pattern *it* BE (det)[5] WONDER (129/132), but also include 3 examples with an existential matrix (*there* BE (det) WONDER + *that*-clause). One more existential matrix is found among the juxtaposed clauses; the other 12 are predicative clauses, with 9 showing anaphoric *it* as subject (cf. (6)) and 3 anaphoric *this*. Turning to the types of complement, *that*-clauses (177/180) clearly outnumber *if*-clauses (3/180); no other clausal complement types are attested in Present-day English.

All examples with *'no' wonder* (428/500, 86%) express mirative qualificational meaning (thus showing grammatical use in the sense of Boye & Harder 2007), and at the same time also establish a rhetorical relationship between two chunks of discourse, i.e. the proposition in their scope and the justification for the mirative appraisal. This relationship has been described as anti-concessive in earlier work. A concessive relation denies expectation (Mann and Thompson 1988: 254), and consequently 'surprise' at a state-of-affairs occurring 'in spite of' another state-of-affairs that functions as an anti-cause and could have been expected to prevent it (Martin 1992: 199). Conversely, the relation between proposition and justification established by a qualifier with *'no' wonder* can be viewed as the opposite of concession: it stresses the expected relation between justification and proposition, and leaves it up to the addressee to infer a rhetorical causal relation between justification and proposition (Halliday and Hasan 1976: 240) (cf. Van linden et al. 2016: 387). What we see in Present-day English complement patterns with positive polarity (*it* BE *a* WONDER + *that*-clause) is that these can also express grammatical meaning, viz. establish a concessive relation between proposition and justification (see Van linden et al. 2016: 405). In addition to these grammatical uses (about 11 instances), the 72 (out of 500) examples with positive polarity also include lexical uses of CTP-clauses of the type illustrated in (3) above (Section 1).

3.2 The historical development of *'no' wonder*

Whereas positive polarity strings with *wonder* account for about 14% of the Present-day English data only, they outnumber the *'no' wonder* strings in Old English (53%), as can be seen in Table 4. Lexical complementation patterns typically refer to wonders and miracles in religious contexts, as in (9) below. Note that *less wonder* invites the query of how much wonder it is that one resurrects a person. Grammatical, mirative uses like (10) are proposed to have resulted from the reanalysis of primary, lexical uses such as (9) into a secondary grammatical use qualifying the proposition in the complement clause (Boye & Harder 2007, 2012) (see Van linden et al. 2016). This reanalysis occurred in negative contexts only, which are thus interpreted to have triggered the grammaticalization of expressions with *wonder*.

(9) Forðon þæt is *læsse wundor,* þæt man hwylcne man in lichaman of deaðe awæcce, buton hit gelimpe, þæt se man þurh þæs lichaman gecwicunge sy gelæded to þæs modes life, …
'Therefore that is less wonder, that one resurrects whatever person in the body of a dead human, except it happen, that this person through this body's revival be led to the spiritual life, ...' (YCOE 1050-1099 GDPref and 3 (C) 17.218.15, cited in Van linden et al. 2016: 392)

(10) Nu cwæð se halga Beda þe ðas boc gedihte, þæt hit *nan wundor* nys, þæt se halga cynincg untrumnysse gehæle nu he on heofonum leofað
'Now said Bede the Holy, who wrote the book, that it is no wonder that the holy king heals weaknesses now that he lives in heaven.' (YCOE 1000-1010 ÆLS [Oswald] 272, cited in Gentens et al. 2016: 132)

[5] In the rendering of matrix patterns, (det) stands for (determiner).

While examples like (10) form the predecessors of examples like (1a), juxtaposed clauses like (6) also have their Old English precursors, e.g. (11). Table 4 indicates that these were even more frequent than mirative complement constructions in Early Old English (850-950), taking up 56% of mirative uses (compared to a mere 3% at present, cf. Table 3).

(11) Þanon he welt þam gewealdleðerum ealle gesceaftu. Nis *nan wundor,* forþam ðe he is cyning & dryhten & æwelm & fruma & æ & wisdom & rihtwis dema
'Henceforth he rules all creation with reins. It is no wonder, for he is the king, the lord, the beginning, the origin, the law, wisdom, and the righteous judge.' (YCOE 940-960 Bo 39.136.23, cited in Van linden et al. 2016: 401)

Old English subperiods	Lexical use: Positive polarity						Grammaticalized/mirative use: *'no' wonder (nan, hwilc)*						Total	
	extraposition + compl		other		Total		extraposition + compl		juxta-position		Total			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
850-950	8	27.59	5	17.24	13	44.83	7	24.14	9	31.03	16	55.17	29	100
950-1150	28	33.73	18	21.69	46	55.42	31	37.35	6	7.23	37	44.58	83	100
Total	36	32.14	23	20.54	59	52.68	38	33.93	15	13.39	53	47.32	112	100

