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Reading the intentions of *be going to*. On the subjectification of future markers

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Abstract: This paper provides a detailed corpus-based account of the formal and functional changes that *be going to* underwent in Late Modern English. Despite *be going to*'s popularity, such studies remain rare for this period, in which the construction's grammaticalization went through a second phase. Our analysis shows that the first half of the eighteenth century witnessed a shift from intention to prediction, which originated in contexts with third person subjects. Reporting the intention of others generally involves a certain amount of guesswork, which eventually resulted in the creation of an additional, epistemic layer of prediction, reinforced by the gradual extension of *be going to* to express non-imminent future situations. It is argued that this shift involves an increase in subjectivity, as the emphasis gradually moved away from the grammatical subject to the speaker: what mattered was no longer the intentions of the subject, but the knowledge of the speaker about them. Attention is also drawn to parallel developments in other future markers, particularly *will*. Interestingly, and in spite of significant differences, each of these went through an intermediary stage that involved past tense uses with reference to a future in the past, which was already known to the speaker.

Keywords: grammaticalization, subjectification, future markers, Late Modern English

1 Introduction

This article provides a detailed account of the formal, functional and semantic changes that *be going to* underwent in Late Modern English. *Be going to* may well be considered a classic within the domain of grammaticalization studies: the development from a verb of movement to an auxiliary of future tense is widely attested cross-linguistically, with no other case having been debated so

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intensely. Despite its fame, the exact nature of the development has rarely been investigated extensively on the basis of a large corpus. An exception is Hilpert (2008), but his quantitative analysis is largely limited to a (highly valuable) distinctive collexeme analysis, and refrains from going into detailed feature analysis of the data. Other previous research was conducted either on smaller existing corpora (e.g. Danchev and Kytö 1994; Nesselhauf 2007, 2010, 2012; Traugott 2012), or on a (non-exhaustive) collection of the work of literary authors such as Shakespeare and Dickens (e.g. Disney 2009b).

In addition, most research on the history of the *be going to* has focused on the behaviour of the construction in Early Modern English: on the stages before and immediately after the start of the grammaticalization process, when the lexical verb *to go* combined with the preposition *to* and the progressive into a construction expressing first ‘motion with intention’, as in (1), and afterwards ‘motionless intention’, as in (2) (e.g. Pertejo 1999; Hilpert 2008; Traugott 2012).

- (1) *I'm going to the market to buy bananas.*
- (2) *I'm going to read your work tomorrow.*

By contrast, the further developments of the construction in Late Modern English have been relatively underinvestigated (e.g. Disney 2009a, b; Nesselhauf 2012). The present article seeks to fill this gap in the literature, in providing an extensive, corpus-based account of the changes *be going to* undergoes from 1710 to 1920. It will be argued that throughout the eighteenth and nineteenth centuries, *be going to* takes part in a process of subjectification (as defined in Traugott 2010), as its early-eighteenth century meaning of intention becomes gradually overpowered by a new reading of prediction. This new epistemic reading is more subjective in nature, in the sense that it puts less emphasis on the intentions of the subject and more emphasis on the speaker's assessment of that subject's intentions. While Traugott herself discusses the acquisition of predictive function by *be going to* as an instance of subjectification (2010: 36), some important gaps remain in our knowledge of how this acquisition came about. Secondly, our analysis aims at enhancing our understanding of the development of markers of the future in general. Specifically, it will reveal a previously unnoticed parallelism between the development of *be going to* and that of other future auxiliaries such as *will* and *shall* (Traugott 1989), or the vulgar Latin periphrastic future with *habeo* (Benveniste 1968). In each of them, the

development of future has been argued to proceed via an intermediate stage of future-in-the-past.

It is commonly assumed that both epistemic modality and future tense often originate in deontic meanings (e. g. Heine and Kuteva 2002: 142–143),¹ and that the development of future readings is closely connected with the rise of epistemic meanings (Traugott 1989). Given that it is hard, arguably even impossible, to know exactly what will happen in the future, a claim about the future is likely to contain some traces of uncertainty. In that respect, it is not surprising that future and epistemic auxiliaries often spring from the same source constructions. The two main future markers in English, *will* and *shall*, are examples of this shift from verbs with deontic meaning to future markers as they developed their semantics of futurity out of their Old English deontic meanings. Although *be going to* did not have a deontic meaning to begin with, the grammaticalization paths of *will* and *shall* might still be insightful with respect to the trajectory of *be going to*.

The article is structured in 7 sections. Section 2 defines the central notion of subjectification as it will be used throughout this paper. Next, we briefly summarize previous research on the later stages of the grammaticalization process of *be going to* itself (Section 3). In Section 4 we formulate four hypotheses that draw on the previous literature presented in Sections 2–4: The shift from intention to prediction is expected to involve (i) a relative increase of third person subjects and of non-imminent infinitival complements; (ii) an increase in questions on the one hand and a decrease in explicit markers of the speakers' (un)certainty on the other, reflecting that this epistemic dimension of the uncertainty associated with reporting someone else's intentions is increasingly semanticized in *be going to*; (iii) an increase in both the number of non-agentive (and even inanimate) subjects and the number of non-intentional infinitival complements, and, finally (iv) a decrease in the relative frequency of the past tense – for which the future is already known, accompanied by an increase in present tense uses representing absolute future. The corpus used to test these hypotheses is described in Section 6. Section 7 constitutes the analysis of the results. This is followed by a discussion of how general the pathway of subjectification described for *be going to* is for the grammaticalization of future markers from different source constructions, showing that the relative before absolute future principle is recurrent in various such grammaticalization processes, and that other aspects, such as marking of imminence and source specification to a certain extent seem to recur as well. Our conclusions are formulated in Section 8.

¹ For a counterview, however, see Narrog 2010.

2 Subjectification

A pervasive mechanism of semantic change is the process of subjectification, by which a construction acquires coded subjective meaning (Traugott 2010: 33).² Subjectivity here is contrasted with (and diachronically stems from) objectivity. Whereas semantically objective linguistic items express meanings that belong to the ‘external world’, semantically subjective linguistic items express the speaker’s attitude or viewpoint towards that objective world. It is this interpretation of subjectivity that underlies the diachronic process of subjectification. Subjectification, as Traugott (2003) understands it, is a “mechanism whereby meanings come over time to encode or externalize the SP[eaker]/W[riter]’s perspectives and attitudes as constrained by the communicative world of the speech event, rather than by the so-called ‘real-world’ characteristics of the event or situation referred to” (Traugott 2003: 126). In this sense, subjectification refers to a linguistic item’s semantic shift from objective to subjective meaning.

Crucially, subjectification is a case of semanticization, and a subjectified construction needs to be distinguished from subjective language use more generally, which refers to the way in which natural languages enable the speaker to express themselves and their own attitudes and beliefs (Lyons 1982: 102). In the sense that any selection from the lexical or grammatical repertoire pass through the speaker, all language is subjective by definition (Cuyckens et al. 2010: 9). This general sense of subjectivity is pragmatic in nature, not semantic. When a construction subjectifies, subjective aspects of meaning, which were at first only present in its context, become coded meanings of that construction. This pathway from contextual/pragmatic to semantic subjectivity hinges upon the process of Strengthening of Information (or Informativeness). Some contexts give rise to (conversational) implicature and invited inference, the processes whereby speakers mean more than they say and hearers infer more than what is said (Traugott 2010: 32). If specific contexts frequently lead to specific inferences, the implicated or inferred meaning may become conventionalized. From that moment on, the hearer does not have to rely on the context anymore to make the inference: its meaning has become part of the semantics of the subjectified item itself. A famous example of this evolution is the *post hoc ergo propter hoc* inference, which motivates the change of many temporal conjunctions into causal conjunctions cross-linguistically, such as the English conjunction *since*, which developed its causal meaning out of a temporal one.

