# A domain matrix view of the uses and development of BE *going to* + infinitive

Steve Disney
Lancaster University

**Abstract**

This paper examines the development of 'BE *going to* + infinitive' and its present day English (PDE) uses, drawing on data for illustration from the BNC and the EEBO collection. The construction is a paradigm example of a verb of motion taking on a future meaning, a common development in many languages (Bybee et al 1994, Croft 2000, Heine and Kuteva 2002). This paper briefly traces the history of the construction, from a domain matrix perspective, from its lexical and 'purposive', but the main focus of the paper is on the meaning that allows speakers to also use BE *going to* to refer to a future event that has a present cause (Leech 2004: 58) or evidence (Disney 2009, forthcoming); the so-called 'predictive' use. This paper looks at how the changes in BE *going to* can be examined from a domain matrix approach.

Papers from the Lancaster University Postgraduate Conference in Linguistics & Language Teaching, Vol. 3: Papers from LAEL PG 2008
Edited by Steve Disney, Bernhard Forchtner, Wesam Ibrahim & Neil Miller

## The domain matrix

This paper[1] examines the development of 'BE *going to* + infinitive' and its PDE uses, drawing on the BNC (e.g. 1-3 below) and Helsinki corpora as well as data taken from literary sources including Chaucer, Shakespeare and Dickens. The construction is a classic example of a grammaticalized verb of motion taking on a future meaning, a common and well documented cross-linguistic development (Heine and Kuteva 2002, Bybee et al 1994, Croft 2000). The paper briefly traces the history of the construction, from OE to the 19thC, from lexical 'going to' (1) to a marker of a future intention (2).

(1) 'Yet still you smile like a bride going to meet her bridegroom!' she murmured
(2) 'You should be pleased. We're going to celebrate your getting well.'

The main focus of the paper is on the construction in PDE where a development over the last 150 years or so has arisen that allows speakers to also use it to refer to a future event that has a present cause or evidence (Leech 2004: 58); the so-called 'predictive' use (3).

(3) I know from past experience, that creating that mailing list is going to take approximately sixteen hours of my time.

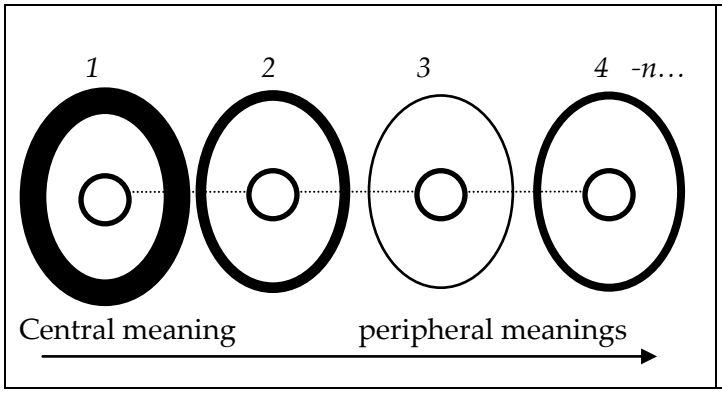
The precise difference between the uses is not clear cut and I describe here a semantic continuum with a fuzzy boundary. In a Cognitive Grammar approach to linguistics, the multiplicity of meanings found in uses of a given form (construction)in a certain usage event can be thought of as co-existing 'domains' (Langacker 1987, 1991, 2008). A domain indicates "any kind of conception or realm of experience" (Langacker 2008: 44) and can be basic, or cognitively irreducible like colour and pitch, space and time, or can be non-basic like RED, ON THE TOP and LATER. Domains may be both core and implied and, crucially, are variably prominent in given speech events and their relative prominence in a usage event is the construction's 'domain matrix'. The idea is similar to the notion of 'layers' of meaning found elsewhere (e.g. Hopper & Traugott 2003: 124-126). For example, the English construction [modal + *have* + past participle], as a whole signals 'past inferential'. This is partly the result of the combination of domains contributed by the smaller elements. The variation in meaning in (4)-(6) can be attributed to the contribution of the domain matrix of the modal verbs and their respective 'certainty' values, from most (4) to least (6), but 'knowledge gained by inference' is coded in each:

(4) He *must* have been here.
(5) He *might* have been here.
(6) He *could* have been here.