Table 4: Distribution of Old English lexical and grammatical uses of *(no) wonder* (cf. Van linden et al. 2016: 390, 404)

The Middle English period marks the advent of a new formal type of stance expression, viz. adverbials, which become predominant as of 1850 (see Table 5). The adverbials from the start come in two distinct subtypes, disjunct (12) and anaphoric adverbials (13), which inherited basic structural and discursive-rhetorical properties from the extraposition and juxtaposition pattern respectively (compare with (10) and (11) respectively). Disjunct adverbials, however, were also rarely found in medial and sentence-final position (for a detailed discussion, see Gentens et al. 2016).

(12) Ay, said the ideot, she is main good company, madam, *no wonder* you miss her. (CLMETEV 1740 Richardson, *Pamela*)

(13) the Master of the House ... came running up Stairs as fast as his legs would carry him, but being about to enter the door, he could not, *and no wonder*, since the oldest Man living never saw a larger pair of Horns than he had on his Head. (PPCEME 1684-1687 Samuel Pepys, *Penny merriments*)

	disjunct adverbial		anaphoric adverbial		elliptical extr. + overt *that*-clause		non-ellipt. extr. + overt/zero *that*-clause		juxta-position		Total	
	n	%	n	%	n	%	n	%	N	%	n	%
850-950	0	0.0	0	0.0	0	0.0	7	43.8	9	56.3	16	100
950-1150	0	0.0	0	0.0	0	0.0	31	83.8	6	16.2	37	100
1150-1350	1	5.9	0	0.0	0	0.0	12	70.6	4	23.5	17	100
1350-1500	1	3.8	1	3.8	5	19.2	11	42.3	8	30.8	26	100
1500-1710	1	7.7	1	7.7	2	15.4	9	69.2	0	0.0	13	100
1710-1780	19	25.3	4	5.3	14	18.7	38	50.7	0	0.0	75	100
1780-1850	17	20.7	19	23.2	28	34.1	17	20.7	1	1.2	82	100
1850-1920	36	38.3	17	18.1	21	22.3	18	19.1	2	2.1	94	100
PDE	164	38.3	71	16.6	48	11.2	132	30.8	13	3.0	428	100

Table 5: Distribution of types of formal realization of grammatical uses of *(it is) 'no' wonder* across time (Gentens et al. 2016: 136)

Table 5 presents the distributions of the two types of clausal mirative marker and of adverbial ones and how their frequencies developed across time relative to each other. Anaphoric adverbials ended up almost completely replacing the juxtaposition pattern in Modern and Present-day English. Disjunct adverbials rose in frequency to become an equal option to the extraposition pattern in Present-day English; Table 5 suggests that the elliptical form of the extraposition construction played a crucial role here (see Gentens et al. 2016).

4. The diachrony of *'no' chance* constructions

While *wonder* is a noun of Germanic stock, *chance* is a Romance loan that came into the language in the Middle English period (see Section 1). Similarly to Section 3, this section first discusses the Present-day English uses of *'no' chance* (Section 4.1), and then traces back the origins of these uses in Section 4.2.

4.1 *'No' chance* in Present-day English

Clausal constructions with *('no') chance* show a much greater variety than those with *('no') wonder* discussed in Section 3.1, both in terms of matrix constructions and in terms of formal type of complement. Consider (14) to (17).

(14) Meanwhile, Likud sources say they are still optimistic about their *chances* of putting together a narrow coalition with right-wing and religious parties. (WB 1990, SB2--900510)
(15) The gold medalists from the Delhi Games now stand no *chance* of a medal this time round. (WB 1990, SB2--900930)
(16) There's been speculation that Saddam Hussein might turn his military sights on Israel, in the hope of swinging Arab opinion firmly behind him. But the *chances* of effective Arab military support for such a strategy must be small, despite the outpourings of popular support amongst Palestinians and others. (WB 1990, SB2--900910)
(17) He has no doubt what the opinion would be: but the fact that the ruling came from an impartial body would give the Soviet leader the *chance* to recognise Lithuania's independence gracefully and uphold the law at the same time. (WB 1990, SB2--900405)

In (14), the complement of *chance(s)* takes the form of an *of*-gerundial clause, in (15) that of an *of*-prepositional phrase (PP) whose noun phrase complement refers to an entity (*a medal*), in (16) that of an *of*-PP whose noun phrase has an action noun as its head (*support*) and in (17) that of a *to*-infinitive.