² In the literature, the terms ‘subjectivity’ and ‘subjectification’ are used in a wide array of meanings that are not always entirely compatible (for a discussion, see Nuyts 2012). In the present paper, it is Traugott’s view of subjectivity that will be adhered to.

3 *Be going to*: From intention to prediction

The list of publications about the history of *be going to* is extensive (Perez 1990; Pertejo 1999; Danchev and Kytö 1994; Hilpert 2008; Garrett 2012; Traugott 2012, 2015). Yet the number of corpus-based studies that focus on the eighteenth and nineteenth centuries is much more limited, and essentially restricted to Disney (2009a, b) and Nesselhauf (2007, 2010, 2012).

Disney (2009b) provides a detailed discussion of what might have happened to the construction after the grammaticalization process had set in and the semantics of intention had been adopted from the context and had become the primary meaning of the construction, more defining now than the semantics of motion. Disney adopts the traditional perspective on the source construction of *be going to* as he believes it to stem from the formally identical construction expressing first location (lexical *be going to* + *place*) and afterwards motion-with-purpose (lexical *be going to* (+ *place*) + *inf.*).

Disney uses the cognitive concept of ‘domain matrix’ to represent the cognitive status of the various functions of *be going to* in Present-Day English. Figure 1 visualises this domain matrix.

The underlying assumption is that various semantic layers co-exist in our mental representation of *be going to*. In using this construction, we may variably put emphasis on one or more of the dimensions present, such as motion (*where are you going to? I’m going to the shop*) or motion + intention (*I am going to visit her*, said as the speaker is leaving), and so on. From a diachronic point of view, while some layers may be more prominent than others at some points and in some uses, most have been present from the start. Only the two that are underlined (*Non-motion intention* and *Non-motion future*) are truly the novel product of the grammaticalization process.

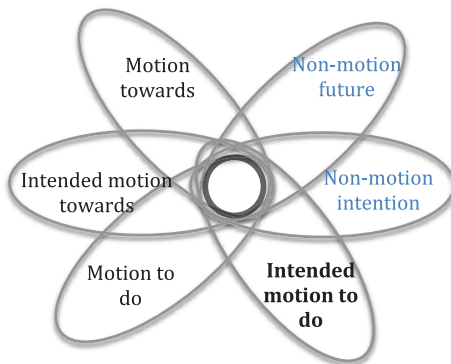


Figure 1: Domain matrix of *be going to* (adapted from Disney 2009a).

This grammaticalization of *be going to*, according to Disney's view, is a process in which the lexical core is gradually stripped out of these layers (a phenomenon also known as 'semantic bleaching', cf. Heine 1993: 89), eventually leading to the emergence of certain new layers ('pragmatic enrichment', cf. Hopper and Traugott 2003: 94). The first layer that got lost is the aspect of motion. On the basis of data drawn from a collection of all texts written by Shakespeare (1580–1616) and the third part of the Helsinki Corpus (1640–1710), Disney argues that the shift from 'movement-with-purpose' to 'non-motional purpose', or simply 'intention' occurred around the middle of the seventeenth century. The number of these new uses rose quickly in the second half of the seventeenth century, and shortly afterwards the next semantic layer started to weaken. This layer is constituted by agentivity, the loss of which resulted in a meaning of prediction rather than intention. The loss of agentivity was attested first in imminent contexts, where *be going to* was synonymous to *be about to* (3).

- (3) *As she **was going to** breathe her last, she saw me grieve as much as if I had been her own Sone.* (EBO a62309) (Disney 2009b: 69)

It is especially the transition from intention to prediction that Disney zooms in on. He looks into the matter by means of data retrieved from a collection of four novels by Dickens, written between 1838 and 1861 and containing 348 instances of *be going to*. Of those instances, 242 (70%) did not involve motion anymore: 228 of them expressed intention; the other 16 attestations expressed either prediction or were ambiguous between intention and prediction.

Disney observed some formal characteristics of both those instances in which intention is still a prominent feature and those that serve as bridging contexts between intention and prediction. A feature of the construction expressing intention is the general absence of negative and interrogative uses of *be going to* in the past tense because such "past tense uses report an action someone intended to do, but did not, and there is unlikely to be many occasions when this is a negative or is questioned; it is merely a narrative device. On the other hand, future intentions are often negative and one's intentions are frequently questioned" (72).

A feature of the instances that are ambiguous between intention and prediction (or even express prediction altogether) is that they typically have a lower degree of agentivity, as in (4a). Note that in this respect, the occasional suggestion that the passive played an important role in the grammaticalization process of *be going to* (e. g. Garrett 2012; Nesselhauf 2012; Traugott 2012) needs qualification. While contexts of lower agentivity are quite often passive, not all passives belong to this category. In fact, by far the most frequent pattern to be found in the passive in our data is *be going to be married*, whose subjects are

generally in control of their action (even if choice was perhaps less decisive than now), and are actually also often in motion, heading towards the church.

- (4a) *‘I won’t hear of it. You are to be a proctor. We’re **not going to** have any knockings on the head in THIS family, if you please, sir.’* (David Copperfield Ch.35; Disney 2009b: 73)
- (4b) *‘I observed the coachman beginning to get down, as if we **were going to** stop presently.’* (Great Expectations, Ch.20; Disney 2009b: 77)
- (4c) *... he left Mr. Bounderby swelling at his own portrait on the wall, as if he **were going to** explode himself into it;* (Hard Times, Ch.11; Disney 2009b: 77)

Another characteristic of constructions expressing prediction rather than intention pertains to their preferred host-clause structure. Predictive uses tend to occur in the complement clauses of verbs of cognition or perception, as in (4b), or as the complement of an *as if*-construction, as in (4c). This difference in host-clause preferences reflects a semantic/pragmatic difference: what is expressed in predictive clauses is not so much the event of the infinitival complement *itself*, but the extent to which the speaker has *knowledge* about the likelihood of the event. In (4b), for instance, the speaker makes an observation and derives that the couch probably will stop shortly after – it is not excluded that the speaker has in mind the coachman’s intention of stopping the couch, but the emphasis is on the speaker’s assessment of how probable it is that the couch will stop, not on the intention.

When this construction occurs with inanimate subjects, the original event is even more backgrounded. As the inanimate subject cannot have the intention to perform the action encoded in the infinitival complement, the intentional reading is downplayed even further and the inference of prediction gains strength. In (5), it is no longer the likelihood that something will happen that is at stake. Instead, the claim “is of a *lack* of knowledge about the future event itself, and hence there is no involvement of the subject in the future event” (75).

- (5) *‘But I did not know then what **was going to happen.**’* (Hard Times B.2, Ch.8; Disney 2009b: 76)

The non-intentional uses described above arise especially in contexts where the referent of the syntactic subject of the clause does not coincide with the speaker of the proposition (Disney 2009a). When *be going to* is used with third-person subjects,

the speaker of the proposition expresses what he thinks to be the intention of another person. Since speakers do not usually have precise knowledge of the intentions of others, using *be going to* with third-person subjects often involves at least some guesswork. It is also likely that the speaker will resort to additional clues available in the context to determine the intentions of the person he talks about. In such cases, the meaning of *be going to* will be ambiguous between expressing intention and prediction. It is precisely the fact that the prediction is made on the basis of contextual clues, that provides *be going to* with an evidential semantic layer in the sense that it implies that the speaker has some kind of evidence that the future event will take place. According to Disney (2009a) it is especially this evidential meaning that distinguishes *be going to* as future marker from *will* as they are used in Present Day English.