Figures 2.1 and 2.2 show in graphical terms (based on Langacker 2008: 48) how in a given usage event, e.g. (4), different meanings coexist with variable levels of

[1] My thanks go to my PhD supervisors Anna Siewierska and Willem Hollman at Lancaster University for their help with an earlier version of this paper. My thanks also to Geoffrey Leech for his advice and constructive criticism.

prominence. The small circles are the entity in focus, e.g. in (4) the situation, *he BE here*. The dotted lines joining them show that it is the same entity throughout the representation. The ellipses represent the different domains, such as the fact it is an inference (1), certainty (2), reliability of the information (3), the time reference (*-n*) etc.[2] The thickness of each shows its relative prominence in a given usage event. The domains are numbered for convenience, but it is not a claim that these are exclusively represented, this is necessarily a sketch. Each domain adds a 'layer' of meaning of varying prominence, and all domains are potentially available for each construction. Crucially, a specific domain may not become prominent until a certain usage event activates it (either by the speaker as an intended meaning, or by the hearer).



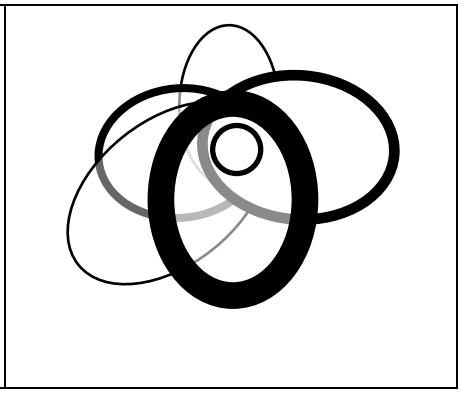



Figure 2.1 The domains in a domain matrix. Figure 2.2 The domain matrix conflated.

## Language change and the domain matrix

From studies on language change has come the theory of 'grammaticalisation', described by (Hopper and Traugott 2003: 1) as:

> […] that part of the study of language change that is concerned with such questions as how lexical items and constructions come in certain linguistic contexts to serve grammatical functions or how grammatical items develop new grammatical functions.

This approach has turned into 'Grammaticalisation Theory' (GT) and consists of a fairly well defined set of commonalities found to occur over time to constructions (see Hopper & Traugott 2003: ch.2; Fischer 2005, Brinton & Traugott 2005, Heine & Kuteva 2002 and 2007). It is central to grammaticalisation theory that 'change' is inevitable, but that 'a change' is not. It presupposes that variation is ubiquitous in language (Croft 2008: 3). Of the central claims made within GT, the unidirectionality principle, i.e. that change happens in certain 'directions' only, e.g. deontic to epistemic modality, and that they do not reverse, is perhaps the most controversial. Unidirectionality also claims

[2] Of course, this is just a very rough guide and it is not a claim made here that the actual thickness of the lines represents in any one-to-one fashion actual prominence, nor that the domains as described in-text relate specifically, or in any specified order, to the diagram. It is merely an illustrative tool.

that change is always away from concrete meanings and towards more abstract ones, and holds that there is a movement over time for form/meaning pairings to be realized first as words, then as particles, through to clitics and finally to bound morphemes (or rather, finally to zero morphemes), but not in the other direction. In order to account for some features of apparent reversal, the notions of 'lexicalisation' and de-grammaticalisation are invoked, i.e. that grammatical morphemes can become free lexical morphemes. There are conflicting views on grammaticalisation as a theory of language change. Indeed, some deny there is a 'process' at all, considering the converging data an emergent coincidence (e.g. Newmayer 2001: 225).

If the grammaticalisation argument is accepted, then as a general conclusion, the propagation of patterns of variants can be thought of as being driven by socio-pragmatic forces such as that described as 'the co-operation principle' (Grice 1975); people are social animals and successful and informative communication of thoughts is key to this. In fact, some argue that each case of change was motivated or goal-oriented (Heine 1997: 31), perhaps by a need for increased expressivity. However, this idea of motivated change in language is something which, increasingly, others deny (e.g. Croft 2000). In this view, variation is ubiquitous and change happens because change is an inevitable by-product of variability.

In the domain matrix view, language change can be seen as the conventionalisation of a modified matrix. What emerges is a 'new' prominence configuration between the active domains. This is precisely because during actual language use, the relative prominence of each domain changes according to its context.[3] Over time, previously infrequently used combinations of domains may come to be used more often or implied domains previously not activated can increase in prominence. Further, some core domains may be stripped out, leading to more abstract or metaphorical uses. This would, on the surface, lead to what we describe as 'meaning change', although it is sometimes difficult to claim 'a change' in meaning has happened when in fact each layer is immanent. The point is that it simply might not be prominent until a certain usage event activates it.