In terms of the distinction between lexical and grammatical uses by Boye & Harder (2007, 2012), however, none of the examples above shows grammatical use. In (15) and (17), *chance* is incorporated in a larger unit with a semantically light verb to form a verbo-nominal pattern (VNP) (*stand a chance, give a chance*), but these do not show grammatical use, in (15) because it is the matrix itself (rather than the *of*-PP complement) that contains the salient information of the sentence. The pattern *give a chance* in (17) does not express a grammatical, qualificational meaning, but rather belongs to the realm of "caused modality" (Van linden & Brems 2017), which adds a causative operator to a basic modal meaning; this augmented event structure is clear from the corresponding paraphrase 'the fact that the ruling came from an impartial body would *make* it *possible* for the Soviet leader to recognise Lithuania's independence gracefully and uphold the law at the same time'. Such expressions of caused modality are never discourse-secondary (see Van linden & Brems 2017). In (14) and (16), in turn, *chance(s)* is not part of a recurrent VNP and cannot be argued to be used grammatically either, as it can occur in the focal position of a cleft (e.g. *it is their chances of putting together a narrow coalition with right-wing and religious parties that they are still optimistic about*). Uses like (14) and (16) are ranged with uses like (15) in the category lexical(ized) in Table 6, which presents an overview of the uses of *chance* in positive and negative polarity contexts in Present-day English.

Type of use	Positive polarity		Negative polarity		Total	
	n	%	n	%	n	%
Lexical(ized)	66	75.86	21	24.14	87	100
Caused-modal	34	82.93	7	17.07	41	100
Grammatical (polar-modal)	83	68.03	39	31.97	122	100
Total	183	73.20	67	26.80	250	100

Table 6: The types of use of *chance* and *'no' chance* in the spoken WB data

It is clear from Table 6 that *chance* predominantly occurs in positive polarity contexts (73%), in which it differs markedly from *wonder*. The share of *'no' chance* is even smaller in the lexical(ized) and caused-modal uses.

Let us now turn to the set of uses that are grammatical in Boye & Harder's (2007, 2012) sense of being ancillary and as such discursively secondary in relation to the complement they combine with. These items invariably have a modal meaning, and represent a good half of the items looked at (51%). In the majority of these examples *chance* is part of a VNP (clausal expressions like *have no chance*, *chances are*, *there is no chance*). In terms of semantic subtypes, VNPs with *('no') chance* are found to express epistemic (18) and dynamic (19) expressions, or expressions vague between these two (20).

(18) According to Mr Yeltsin, these changes would mean the creation of a parliamentary party which could work with other socialist groups in a union of democratic forces. But there is *little chance* the Russian President's arguments will be accepted. (WB 1990, SB2--900706)
(19) If he had a dropsy fit sitting there, I would*n't* have a *chance* to grab him because he goes that quick down. (WB 1995, SB3--001272)
(20) they said er equal opportunities welcome but as soon you've told them you've got problems er that you know you you can tell er by their reactions that you you've got *no chance* of getting a job you know. (WB 1991, SB1----0216)

In (18), the clause *there is little chance* indicates the reported speaker's epistemic assessment: it is highly unlikely that Yeltsin's arguments will be accepted (cf. Schmid's (2000: 232) description of a similar example with *chance* as an epistemic modal shell noun). Note that the meaning of unlikelihood is not the main point of uttering (18); this meaning is always ancillary to the propositional content it applies to. The same goes for (19) and (20). In (19), the VNP *not have a chance* indicates inability of the subject participant imposed by the situation (cf. 'opportunity' shell nouns in Schmid (2000: 254)): because the *he*-person falls down so quickly in a dropsy fit, the *I*-person would not be able to grab him. Note that (19) does not involve an attitudinal assessment, and thus does not qualify as a stance construction. In fact, dynamic modal meaning has been argued to be a situating rather than an attitudinal category (cf. Nuyts 2006; Van linden 2012: 12-16). Example (20), finally, is vague between epistemic and dynamic meaning; it expresses 'you are unable to get a job' and 'you are unlikely to get a job' at the same time.

In just 3 out of 250 examples, *no chance* is not incorporated in a larger unit, and is used as an anaphoric adverbial which serves as a response to a preceding speech act, cf. (21).

(21) "I mean have you got children John?" — "Yes." — "How many have you got?" — "Four." — "Four and I bet you wouldn't put any of yours in boarding school eh?" — "*No chance*." (WB 1991, SB1----0196)

In (21), *no chance* forms an emphatic variant to the negative response item *no* (cf. Huddleston & Pullum 2002: 849; Brems & Van linden 2018), with additional modal colouring, in this case epistemic overtones ('it is impossible that I would put any of my children in boarding schools').

Table 7 indicates the quantitative instantiation of the formal and semantic subtypes of the 122 grammatical expressions with *chance* in the synchronic 250-hit sample studied.