In sum, Disney takes the original motion construction as starting point and shows that this construction first developed intentional readings around the middle of the seventeenth century. This intentionality gradually got lost, first only in contexts with imminent infinitival complements and afterwards also in contexts with infinitival complements expressing non-near future. The shift from intention to prediction was made first in clauses with third person subjects, when speakers have some trouble reading the exact intentions of the subject. Markers of this struggle are found in changes in the host-clause structure – the presence of cognitive verbs – and the presence of external evidence drawn upon.

The studies by Nesselhauf take a more general perspective, according to which *be going to* is only one of several options for referring to a future situation in Late Modern English. One pattern to which *be going to* is obviously related is that of the use of the progressive to express future plans and intentions more generally (as in *I'm travelling to Vancouver next week*) (Nesselhauf 2007; 2010). This futurate use of the progressive has steadily increased in the Late Modern English period. However, the impact of this more general tendency on an explanation of the grammaticalization of *be going to* is probably negligible, as it is *be going to* that has always been at the vanguard of this development, and it is the only expression that specialized into a marker of the future. Looking further into the whole range of future markers, Nesselhauf (2010) observes that there is a general increase in questions about the future across all constructions that mark futurity, and that the tendency to refer to the speaker's own plans, intentions and arrangements for the future has generally decreased. She connects this second tendency particularly to cultural changes in the discourse, such as the gradual retraction of the writer's voice in more scientific prose. The significance of these more general tendencies for our case study will be discussed in our analysis.

4 Hypotheses

Following Disney (2009b), we hypothesise that as part of its grammaticalization, *be going to* underwent a subjectification process in which the emphasis gradually shifted from the intentions of the subject to the extent to which the speaker can assess these intentions. This shift in emphasis leads to the creation of a new layer of meaning, which is more speaker-centred than the previous meaning of intention, since it shifts the focus away from the objective world towards the speaker's view of the objective world. Eventually the underlying intentional layer is weakened, which leads to a broadening of the range of possible subjects and infinitival complements.

In order to test this hypothesis, we broke down the general story into four quantifiable subparts, which can be tested on a large corpus. Our first subhypothesis ties in with Disney's (2009b) observations that the shift from intention to prediction occurred first in contexts where it is harder for the speaker to assess the intentions of the subject. This is naturally the case whenever (i) the referent of the syntactic subject of the *be going to*-clause does not coincide with the speaker or (ii) the action designated by the infinitival complement cannot be executed immediately. If these are the contexts in which the shift from intention to prediction originated, we expect this shift to be manifested in our data both in (1.1) a rise in non-first person subjects at the expense of first person subjects and (1.2) an increase in the share of non-imminent infinitival complements at the time the shift from intention to prediction started to take place.

In agreement with what is known about the role of semanticization in subjectification, we hypothesize that the emergence of prediction as an independent coded meaning of *be going to* was mediated by the repeated presence of linguistic or non-linguistic contexts that made it clear that the speaker did not control the realization of the future event. Eventually, the hearer would infer the presence of a layer of prediction in *be going to* itself, and start using *be going to* for prediction even when such contexts were no longer present. Given the written nature of our data, we will focus on linguistic contexts only. Concretely, we expect (2.1) a decrease in contexts that explicitly mark the inability of the speaker to assess the intentions of their subjects. Simultaneously, we expect this semanticization to become visible in the behaviour of *be going to* itself. If speakers are increasingly less certain about the content of their *be going to*-clauses, it may be expected that (2.2) they will use the construction increasingly often in sentence types other than statements, as these allow them to express the information without having to commit themselves fully to it.

Thirdly, as the new epistemic layer gains strength, it gradually starts to outgrow the underlying layer of intention. This shift in the balance of power is expected to loosen the restrictions that were originally placed on the schematic parts of the construction. In particular, we expect that the increased importance of the prediction layer will become visible as (3) an increase in both the number of non-agentive (and even inanimate) subjects and the number of non-intentional infinitival complements.

Finally, we hypothesize that the development of *be going to* shares at least some characteristics of a more general pathway of the grammaticalization of future auxiliaries. Both for the two other major English future auxiliaries, *will* and *shall*, as well as for the French future, it has been argued that each of them developed relative future-in-the-past readings before they came to express an absolute/deictic future. If this is a more general order of development, *be going to* should show (4) a decrease in the relative frequency of the past tense with *to be*, accompanied by an increase in present tense uses of *to be* representing absolute future.

5 Corpus

We investigate the use of *be going to* in Late Modern English by means of data drawn from the Corpus of Late Modern English Texts, version 3.0 (henceforth CLMET3.0, De Smet et al. 2011), the Penn Parsed Corpus of Modern British English (henceforth PPCMBE; Kroch et al. 2010), and the ECCO-TCP corpus (<http://www.textcreationpartnership.org/tcp-ecco/>). The latter two were mined only for the earliest data up to 1729, because CLMET 3.0 only yielded 14 instances here.³ The CLMET3.0 is a genre-balanced collection of texts written from 1710 up to 1920 by native British writers and contains approximately 34 million words. It is natively divided into three periods, each of them covering 70 years. For the present case study, an additional division was made: each subpart was divided in half, which resulted in a total of six parts, each covering a period of 35 years.

³ This scarcity is owing to the design of CLMET3.0, which for each period draws on a set of authors that were born within a specific range. For the earliest years of each period, this means only texts from the authors born at the left edge of that range could be included. For this reason, it is unfortunately also not possible to divide CLMET3.0 in more fine-grained time slices, because the different slices would become less and less comparable, and some would contain significantly less data than others.

We searched the corpora for all attestations that consist of any form of *be (a) going to*, including historical spelling variants, allowing for at most three arbitrary words between each of the individual words in the construction. This resulted in a dataset of 4740 observations, of which we manually removed all the attestations that did not consist of a form of *be going to* followed by a verb phrase. We removed, for example, all instances of *be going to* followed by a noun phrase or adverbial phrase, except when that noun phrase or adverbial was followed by a to-infinitive expressing purpose, as in (6).

- (6) “*I am going into the village to see my horses,*” said he, “*as you are not yet ready for breakfast; I shall be back again presently.*” (1811)

The resulting dataset contained 3396 instances. From these all attestations were removed of which the dating was an interval that stretched across more than one of the six periods. We then exhaustively selected all instances of the first, least populated, subpart, and for each other subpart, we randomly selected around 55 % of the observations. In this way, we created a dataset of 2022 instances. Table 1 shows the number of attestations we analyzed for each period.

Table 1: Overview of the dataset size per period.

Period	Number of attestations
1710–1745	126
1746–1780	250
1781–1815	170
1816–1850	366
1851–1885	276
1886–1920	834

6 Results

6.1 Increase in speaker effort

Our first hypothesis is that the shift of *be going to* from intention to prediction took place first in those contexts where the speakers had trouble to assess the intentions of their subjects.