A further important consideration is that, as Hopper and Traugott say (2003: 71), grammaticalisation implies that change is as much driven by the hearer as the speaker, i.e. that a 'meaning' is not always meant, but an utterance will be understood to mean *something*. It follows that "if new renditions or new combinations should happen to recur, they themselves are subject to entrenchment and conventionalisation, becoming conventional units available for exploitation." (Langacker 2008: 459). Language 'change' in a larger sense of a conventionalised form/meaning pairing is then

[3] This works at different linguistic levels. For example, use of marked positions and stress can be used to adjust the relative prominence of a certain domain and perhaps a morphological variant will become associated with a certain wider meaning. I am thinking here of expressions like *See you laters* sometimes heard in the North of England. It is perhaps an extension of the plural *yous* often heard in environments in the North in low social distance interactions, but one occasionally hears non-northerners use *yous* to a single person. To an outsider the non-standard *-s* may be a form associated with reduced social distance rather than strictly coding 'plurality' as it is for native users. It therefore seems to me that users of the *see you laters* expression (anecdotally these are very often work colleagues, e.g. bus drivers) are using this form to show reduced social distance.

the result of myriads of tiny changes for every single utterance for every single construction. Clearly, where high frequency is involved as well, then there is more opportunity for this to occur.

A usage event, then, involves an utterance, the environment and at least a speaker and hearer, the 'conceptualisers'. A given domain matrix combination may be either implied by the speaker, or inferred by a hearer, who is trying to make sense of an utterance they have heard. Clearly, form/meaning parings can be novel and intended by the speaker, or a mismatch may occur between what was meant and what was inferred. Given that people already have a certain flexibility in what they consider to be acceptable usage, some instances may be less central, but still acceptable. This is the difference between Langacker's 'full' and 'partial' sanction (1987: 68) and the resulting 'stretching' of the scope of meaning expressible by a given form along with successive meaning mismatches between the speaker and hearer increase the likelihood of change occurring. In terms of the process of meaning change, through repeated use, a domain combination (a 'meaning') for a construction becomes entrenched in the individual and conventionalised in the speech community, becoming part of the standard set of expressions in the language. This is why frequency is the crucial factor in this approach. The construction may be rather fully spelled out, e.g. BE *going to* + infinitive, or relatively schematic e.g. the future reference in BE V+*ing*, which is also an instantiation of the higher level, more schematic, construction BE+ complement and so forth. The process results in the backgrounding of the older, more prototypical meanings. The domain approach adds a way of describing in some detail an actual path of change, but is of course a rather crude representation. It does, however, significantly add to an approach that merely claims that 'this meaning' is fore-grounded and 'that meaning' is back-grounded.

The BE *going to* + infinitive (hereafter BE *going to*)[4] construction is often considered to have 'grammaticalised', based on three main considerations. First, it has a more semantically bleached 'new' use, second is the fact that in its spoken form the *going to* construction is often phonetically reduced to ['gʌnə], and is often spelt *gonna* to reflect this. Finally, it can be said to have been 'reanalysed', in terms of internal constituency boundaries from [[*going*] [*to X*]] to [[*going to*] [*X*]]. I have noted elsewhere (Disney 2009, forthcoming) the view that because its PDE use in e.g. (3) codes an allusion to 'evidence', then it can be considered to have an 'evidential' function. This paper looks at how the changes in BE *going to* can be explained from a domain matrix approach, but first I outline approaches to the field of evidentiality.

## The domains of evidentiality and epistemic modality

The field of evidentiality is rather confusing because approaches are so varied, the terminology and boundaries are not consistent and some of the justifications for

[4] Although not an unproblematic issue, I consider both finite and non-finite examples as well as uses without BE as being essentially the same construction, i.e. that *going to* is the form to which these meanings are associated.

studies are based on some misleading assumptions about the nature of evidentiality and its relationship with (other) modalities. In a study dealing with aspects of evidentiality the field needs to be explicitly delimited and the relationship between evidentiality and epistemic modality needs to be described. There are three main strategies that studies on evidentiality use to deal with its relationship with neighbouring fields: inclusion, as mentioned above, disjunction and overlap (Dendale and Tasmowski 2001: 342). The 'disjunction' approaches mostly divide the field according to grammatical criteria (e.g. Aikhenvald 2004), while non-typology studies tend to follow an inclusion model.