Type of grammatical meaning	Clausal expressions + complement				Adverbials		Total	
	Positive polarity		Negative polarity		Negative polarity			
	n	%	n	%	n	%	n	%
Epistemic	35	71.43	14	28.57	—	—	49	100
Epistemic-polar	—	—	—	—	3	100	3	100
Epistemic-dynamic	10	71.43	4	28.57	—	—	14	100
Dynamic	38	67.86	18	32.14	—	—	56	100
Total	83	68.03	36	29.51	3	2.46	122	100

Table 7: The types of grammatical use of *chance* and *'no' chance* in the spoken WB data

As the 250-hit sample discussed above did not include any disjunct adverbial uses of *no chance* parallel to such examples of *no wonder* as (7) above, I analysed an additional 369-hit dataset featuring *no chance* immediately preceded by a punctuation mark (see Section 2), from which 99 examples had to be discarded, for example because *no chance* appeared between quotation marks in a clausal expression (e.g. *they have "no chance" of beating Labour* (WB)). Table 8 shows that only 7 instances from this exhaustive sample could qualify as disjunct adverbials. Examples are in (22) and (23).

(22) "I told you, I don't know what I want to do." — "*No chance* you'll give the party a miss, and come clubbing with me instead?" (WB 2001, BB--F012160)

(23) My coffee is always heavily laced with cream and sugar. Mother takes hers black. Unexpectedly he grinned. "*No chance* I'll get the wrong cup." (WB 1993, BU-iF931229)

Construction type	n	%
with *to*-infinitive complement	23	8.52
with *of*-gerundial complement	32	11.85
with *of*-PP complement	48	17.78
with *for*-PP complement	10	3.70
with *with*-PP complement	15	5.56
with *that*-clause [overt *that*]	5	1.85
with *that*-clause [*that*-omission] or disjunct adverbial	7	2.59
anaphoric adverbial	130	48.15
Total	270	100

Table 8: Construction types featuring sentence-initial *no chance* in the WB data

Four out of seven examples are interrogatives like (22), in which the absence of inversion suggests that sentence-initial *no chance* is an elliptical rendering of *is there no chance* complemented by a *that*-clause with omitted *that* rather than a disjunct adverbial. The other three examples are similar to (23), for which there is no formal property going against a disjunct analysis. That *no chance* is discourse secondary to the remainder of the sentence becomes clear when we consider plausible echo questions in reaction to (23): 'won't you?' (targeting the propositional content *no chance* qualifies) follows on more naturally than 'isn't there?'. The circumstance that both elements constituting the 'adverbial', *no* and *chance*, can receive tonic prominence (pc John Dubois) does not invalidate the argument, as focalizing *no* in *no chance* would serve a contrastive focus function, invoking contrast with and highlighting *no* in relation to its paradigmatic alternatives like *little*, *small*, or *much*; it would not lend focus to *no* in relation to its syntagmatic context (cf. Boye & Harder 2012: 17-18).

In conclusion, while grammatical uses of clauses containing *('no') chance* are rather frequent, their adverbial counterparts are infrequent and invariably anaphoric in the 250-hit sample studied. In fact, the 550 million-word corpus consulted contains only three examples of *no chance* used as a disjunct adverbial, which may as well be analysed as elliptical matrices with zero *that*-clauses (cf. *no wonder* disjuncts). Compared to *'no' wonder*, this scarcity of adverbials might be explained by the fact that grammatical uses of *'no' chance* are a rather recent phenomenon, as shown in the next section, and may not yet have fully grammaticalized.

4.2 The historical development of *'no' chance*

This section discusses the diachronic development of the various constructions with *'no' chance* recorded in Present-day English. In the Middle English data retrieved from PPCME2, all seven occurrences of *chance* (see Table 2 in Section 2) show the first meaning of the noun listed in the OED (see Section 1), referring to the falling out of events (note that Old French *cheance* itself goes back to the Latin verb *caděre* 'fall', OED). In only one example, given in (24), *chance* is used in a verbo-nominal pattern, viz. with *take*; the first OED definition of the pattern *to take one's chance* (s.v. *chance* n. II.11a) applies here: 'to take what may befall one, submit to whatever may happen; to 'risk it''.

(24) Mordrede hade assemblede al þe folc of Cornwayle, and hade peple wiþoute nombre, & wist þat Arthure Was comyng. He hade leuer to Dye and tak *his chaunce*, þan lenger flee, and abode and ȝaf an harde bataile to Kyng Arthur & to his peple
'Mordred had assembled all the people of Cornwall, and had countless people, and knew that Arthur was coming. He had rather die and take his chance, than flee any longer, and (he) waited and gave a hard battle to king Arthur and to his people.' (PPCME, *c*1400 Brut-1333 (Rwl B.171) 90/11)

While in (24) *chance* does not show a complement, and arguably does not function as a shell noun (cf. Schmid 2000: 3-19), it combines with an *of*-PP in one example, presented in (25), in which the PP-complement specifies the content of *chance*.