In agreement with hypothesis 1.1, we first investigated whether *be going to* altered its preference with regard to person throughout the eighteenth and

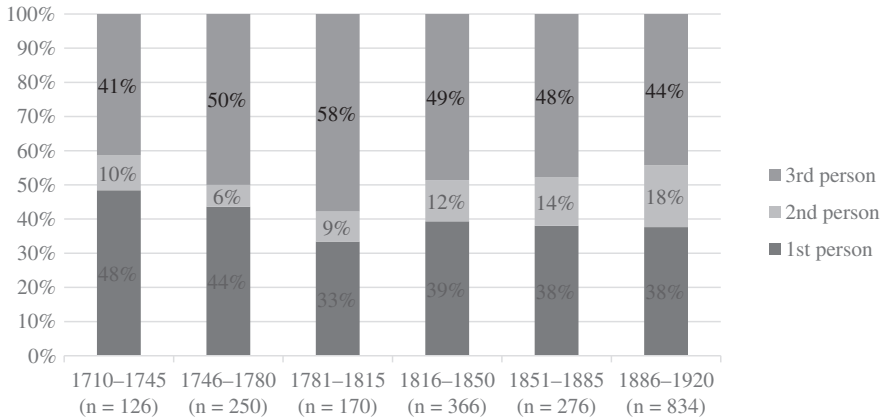


Figure 2: Person.

nineteenth century. The results are summarized in Figure 2. As the graph shows, *be going to* mainly occurred with first person subjects in the beginning of the eighteenth century.

The data confirm the expected loss of first person subjects in favour of both second and third person subjects up til 1815. Statistical testing, using Kendall's tau-b, provides some interesting additional information. Kendall's tau-b is a robust and widely used method for trend analysis, testing whether the increase or decrease of one type as compared to one or more others is statistically significant (see e. g. Agresti 2010: 196). Applying Kendall's tau-b (using the R package, R Core Team 2013) on the first three periods, the decreasing trend appears to be highly significant. The p-value (signalling the probability of this trend being due to chance) is very low at 0.005, although admittedly the tau-b value (signalling the effect size of the trend on a scale between 0 and 1) is small at 0.11, meaning that the trend is only a weak one. The trend is not continued after 1815 (overall tau-b \approx 0, $p = 0.80$). What this trend may point out is that throughout the eighteenth century, speakers started to use *be going to* less often to express their own intentions and increasingly often to express the intentions of others. This increase is an important indication that the sense of prediction was gradually gaining strength and moved from the periphery to the semantic core of the construction.

After 1815, the ratio first/non-first persons stabilizes. However, within the non-first person subjects, the share of second persons continues to increase. In fact, the increase of second person subjects is a highly significant trend throughout the entire period investigated (tau-b = 0.11, $p < 0.001$). This more

specific rise may be a consequence of a general widening of the range of sentence types in which *be going to* started to occur in the nineteenth century, including questions and directives, which highly favoured second person subjects. We will come back to this point in our discussion of the sentence types in which *be going to* occurs.

A second important change in the *be going to* construction pertains to the nature of the infinitival complement (Hypothesis 1.2). The more the construction moves away from the original motional meaning, the more often its infinitival complement expresses an action/event that can only be actualized on the long term. The graph in Figure 3 shows that while in the eighteenth century almost 75% of the infinitival complements referred to imminent actions/events, the subsequent two centuries saw such a rapid decline of imminence that by the turn of the nineteenth century the proportion of imminent infinitival complements only made up for 30% of the total number of attestations (Kendall's tau-b = 0.29, $p < 0.001$).

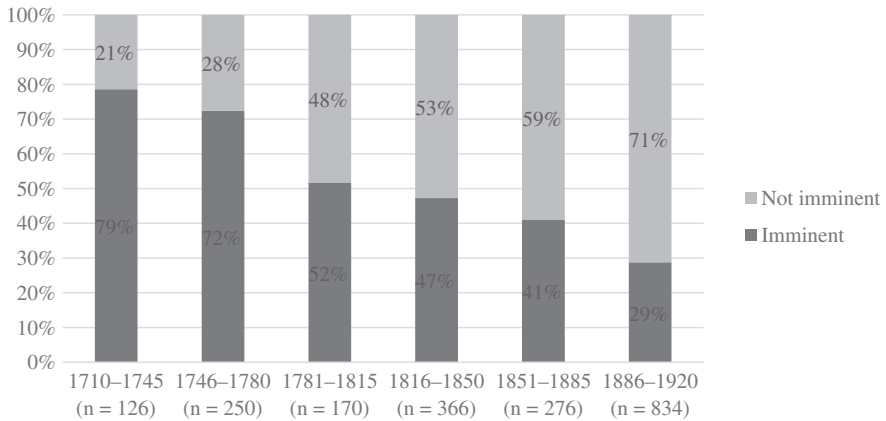


Figure 3: Imminence.

An example of an imminent action is shown in (7a), where the *he* is about to tell a secret to Mrs Jewkes, and indeed tells it immediately after Mrs Jewkes has assured him she will keep the secret to herself. In the example in (7b), by contrast, the action of leaving Florence will not be carried out immediately, as is signalled by the temporal adjunct “early the next morning”.

(7a) *And he rung for her; and when she came in, he said, Mrs. Jewkes, I am going to entrust you with a secret. Sir, answered she, I will be sure to keep it as*

such. Why, said he, we intend to-morrow, privately as possible, for our wedding-day; (1740)

- (7b) *and she further said that Bertram had been particularly importunate with Diana to admit him to the visit he so much desired that night, because he **was going to** leave Florence early the next morning. (1807)*

The sentences with imminent infinitival complements form a remarkably coherent category, and are especially common with verbs of communication. An example of such a combination is found in (7a). As Table 2 shows, the three most frequent lexemes in imminent future contexts all designate a communicative action. In contrast, among the infinitives in non-imminent contexts, not a single speech verb occurs in the top 20.

Table 2: Most frequent imminent infinitives.

Lexeme	Absolute frequency
To say	108
To tell	49
To speak	32

The increase in non-imminent infinitival complements in itself can be seen as a move towards a more subjective use of *be going to*. With imminent infinitival complements, there are usually already some visual clues that the action is about to happen within a really short time-span. As such, reporting imminent actions requires less speaker effort than reporting non-imminent actions because of this conclusive and easily retrievable evidence. The emphasis is not so much put on the speaker, but remains on the intentions of the subject. By contrast, non-imminent uses put more emphasis on the speaker's assessment of the likelihood of the future event.

The gradual increase in both non-first person subjects and non-imminent infinitival complements, and the fact that they occur around the same time, reflects the changing semantics of *be going to*, as the construction is increasingly used by speakers who are not sure of the intentions of other people and are predicting rather than describing them. In that respect, the loss of the imminence and the increased co-occurrence with non-first person subjects strengthened the pragmatic inference of prediction and augmented the degree of subjectivity of *be going to*, both of which were important factors in the evolution towards the semantics of prediction.

6.2 Semanticization of (un)certainty

An additional way to test the plausibility of a semantic shift towards prediction in the second half of the eighteenth century and the first half of the nineteenth century, as indicated by the changes above, is to examine any textual clues that make explicit the speakers' struggle to read the intention of others. Two types of clues were investigated. One is semantic or pragmatic in nature and consists of explicit markers of doubt or certainty on the speakers' part. The other is more syntactic and consists of the use of *be going to* in sentence types other than declarative statements.

There are two types of semantico-pragmatic context that add a layer of qualification to the future event expressed by *be going to*, and which may have facilitated the semanticization of prediction. The first of these is 'source specification', by which we label those attestations in which the speaker backs up his proposition by either stating where she obtained the information she is conveying or by mentioning the clues she deduced the information from.⁴ An example of source specification is the clause in (8), where the speaker labels the news of the marriage as a *hearsay*.