(25) A man or a womman, affraied wiþ any sodeyn *chaunce* of fiir, or of mans deeþ, or what elles þat it be, sodenly in þe heiȝt of his speryt he is dreuyn upon hast & upon nede for to crie or for to prey after help.
'A man or woman, frightened by any sudden chance of fire, or of man's death, or what else it may be, suddenly in the height of his spirit he is driven upon haste and upon need to cry or to pray for help.' (PPCME *a*1425(?*a*1400) Cloud (Hrl 674) 74)

The Early Modern English data present us with the first clausal complement constructions, the most common pattern of which is illustrated in (26), schematically *it* BE [possessive CHANCE] + *to*-infinitive. In fact, (26) forms an extraposed variant of example (5) given in Section 1 (schematically [possessive CHANCE] BE + *to*-infinitive). In both examples, *chance* still retains its original meaning; the meaning of the VNPs at issue is one of happenstance, as (26) can be paraphrased as 'it was his master's hap, fortune to die'. This meaning has also been identified as the original meaning of the epistemic adverbs *maybe*, *perhaps* and *perchance* by López-Couso & Méndez-Naya (2017).

(26) After that Iacke had long led this pleasant life, beeing though hee were but poore in good estimation; it was his Masters *chance* to die, and his Dame to bee a Widow, who was a very comely auncient Woman, and of reasonable Wealth. (PPCEME 1619 Deloney, *Jack of Newbury*)

Table 9 presents an overview of the patterns found with *chance* in the two Early Modern English corpora consulted for this period. Out of the 16 cases of happenstance constructions, only one case shows negative polarity (*it was not my chance to hear …*). While the pattern with a *when*-clause included in Table 9 is also negative (*it is not chance or weakness when it* [i.e. infirmity, AVL] *appears at first*), it does not represent a happenstance nor modal context (*chance* is discourse-primary here). Rather, it is in the additional dataset from CEMET that the earliest modal expression with *chance* is observed, featuring a new pattern with light verb *have* and an *of*-gerundial complement, viz. (27), which shows positive polarity. This pattern of *have* + noun + *of*-gerundial was already around in dynamic modal expressions in that period, e.g. with *need* (Van linden et al. 2011).

(27) The right path is that by which he has the best *chance* of adding to the stock of knowledge in the world something worth labouring for (CEMET 1605 Bacon, *The advancement of learning*)

In (27) *chance* no longer refers to the falling out of events (which sense does not fit with a verb like *have*), but rather shows the more abstract meaning of "[a]n opportunity that comes in any one's way" (OED s.v. *chance* n. I.4a). As (27) can be paraphrased by both 'by which he is best able to add something' and 'by which he is most likely to add something', I conclude that the earliest modal meaning acquired by VNPs with *chance* is vague between dynamic and epistemic meaning. Because of this dynamic component *chance* cannot be held to take part in stance constructions in Early Modern English yet (see Section 4.1). Because of the epistemic component, in turn, we can say that *chance* underwent subjectification (cf. Traugott 1989), since rather than describing a situation as the (objective) falling out of events, *chance* now relates to the speaker's subjective assessment of the situation in terms of likelihood. In any case, it is part of a grammatical expression in the sense of Boye & Harder (2012), as *having a chance* in (27) is dependent on a situation such as *add something* to which it can be discourse-secondary.

Pattern with complement	1500-1570	1570-1640		1640-1710		TOTAL	
	PPCEME	PPCEME	CEMET	PPCEME	CEMET	PPCEME	CEMET
it BE [poss CHANCE] + *to*-inf	2	3	4	—	2	5	6
[poss CHANCE] BE + *to*-inf	1	—	3	—	1	1	4
HAVE CHANCE + *of* V-ing	—	—	1	—	—	—	1
it BE (not) CHANCE + *when*-clause	—	—	—	1	—	1	—
of-PP complement	8	—	10	1	4	9	14
no complement	66	33	143	20	81	119	224
TOTAL	77	36	161	22	88	135	249

Table 9: Patterns and complement types with *chance* in Early Modern English

In terms of matrix constructions, Table 10 indicates that the Early Modern English data already show a number of the patterns found in the Present-day English data-set, viz. in the last three rows. The first five rows contain patterns in which *chance* still has its original sense, as in (26). Whenever a cell is ticked, this means that the matrix construction is attested, but not necessarily with a complement. For instance, the earliest PPCEME data contain two examples with HAVE (det) CHANCE, but without complements of the type in (19) or (27). Likewise, the existential construction already appears in CEMET (1640-1710), but without complements like in (18). Interestingly, in such cases as (28) below, *chance* still shows lexical use. The main point of (28) is conveying the existence of a chance.

(28) Had heaven and nature added to that love all the perfections that adorn our sex, it had availed me nothing in your soul: there is a *chance* in love as well as life, and often the most unworthy are preferred. (CEMET 1684 Behn, *Love letters between a nobleman and his sister*)

Matrix pattern	1500-1570	1570-1640		1640-1710	
	PPCEME	PPCEME	CEMET	PPCEME	CEMET
(det) CHANCE HAPPEN/ BETIDE/ FORTUNE	✓	✓	—	✓	—
(det) CHANCE COME	✓	—	—	—	—
(det) CHANCE BE	✓	—	✓	—	✓
it BE (det) CHANCE	✓	✓	✓	✓	✓
X BE (det) CHANCE	✓	✓	✓	—	—
HAVE (det) CHANCE	✓	—	✓	—	—
there BE (det) CHANCE	—	—	—	—	✓
TAKE (det) CHANCE	—	—	✓	—	✓

Table 10: Matrix constructions with *chance* in Early Modern English

The Late Modern English period witnesses the emergence of new VNPs with clausal complements as well as full blown stance constructions with *chance* expressing epistemic modality. The former include examples like (29)-(30) below, in which HAVE (det) CHANCE combines with a *to*-infinitive. This new pattern may have appeared by analogy with the semantically close pattern of HAVE (det) WAY + *to*-infinitive, which already cropped up in the CEMET corpus and is also attested us in the CLMETEV data (Davidse et al. 2014). At a more schematic level, the pattern of *have* + noun + *to*-infinitive was already firmly established back then, as it is found with considerable frequency with *need* as of Middle English (cf. Van linden et al. 2011).

(29) as they all spoke together, no man had *chance* to be heard, unless he could bawl louder than his fellows. (CLMETEV 1771 Smollett, *The expedition of Humphrey Clinker*)
(30) what specialties of treason, stratagem, aimed or aimless endeavour towards mischief, no party living […] has now any *chance* to know. Camille's conjecture is the likeliest […] (CLMETEV 1837 Carlyle, *The French revolution*)

What is striking is that the earliest occurrences of this new pattern show negative polarity (in (28)-(29) expressed in the subject participant, which has been underlined). Semantically, these examples are similar to the one with HAVE (det) CHANCE + *of*-gerundial in (27), i.e. vague between dynamic and epistemic meaning, just like the paraphrase for (29): 'no man could be heard'. Interestingly, the latter pattern is also found with purely epistemic meaning in Late Modern English, as in (31), which can be paraphrased as 'they might have a month of good weather'. As in (31) the speaker uses the VNP with *chance* to express an epistemic commitment to a propositional content, with that content being the most salient information, the example is taken to show grammatical use (cf. Boye & Harder 2007). This shift from vague to purely epistemic meaning can be accounted for by the parameter of control. While in the semantically vague cases in (29) and (30) the grammatical subject still has (limited) control over the realization of the modalized event (e.g. by speaking louder in (29), by conducting inquiries in (30)), which allows for a (participant-imposed) ability reading, the subject in (31) has no control whatsoever, since the modalized event concerns a meteorological state.

(31) I have but just begun to like London, and to be settled in an agreeable set of people, and now they are going to wander all over the kingdom. Because they have some *chance* of having a month of good weather they will bury themselves three more in bad. (CLMETEV 1735-1748 Walpole, *Letters*)

Other instances of full blown stance constructions with *chance* emerge in 1780-1850 in patterns that feature *that*-clause complements, e.g. (32)-(33). Example (32) instantiates the *there* BE (det) CHANCE + *that*-clause pattern, and (33) the (det) CHANCE BE + *that*-clause pattern (see Table 11). Both examples express the speaker's assessment of a propositional content in terms of likelihood; (32) shows near-negative polarity, and (33) positive polarity. While the former pattern had already been around with another epistemic shell noun, viz. *doubt*, as of Middle English (cf. Davidse et al. 2015), the latter seems to be a Late Modern English innovation, also attested with the semantically similar noun *odds*, e.g. *I… shall lose my Match, and as to Harriot, why, the* Odds *are that I lose my Match there too* (OED 1761 Colman, *Jealous Wife*).[6]

(32) "I fear, then," cried Cecilia, not very angry at this speech, "there is but little *chance* your ladyship should like either of us." "O yes, I do! I like odd people of all things." (CLMETEV 1782 Burney, *Cecilia*)
(33) Whether it [i.e. Carcel de la Corte] was originally intended for the purpose to which it is at present applied [i.e. a prison], I have no opportunity of knowing. The *chances*, however, are, that it was not. (CLMETEV 1842 Borrow, *The Bible in Spain*)

[6] On the constructions *(the) odds are (that)* and *(the) chances are (that)*, see López-Couso & Méndez-Naya 2019 and 2020, respectively.