- (8) *Some time ago it was all over our town that he **was going to** be married to the parson's youngest daughter, and she is a pretty creature, and disarves him if he was more richer and handsomer than he is* (1762)

The second type is that of 'epistemic marking', and includes all kinds of markers that reflect the speaker's degree of certainty with regard to his proposition. An example of epistemic marking can be found in (9), where the speaker uses *I'll lay my last dollar on that* to indicate that he is very confident that there will be trouble.

⁴ Coding these categories can be intricate. To make the coding as reliable as possible, this variable has been coded independently by both authors. Cases of disagreement were discussed one by one. One difficulty is that both source specification and epistemic marking are essentially limited to speech contexts, and logically exclude superficially similar expressions if made by omniscient narrators (e. g., *He said she was going to...*). Also excluded are cases where the narrator indicates that the speaker is showing non-verbal evidence, as in '*Are you going to review this?*' *inquired Stephen with apparent unconcern, and holding up Elfride's effusion* (1840). While the gradual entrenchment of using non-verbal clues may obviously also play a part in language change, this cannot be quantified on the basis of written texts. For this reason we stick to the examination of the facilitating role of linguistic context within the speaker's scope.

- (9) *But now, I think you had better go off to bed. There **is going to** be some serious trouble here, I'll lay my last dollar on that[!] (1902)*

To reveal relevant semantic and pragmatic clues in the context of the construction for the semanticization of prediction, it is necessary to filter the data for instances where invited inferences will most likely lead to semanticization. Significant changes are not expected in instances that either have first person subjects and/or where the realization of the action coded by the infinitival complement is imminent. The referents of first person subjects coincide with the speaker/writer, who normally has access to her own mind and does not need to guess about her own plans or intentions. Similarly, the more imminent the action is, the more obvious it is that it will happen, so there is generally no need to back up statements about imminent events with evidence. In (10) for example it is obvious that the woman has the intention to hit the man as she had apparently already raised her hand when she shouts “Take that!”.

- (10) *Take that, said she, if I die for it, wretch that thou art! and **was going to** hit him a great slap; but he held her hand. (1740)*

The graph in Figure 4 displays the distribution of source specification and epistemic marking across the six periods.

At first view, the graph corroborates our hypothesis of a decrease of explicit contextual marking once the semanticization of prediction takes over. A trend analysis reveals that there is a significant overall trend of decrease ($p = 0.003$), with a moderate effect size (Kendall's tau-b = -0.10).

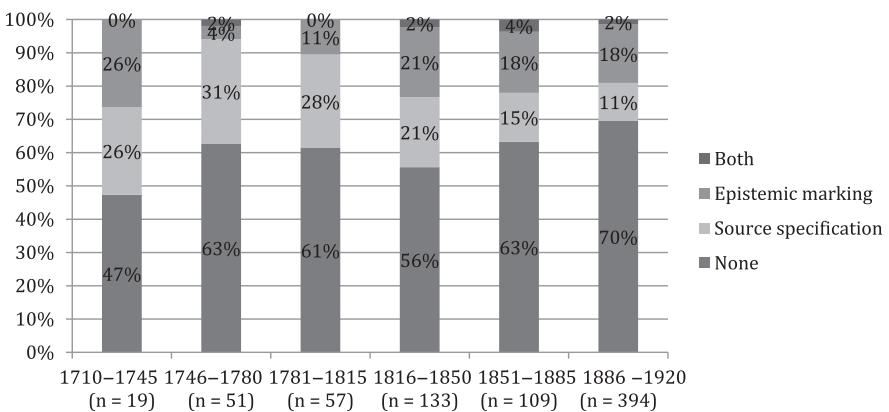


Figure 4: Source specification and epistemic marking.

However, when we look more closely at the distributions of epistemic marking and source specification, an even more specific trend becomes apparent. Except for the first period, source specification consistently and extensively decreases ($\tau\text{-}b = -0.15$, $p < 0.001$), whereas the behaviour of epistemic marking does not show any clear trend at all ($\tau\text{-}b = 0.03$, $p = 0.40$). An explanation of this distributional behaviour might relate to their having a different status. When a speaker mentions the source of her statement, this is essentially objective language use. None of the words or constructions actually encode the speaker's own attitude or belief.⁵ Yet combinations such as these may invite hearers/readers to infer that *be going to* can be used to talk about somebody else's future more generally, and as such the context of "source specification" might have facilitated the subjectification process. Once prediction had become part of the semantics of *be going to*, it became possible to make non-first person non-imminent statements about other people without having to link these to a source (normally ultimately the people who are going to do something themselves). Unlike source specification, the use of epistemic marking probably already reflects a degree of subjectification of *be going to*. *Be going to* in such a case has already shifted to prediction and to a speaker-based assessment. Only, the prediction is qualified by an explicit marker of degree of certainty. When no such qualification by means of epistemic marking is present, this only means that the speaker is confident the predicted event will take place (often because it is planned, in fact).

In sum, while we expected that any explicit linguistic context would decrease that marked a lack of control by the speaker over the realization of the event, this proved to hold only for the type of marking which we labelled source specification. We take this to mean that only evidential marking was instrumental in inferring the predictive layer, while epistemic marking often already presupposes the presence of this layer.

A second change that relates to our second hypothesis is the increased presence of *be going to* in a wider range of sentence types, as is shown in Figure 5. While originally almost all clauses with *be going to* were statements, statements started losing their exclusive status by the turn of the eighteenth

⁵ Except for the fact that the speaker signals that she does not take responsibility for the truth of the proposition. This, however, relates more to the notion of subjectivity in the sense of Nuyts (2012) than it does to that of Traugott. Note that Nuyts makes a further distinction between subjective and intersubjective (which is, paradoxically, more aligned to Traugott's objective use) types of epistemic modality (Nuyts 2012: 55). We have not distinguished these two types when counting epistemic markers, though we acknowledge this might further refine the picture of the role played by markers of (un)certainly.

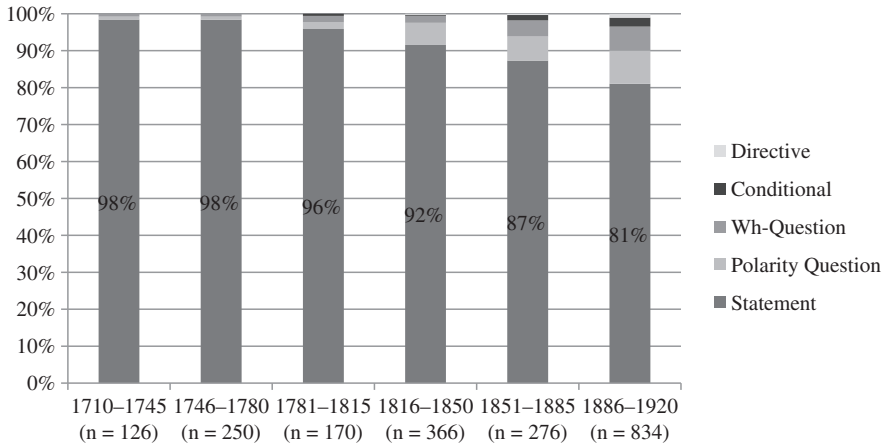


Figure 5: Sentence types.

century. By the beginning of the twentieth century, about 19% of the attestations did not involve statements anymore, being the end of a highly significant upward trend (Kendall's tau-b = 0.19, $p < 0.001$).

The attestation of *be going to* in questions and in the *if*-clause of conditionals might be seen as additional evidence that speakers started to use *be going to* increasingly in contexts where they were not sure about the intentions of the subject.

The use of *be going to* in conditionals serves a similar purpose, as it provides the speaker with a means to avoid commitment to the truth of the proposition: when the *be going to*-statement as a whole is turned into an *if*-clause, the speaker can still elaborate on the state of affairs which would be the case if the *be going to*-proposition was true without having to state explicitly whether he thinks the proposition holds or not. As such, the use of *be going to* in both questions and conditionals indicates that the construction was used increasingly often by speakers who did not know the intention of the subject and in that respect form additional evidence for the hypothesis that by the end of the eighteenth century, the meaning of *was* gradually shifting towards prediction.⁶

⁶ Another interesting observation is that it is not until the beginning of the 19th century that *be going to* starts to occur in directives. By this time, the meaning of prediction was already quite strong. This might imply that the deontic meaning of *be going to* in directives originated out of its epistemic meaning of prediction, as such providing counter-evidence to the widely shared view that epistemic modal meanings stem from deontic ones (see Traugott and Dasher 2002: 105–147; or Narrog 2012: 87, providing an updated view of Van der Auwera and Plungian 1998,

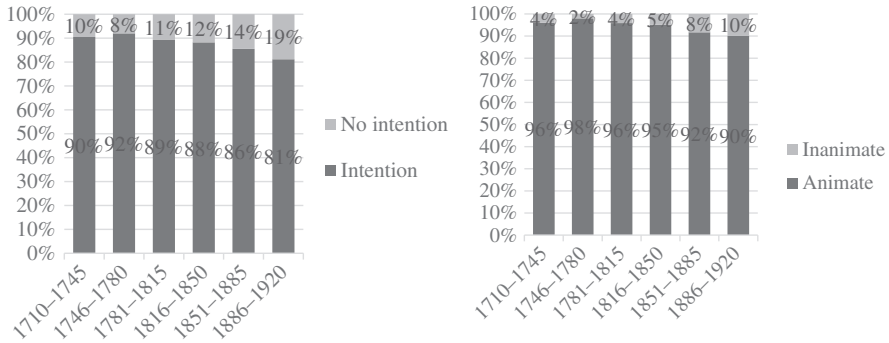
A possible objection to linking the marked increase in questions to the overall subjectification process of *be going to* may be made on the basis of the more general observation by Nesselhauf (2010) that questions increase in all genres in the Late Modern English period, owing to a shift in written discourse styles. We believe, though, that the two explanations do not necessarily exclude each other. If *be going to* had not subjectified, it still seems unlikely that such an increase would have taken place. If anything, the discourse shift arguably only actualizes a change in written language which had possibly already taken place in spoken language at a larger scale.

6.3 The increase in non-agentive subjects and infinitival complements

The evidence presented so far corroborates the hypothesis that throughout the eighteenth century *be going to* acquires an additional, epistemic layer on top of its original, intentional meaning. The next question is whether this epistemic layer causes the intentional layer to weaken. One way to tackle this question is by analysing the restrictions the construction originally placed on its subject and infinitival complement. Whereas the intentional semantics of *be going to* require at least an animate subject and an infinitival complement over whose activity the subject can at least in principle exert control, the predictive use is not restricted in this way. In that respect, the decline of the animacy and intentionality of the subject and the nature of the infinitival complement might reveal something about the nature and timing of the semantic change.

The graph in Figures 6 and 7 indicates that about 90% of the eighteenth-century attestations contain subjects that had the intention to perform the action described by the infinitival complement. While intentional constructions remained by far the most frequent type in the nineteenth century, they gradually lost ground to constructions in which the subjects did not intend to perform the action described by the infinitival complement (11a) or did not want the event described by the infinitival complement to happen (a trend with as Kendall's tau-b = 0.19, $p < 0.001$). It is important not to confuse absence of intention with sentences such as (11b), in which the subject has the intention *not* to do

where deontic modality is not listed as a possible outcome of source future markers). The precise origin of this construction type is not entirely clear and would be an interesting avenue for future research, possibly comparing it with the more similar recent development in *want to* (as discussed in Krug 2000).



Figures 6 and 7: Intention and Animacy.

something. Subjects of the latter kind are classified as intentional subjects since ‘intention *not* to do something’ is a kind of intention too.

- (11a) *‘La! mamma, what is the matter with poor papa, what makes him look so as if he **was going to** cry? he is not half so merry as he used to be in the country’ (1751)*
- (11b) *‘I’m not the only one, indeed, sir! I hope you won’t make me an example for the rest. It’s very hard I’m to be flogged more than they!’ **I’m not going to** flog you.’ ‘Thank you, sir,’ said Tarlton, getting up and wiping his eyes. (1796–1801)*

At roughly the same time, a similar change may be observed in the distribution of inanimate subjects. Whereas inanimate subjects were rare throughout the eighteenth century, by the end of the nineteenth century, they accounted for about 10 % of the subjects in total ($\tau\text{-}b = 0.10$, $p < 0.001$).

In order to explore the loss of agentivity even further, we carried out a Distinctive Collexeme Analysis (Gries and Stefanowitsch 2004: 101), statistically comparing the preferences for particular lexemes used as infinitival complements of the construction in the three original periods of the CLMET3.0 corpus. Table 3 shows the top-10 collocates for each period. Our table shows similarities to the findings of Hilpert (2008), who carried out the same type of analysis on a partially different, smaller dataset. First of all, the results reveal that there is some semantic overlap between the collocates of the first and the second part. Although most verbs of communication occur as collocates of *be going to* in the first part of the corpus, *to say* is the top collocate in the second part. This is an indication that general semantic types

Table 3: Top-10 collocates of *be going to* for the three periods.

1710–1780		1780–1850		1850–1920	
Verb	Coll. Strength	Verb	Coll. Strength	Verb	Coll. Strength
to relate	4.31	to say	4.12	to be	8.44
to express	3.95	to commence	2.26	to do	7.35
to speak	3.94	to sell	2.16	to have	2.46
to answer	3.90	to marry	1.73	to get	2.23
to follow	2.76	to dinner	1.69	to happen	2.05
to mention	1.83	to leave	1.46	to stay	1.73
to pay	1.66	to call	1.41	to buy	1.54
to begin	1.62			VERB ELIDED	1.49
to lay hold	1.58				
to suffer	1.58				

of the complements have remained rather stable during the first two periods of the corpus.

Second, the analysis shows that the infinitival complements mainly begin to express events involving low agentivity and general meaning in the third period. *To be* and *to happen*, for instance, typically refer to states that are not completely within the power of the subject. As such, there has clearly been a shift in preference: whereas in the first two parts of the corpus, the very transitive and also rather agentive verbs of communication were the preferred complements, in the last two periods of the corpus, verbs with a lower degree of transitivity start dominating the scene.

6.4 The shift from relative to absolute future

The story so far can be summarised as follows. In the beginning of the eighteenth century, *be going to* was still predominantly used to express intention, but the construction soon became subject to a semantic shift that was triggered because speakers started to use the construction more and more to report the intentions of other people. As people are rarely dead certain about these, trying to report them naturally led to the addition of an epistemic layer signalling a lack of certainty of the speaker towards the proposition. This epistemic layer first arose in constructions with third person subjects, where the speaker and the grammatical subject did not coincide. As the epistemic meaning grew stronger, it became conventionalized and encoded in the grammaticalizing *be going to* construction itself. As a consequence, the underlying semantics of intention

were backgrounded and weakened, making it possible for the speaker to report events in which the subject does not or cannot have the intention to perform the action described by the infinitival complement. At that point, the intentional uses are backgrounded, leaving more space for the epistemic meanings, allowing the intentional semantics to weaken and causing invited inferences of prediction and future to develop.