Table 11 surveys the most common matrix patterns found with *chance* in Late Modern English, ordered in terms of decreasing frequency, and the formal types of complement they take. The happenstance construction (see *it* BE (det) CHANCE + *to*-infinitive in Table 11) is clearly on the decline (and has by now become archaic). Compared with the Early Modern English data in Tables 9 and 10, the matrices *there* BE (det) CHANCE and TAKE (det) CHANCE now appear with clausal complements, and HAVE (det) CHANCE has extended its range of complement types. In addition, Table 11 includes a number of newly emerged matrix patterns (e.g. (33)). A notable example is elliptical '*no* CHANCE', which only takes prepositional complements in the Late Modern English data studied.

Matrix pattern	*to*-infinitive	*that*-clause	*of/for* V-ing	*of/for*-PP (action)	No complement	TOTAL
HAVE (det) CHANCE	7	—	56	15	32	110
there BE (det) CHANCE	*(for* NP) 1	5	21	7	8	42
GIVE (det) CHANCE	5	—	8	3	9	25
(det) CHANCE BE	8	5	—	—	7	20
TAKE (det) CHANCE	—	—	4	3	10	17
STAND (det) CHANCE	—	—	5	1	4	10
it BE (det) CHANCE	2	2	—	—	5	9
SEE (det) CHANCE	—	—	3	1	0	4
elliptical *no* CHANCE	—	—	—	2	0	2

Table 11: The most frequent matrix patterns and complement types with *chance* in CLMETEV

The verbo-nominal patterns with complements in Early Modern English showed predominantly positive polarity, and Table 12 indicates that the same holds for those in Late Modern English. Negative polarity peaks in 1780-1850 to 43%; this can be put down to the emergence of two patterns that favour negative polarity, viz. SEE *no* CHANCE (e.g. (34), which expresses dynamic modal meaning) and *there* BE (det) CHANCE (cf. (32)). About half of the instances of HAVE (det) CHANCE in that period show negative polarity as well.

(34) for we had not sailed above a league from Epidamnum before a dreadful storm arose, which continued with such violence that the sailors, seeing no *chance* of saving the ship, crowded into the boat to save their own lives (CLMETEV 1807 Lamb, *Tales from Shakespeare*)

VNP with complement	1710-1780		1780-1850		1850-1920	
	n	%	n	%	n	%
Positive polarity	20	66.67	43	56.58	46	71.88
Negative polarity	10	33.33	33	43.42	18	28.13
TOTAL	30 (/174)	100	76 (/250)	100	64 (/250)	100

Table 12: Polarity values of VNPs with *chance* + complements in Late Modern English

Summarizing the discussion above, while *chance* is recorded in the corpora consulted as of Middle English, it appears in stance constructions only in Late Modern English, after undergoing semantic abstraction and subjectification. Before it is used in clausal expressions of epistemic modality, it is observed in happenstance constructions first and later on in dynamic-epistemic expressions – with matrix patterns distinct from those of the happenstance constructions – in Early Modern English. The historical data do not include any adverbial realizations, and just two elliptical structures of *no chance* complemented by prepositional phrases.

5. Concluding discussion

This paper started from the functional and structural similarity of stance constructions with *'no' wonder* and *'no' chance* in Present-day English, and set out to compare their diachronic development. Synchronically, these two *'no'* + shell noun strings take part in the same formal types of grammatical stance construction as defined by Biber et al. (1999: 969-970), i.e. as main clauses taking complements that code the propositions in their scope, cf. (1a) and (2a), and as stance adverbials, with

the propositions in their scope coded as independent clauses, cf. (1b) and (2b). Another similarity is that the complement-taking predicate clauses (CTP-clauses) with both nouns can show two types of use in the sense of Boye & Harder (2007, 2012), i.e. lexical and grammatical use. Whereas in the first type of use the CTP-clause contains the most salient information, with the content coded by the complement as discourse-secondary, in the latter use it is the other way around, with the complement carrying the most important information, which the CTP-clause overlays with a speaker-related qualificational meaning, thus functioning as an interpersonal modifier (McGregor 1997: 64-73). Adverbial stance expressions invariably show grammatical use; they are always discourse-secondary.