As such, the semantic shift that *be going to* undergoes is an instance of subjectification, as it involves essentially a shift from subject-focus to speaker-focus. Whereas in the intentional uses, the emphasis was predominantly on the intentions of the subject, the predictive uses emphasise the speaker's assessment of these intentions more than the intentions themselves.⁷ In this section we will show that another key pathway in this development is that from relative to absolute future. We adopt this hypothesis from Traugott (1989) who argues for a similar chronology in the development of *will* and *shall*, which underwent a process of subjectification too. We will elaborate on the extent of this parallelism in Section 7.

The relative future differs from the absolute future in that the situation encoded in its infinitival complements happened posterior to another situation, which does not coincide with the moment of speech. This is a more objective way of referring to future situations, in the sense that the temporal reference point of the relative future exists on its own and is temporally unrelated to the speaker and the moment of speech. The future situation might even be anterior to the speech situation – in fact, this is predominantly the case – which signals very clearly that the speaker and the speech situation are not used as reference points for expressing future. As the relative future often uses a reference point in the past, the number of past tense uses of *be going to* can reveal the distribution of its uses as relative future throughout the eighteenth and nineteenth century.

The graph in Figure 8 shows that throughout the eighteenth century the past tense was roughly twice as frequent as the present. But whereas the past tense does not significantly change afterwards, the present tense starts to catch up. At first the present tense kept pace with the past, but by the beginning of

⁷ Note that, when speakers use *be going to* to express their own intentions, as in *I'm going to skip football practice today*, they already adopt the construction in order to express an internal meaning: they do not describe an external event, but rather they describe their own mind, an internal and hence a possibly more subjective event. This implies that more subjective uses of *be going to* might have been around as early as the intention stage. As such, while the shift from relative to absolute future does correspond to a subjectification process for the uses of *be going to* with third person pronouns, this higher degree of subjectification might have been present earlier when *be going to* was used to express first-person intention.



Figure 8: Tense (normalized frequencies per million words).

the twentieth century it had become more than twice as frequent as the past tense uses.

The predominance of the past tense in the first parts of the corpus is a first indication that *be going to* indeed developed via this intermediate stage of relative future, but only an investigation of the kind of past tense uses can form conclusive evidence as to whether or not *be going to* went through an intermediate stage of relative future.

A more detailed look at the data reveals that there are roughly two kinds of construction types that are formed with a past tense form of *be going to*. The first type consists of constructions that express posteriority vis-à-vis a temporal reference point in the past. These constructions express that the action described by the infinitival complement happened in the past, at a moment later than the reference point. Note that, since this construction expresses future-in-the-past, it is possible for the speaker to report about the future with absolute certainty, given that the actualization of the event encoded by the infinitival complement had already happened before the time of utterance (12).

- (12) *As the war was then carried on between the French and Italians with the utmost inhumanity, **they were going at once to perpetrate** those two extremes, suggested by appetite and cruelty.* (1766)

The second group of constructions differs from the first in terms of the actualization of the infinitival complement. Whereas the first group consists of constructions in which the action described by the infinitival complement took place at a

point in time later than the reference point, the infinitival complements of the second group of constructions refer to actions that did not take place. Although the construction signals that something was about to happen, the normal course of action was suddenly interrupted and the planned actualization never took place. The interruption can be subject-internal, in the sense that the subject changed his or her mind (13a), or subject-external, in the sense that a third party interrupts the course of action (13b).

- (13a) *I was just going to run the Sword into his Body, in my Heat of Passion; but I consider'd immediately, it wou'd look like an Action of Barbarity to stab a defenceless Man, therefore I desisted; (1736)*
- (13b) *Take that, said she, if I die for it, wretch that thou art! and was going to hit him a great slap; but he held her hand. (1740)*
- (13c) *'Yes, sir, I will advertise immediately: and meantime, I suppose—' I was going to say, 'I suppose I may stay here, till I find another shelter to betake myself to:' but I stopped, feeling it would not do to risk a long sentence, for my voice was not quite under command. (1847)*

As has already been pointed out in Pertejo (1999: 140), the infinitival complements of this kind of construction typically express an action that would have been actualized almost immediately after the utterance, if the interruption had not prevented their actualization.⁸ This connotation of imminence is made clear too by the frequent occurrence of *just* in the clause expressing the near-actualization. In particular, the construction often occurs in combination with verbs that express a violent action (13a,b), and with verbs of communication, where they signal that the subject was about to say something, but did not do so because in the end considered it to be inappropriate (13c). Especially the latter type is very frequent throughout the eighteenth and in the first half of the nineteenth century.

7 Shared subjectification of future markers

While the trajectory followed by *be going to* in Late Modern English involves a number of apparently unrelated frequency changes, we have shown how each of these may be related to an overarching shift away from expressing known intentions or known futures. This poses the interesting question to what extent

⁸ Whereas 58% of all the past tense attestations had an imminent infinitival complement, imminent complements accounted only for 34% of the present tense attestations. This difference in distribution turns out to be highly significant ($p < 0.001$).

trajectories in other verbs developing future semantics are similar. Such a similarity has already been hinted at in our reference to the well-known analysis of *will* and *shall* by Traugott (1989). Traugott maintains that both these auxiliaries acquired future semantics via an intermediate route of expressions where the future is already known, either because it is a ‘relative future’ (as in the case of *be going to*), or because a generic statement was involved, assuming existing regularities will continue to exist. Generic uses do not seem to play a role in the subjectification of *be going to*, and will not be discussed here (see Ziegeler 2006: 241–286 for a detailed analysis). Instead, we look into mentions of the other variables analyzed in this paper in the literature on the subjectification of *will*.

The example Traugott provides to illustrate the very early appearance of predictive use in the past tense is given in (14). Note that only the first *wolde* is predictive, while the second is still volitional.

- (14) *þa Darius geseah þæt he oferwunnen beon wolde, þa wolde he hiene selfne on ðæm gefeohte forspillan.*
 ‘When Darius saw that he would be defeated, he wanted to destroy himself in the battle.’ (c925. *Or* 9.70.2)

Still according to Traugott, the absolute future sense, in which a speaker makes a prediction about a future event, developed only later on, when the semantics of posteriority grew stronger and the inference of future actualization of the complement became conventionalized. Similar to the development of *be going to*, the shift from deontic (volition) to future meanings conforms to the general pattern of subjectification. Whereas the temporal reference point of the relative future could be a real-world event, the absolute future takes as temporal reference point the moment of utterance, which is necessarily more speaker-based and hence also more subjective. Interestingly, cross-linguistic evidence suggests that this hypothesized bridging function of the relative future is more general still. Benveniste (1968) argues that the development of the Latin periphrasis [INF *habeo*] into the French marker of the future *-erai* was originally restricted to (passive) infinitives occurring in subordinate clauses in the past. Second, Kuteva and Heine (1995, as quoted in Ziegeler 2000: 58), likewise, observe that in Old Bulgarian the relative future-in-the-past developed directly from a past volitional verb source and emerged before the absolute future had developed.⁹

⁹ Not all past time occurrences or generic uses of deontic auxiliaries give rise to future readings. When the complement of the auxiliary is not actualized, past tense deontic modals, such

While Traugott's argumentation has been widely cited, her evidence in particular for this relative to absolute future chronology is backed up only sparsely by corpus data. The only example she gives is (14). As far as we know, there has not yet been a single study which provides a quantitative analysis of the development of future uses of *will/shall* in the earliest stages of English that includes the past tense. The recent study by Wischer (2008) is deliberately limited to the present tense. What we do gather from her study is that unambiguous instances in the present tense of predictive *will* and *shall* are indeed still extremely rare in Old English (around 2–3% of all uses). As such, this study at least does not render it implausible that the past tense that was ahead of the present.