The two strings studied were also found to differ from each other in Present-day English. An obvious difference relates to the type of attitudinal assessment coded in their grammatical uses, with *'no' wonder* strings expressing mirative qualification and *'no' chance* strings conveying epistemic qualification. On closer examination of random samples of corpus data, it was also observed that the *wonder* data contained far larger shares of grammatical uses than the *chance* data (86% vs. 51% respectively), as well as larger shares of negative polarity strings (86% vs. 27% respectively). In addition, the corpus study pointed to a number of structural differences. The *'no' wonder* data show two types of clausal realization – complement patterns and juxtaposed clauses – which themselves display little variation in matrix patterns (and complement types for the former), as well as two types of adverbial realization, i.e. disjunct and anaphoric adverbials. The *('no') chance* data, by contrast, show one basic type of clausal realization, i.e. complement patterns, and so far mainly anaphoric adverbials; disjunct adverbials are very infrequent as well as structurally ambiguous (like the *no wonder* disjuncts). This scarcity of adverbials was put into perspective by referring to the difference in time-depth of the two grammaticalization paths concerned. The complement patterns with *'no' chance*, in turn, show a far greater variety in matrix constructions (e.g. HAVE (det) CHANCE, (det) CHANCE BE, *there* BE (det) CHANCE) and complement types (*that*-clauses, *to*-infinitives, *of*-gerundials) than the *'no' wonder* data. Quantitatively, stance constructions with *'no' wonder* are predominantly realized by adverbials (55%), while this formal type accounts for a mere 2.5% of the modal uses with *chance*, with 97.5% taking the form of complement patterns. Thus, scratching the surface of the functional and structural similarity of stance constructions with *'no' wonder* and *'no' chance* in Present-day English, this paper found a considerable number of differences between the two strings studied.

In line with the synchronic differences between the *'no' wonder* and *'no' chance* data, the historical data revealed distinct developments. *'No' wonder* is observed in mirative clausal structures as of Old English, and in both disjunct and anaphoric adverbials as of Middle English. Note that *no doubt* also showed disjunct uses in Middle English already (Davidse et al. 2015: 36-38). The noun *chance*, by contrast, was borrowed from Old French into Middle English, and first occurred in complement constructions in Early Modern English in its original meaning referring to the falling out of events, i.e. in happenstance contexts (e.g. *it was my chance to* …), typically showing positive polarity; this use has now become obsolete. Modal uses appear in complement constructions with a different matrix pattern still in Early Modern English (HAVE (det) CHANCE + *of*-gerundial), and develop into epistemic stance constructions in Late Modern English, when yet distinct matrix patterns emerge functioning as epistemic qualifiers. For every new pattern *chance* is found in, there already was a constructional template available in the language. Interestingly, the first patterns showing dynamic-epistemic meaning (cf. (27), (29), (30)) were structurally identical to patterns with *need* and *way* expressing dynamic modal meaning (cf. Van linden et al. 2011; Davidse et al. 2014), while the first patterns conveying epistemic meaning (cf. (32), (33)) had the same constructional make-up as patterns with *doubt* and *odds*, which also belong to the epistemic realm. These observations thus point to analogy with other semiotic nouns having been at work at both the structural and modal-semantic plane.

In describing the diachrony of the *'no' wonder* and *'no' chance* strings, this paper applied Boye & Harder's (2007, 2012) theory of grammatical status and grammaticalization, in which discourse prominence takes centre stage. While it verified ancillary status for the examples discussed, it has kept silent about a crucial aspect of grammatical expressions, i.e. they are ancillary *by linguistic convention*. This aspect remains hard to operationalize, and the role of frequency needs further investigation.

A last aspect to discuss is the role of negative polarity in the development of grammatical meaning with semiotic nouns. Remember that for the *wonder* data, the shift from lexical to grammatical uses

took place in negative polarity contexts in Old English complement constructions (Van linden et al. 2016; Gentens et al. 2016), which explains the diachronically stable predominance of negative polarity strings. Negation also triggered the emergence of grammatical uses in the case of *(no) doubt* (Davidse et al. 2015), *(no) question* (Davidse & De Wolf 2012) and *(no) way* (Davidse et al. 2014). By contrast, in the case of *chance*, while some matrices favour negative polarity contexts, it cannot be argued that negative polarity triggered the emergence of modal meaning, viz. dynamic-epistemic meaning first, and later on purely epistemic meaning. We also observed a low percentage of *'no' chance* in the Present-day English data (27%, cf. above). The same goes for patterns with *(no) need*, although the data show a clear tendency to express more abstract modal meanings (e.g. deontic rather than dynamic) when combined with negative polarity (Van linden et al. 2011). The question of why negation is a triggering or facilitating factor in some but not in other lemma-specific grammaticalization paths is left here for future research.

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