In addition, various observations from earlier studies might shed some more light on the nature and degree of the parallelism between the subjectification of *be going to* and *will* (and possibly *shall*). Warner (1993: 168) and Kuteva (2004: 107–108) (see also Ziegeler 2000: 36) provide evidence that *will* was also temporarily used around the same time (in Old English) as a marker of imminent future (as in (15)), a function that also provided a springboard for the development of *be going to*.

(15) *Se untruma eac wacode oðþæt hit wolde dagian.*

'The sick-man also stayed-awake until it was about to dawn.'

Incidentally, (15) is also a second instance of a relative future, as is another example among those given by Warner (1993: 169). Alternatively, the generic quality of (15) (dawns tend to reoccur at around the same time) might also be relevant.

Goossens (1982) agrees with Traugott that *will* and *shall* show the beginnings of epistemic usage in Old English. While he does not discuss the distinction between relative and absolute future, his observations tie in well with our observations on the bridging role of linguistic markers of uncertainty. Both for

as *might* and *could*, "lead to hypothetical conditionals and politeness markers because 'their past forms assert that a state existed before the moment of speech, but do not say whether that state still exists in the present or not'" (Bybee, 1987:5). In that respect, past tense deontics not only indicate posteriority of the situation described by their complement vis-à-vis a past reference time, they also imply that this situation was not necessarily actualized. As such, they describe an epistemic attitude towards a situation in the past, regardless of its present actualization. In that respect, the shift from past deontic modals to hypothetical conditionals and politeness markers involves an increase in subjectivity too, since past hypothetical conditionals and politeness markers take more speaker-based situations as (temporal) reference point.

shall and for *will* he gives examples where they occur embedded in a matrix clause with either an epistemic marker (16) or something that might be either an epistemic marker or a source specification, depending on how it is interpreted (17). Again, (16) is also an instance of a relative future, though (17) is not.

(16) *Wende ic ðæt ðu ðy wærra worðan sceolde*
‘I expected that you must have got more cautious’

(17) *Wen is ðæt hi us lifigende lungre wyllen sniome forsweolgan*
‘The opinion exists/we think it likely that they will quickly swallow us up alive.’

The eight examples of predictive *will* given in Warner (1993) are equally striking as far as epistemic marking goes. Although Warner lists these examples primarily because they contain passives or other indications of non-volitional uses of *will*, each and every one of them (1993: 168–169) also contains some kind of epistemic marking, and is quite similar to (16) and (17). The epistemic marker *wene ic* also appears (unnoticed) in the examples in Hopper and Traugott (2003: 97) and Ziegeler (2006: 271; the role of probabilistic inference appears in a different context at p. 274).

Finally, Denison (1993) and Ziegeler (2006) observe that many of the early predictive uses have inanimate subjects or are impersonal constructions. Their findings support the idea that these contexts reflected the actualization of the layer of prediction similar to the increased presence of inanimate subjects in *be going to*.

While a more comprehensive corpus-based study would definitely further refine the hypothesis of a shared subjectification pathway, these various studies already strongly point towards a considerable degree of parallelism between *will* and *be going to*, and, as far as the relative future goes, a number of other auxiliaries as well. Moreover, this parallelism is not limited to the parameter of relative future.

8 Conclusion

We have looked in detail into the changes that *be going to* underwent from 1710 to 1920, a period in which the first stages of the grammaticalization process had been completed with the construction already having evolved from expressing motion with purpose to expressing intention. The starting point is the beginning of the eighteenth century, when speakers mainly used *be going to* to express their own immediate intentions. This typically resulted in constructions with

first persons subjects and infinitival complements that have a high degree of imminence and that designate actions that need an agent who is in control.

In the second half of the eighteenth century, *be going to* underwent a process of subjectification involving a shift of focus from the intention of the grammatical subject to the attitude of the speaker: what matters is no longer the intention of the subject, but the extent to which the speaker has knowledge of the intentions of the subject. This process is gradual and is visible in a number of changes in the *be going to* construction itself or in its immediate surroundings. The process of subjectification was mainly triggered by speakers who wanted to report the intentions of other persons, but had some trouble doing so as people rarely have absolute knowledge about other people's intentions. This tension between knowing and reporting naturally led to the pragmatic inference of prediction which eventually became conventionalised and encoded in the meaning of *be going to* itself. The pragmatic inference was particularly prominent in contexts with third person subjects, where the referents of speaker and subject did not coincide. The inference gained in importance during the eighteenth century, as is signalled by the observation that the share of constructions with third person subjects increases whereas the number of constructions with first person subjects decreases. The decrease in source specification in turn signalled that uncertainty gradually became coded in *be going to* and the occurrence of non-first person subjects was no longer limited to the reporting of authoritative sources.

The inference of prediction was also reinforced by the loss of imminence in the infinitival complements. While in the first half of the eighteenth century the infinitival complements predominantly expressed actions that were (about to be) carried out immediately, this imminence constraint weakened and by the turn of the eighteenth century, *be going to* allowed infinitival complements that could only be actualized on the long term. The appearance of *be going to* in questions and *if*-clauses too signalled that the construction was used increasingly often to express future situations where the speaker is not sure of the prediction they are making. As such, the loss of imminence drew the emphasis even more away from the intentions of the subject in favour of the knowledge of the speaker. By the turn of the nineteenth century, the use of *be going to* spread even further as it started to be used in directives with second person pronouns.

The shift of focus from the subject to the speaker allowed the meaning of intention to weaken. In the course of the nineteenth century, it becomes increasingly common for *be going to* to occur with subjects that do not have the intention to carry out the action described by the infinitival complement, or to

occur with infinitival complements that encode actions which cannot be controlled by the subject. At this point, the transition from intention to prediction is complete: the subjectified, epistemic layer of prediction has gained so much strength that the underlying layer of intention is allowed to wither.

During the eighteenth century, *be going to* was equally frequent in the past tense as in the present tense, while in the nineteenth century, the construction occurred mainly in the present tense. The eighteenth century peak in past tense uses is an indication that the evolution of future meanings developed through a stage of relative future in which *be going to* expressed future with regard to another event. This event was often situated in the past, which made the construction express future-in-the-past rather than absolute future. This stage of relative future makes the development of *be going to* analogous to this of *will* and *shall* and makes the shift towards the semantics of absolute future more gradual since relative future is less subjective than absolute future.

From a theoretical point of view, we have drawn attention to a number of parallelisms with the development of *will*, and, to a lesser extent, other auxiliaries of the future cross-linguistically. As regards *will*, this parallelism not only involves relative-before-absolute-future chronology, but also shared imminent semantics, the presence of matrix clauses that qualify the degree of certainty expressed, and the conspicuous appearance of inanimate subjects. These parallelisms are the more striking, given the significant differences between these other future markers and *be going to* in various other respects, such as the inherent presence of deontic modality in *will*, *shall*, and Latin [INF *habeo*]. Generally, our analysis provides further evidence for recent claims (e. g. De Smet 2012) that grammaticalization follows minimally disruptive pathways, taking the smallest steps possible in the development, and at the same time shows that recurring patterns may be found at this smallest level as well.

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