In brief, epistemic modality is concerned with the speaker's *attitude* towards the information in the proposition and evidentiality is concerned only with the *mode* of knowing. These issues are mostly overlooked in work on English and the distinction is conveniently ignored by many (see Chung and Timberlake 1985: 244-6) and one is most often included within the other. In fact, an inclusion model often seems to be considered self-evident by many authors, especially those writing on English, a complaint echoed by Aikhenvald (2004). Dendale and Tasmowski observe that "[m]ost often, the 'included' notion is evidentiality, because marking the source of information can be imagined as an indirect means of marking an epistemic attitude towards the information" (2001: 342). Kärkkäinen (2003) also notes that approaches vary, concluding that "[t]he choice of one as superordinate over the other is then almost a matter of terminological convenience". The result is, regrettably, terminological inconvenience.

Since Chafe and Nichols (1986), authors in the field have justified broader and broader approaches, mostly based on Chafe's comment that he is "using the term 'evidentiality' in its broadest sense" (1986: 262). He admits this is not actually necessarily concerned with evidence at all, but that evidence is "one of [the] considerations, but not the only one." He goes on to say his approach covers any linguistic expression of attitudes toward knowledge (1986: 263) and even includes expressions such as 'oddly enough' (ibid.: 265). Chafe (1986) and Biber and Finnegan (1989) among others include epistemic modality within 'evidentiality'. Mithun (1986) also comes fairly close to a universal inclusion scope and describes four general areas she considers as being covered by the term 'evidentiality' (p. 89-90). In contrast, Biber et al. (1999: 855) and Kärkkäinen (2003: 19) subsume evidentiality under 'epistemic stance' as do most 'discourse' based studies, e.g. Barton (1993), Mushin (2001), Clift (2006). An inclusion approach is also found in work on other languages, for example, Friedman's (1986: 169) work on Bulgarian, in which he says evidentiality "involves the speaker's ATTITUDE towards the information, source being an implication derived from that attitude". However, in line perhaps with the approach taken here, he concedes that the term evidentiality in his study is "a convenient label (…) not to be taken as literally descriptive." (p.169)

There are three main considerations in arguing against such 'inclusion' models. The clearest evidence comes from typology where researchers claim that evidentiality is a separate domain at the conceptual level (Anderson 1986, van der Auwera and Plungian 1998, Plungian2001, Noel and van der Auwera 2009, Boye and Harder 2009, Boye2009). I concur with by Boye (2009), who argues convincingly for a clear

separation of these domains on typological grounds, but dismisses the relevance of 'grammatical categories' for ascertaining this. He treats evidentiality as a conceptual functional domain in line with studies that show how evidentiality is a separate region of (universal) conceptual space. This space is itself, however, ascertained by cross-linguistic analysis of morphological marking for evidentiality (Anderson 1986, Plungian2001), but the field is not restricted nor defined thus. The analysis is in line with Palmer, who divides his "propositional modality" into "epistemic" and "evidential" sub-domains (2001, but cf. Palmer 1986). The argument I follow here is that because evidentiality is only identifiable at the conceptual-functional level, then only this level can be considered a valid delimiter for the field, and as such all evidential expressions are expressing an 'evidential function', and could be considered 'evidentials', regardless of their surface form. This position also conflicts with an 'overlap' model, such as that presented by van der Auwera and Plungian (1998). In fact, because the overlap they describe results from evidential and modal values being semantically "identical at the interface" compatibility remains debatable.

Secondly, unlike stance comments, evidentials do not affect the truth or certainty of the proposition and can be questioned or negated in their own right, also without affecting these values.[5]For example the evidence can be questioned in (4-6) but the beliefs cannot. Consider the difference between (7a) and (7b):

(7) a. What evidence do you have that this is true?
b. *What belief do you have that this is true?

Aikhenvald claims that in fact "an evidential can have a truth function of its own. It can be negated and questioned, without negating and questioning the predicate itself (2004: 4)". Boye (2009) supports this view and his excellent discussion is not repeated here.

Finally, while evidential and epistemic meta-comments may superficially seem to have the same function, authors in the inclusion school often describe 'evidentiality' in terms of the speaker's 'commitment to the truth' of the proposition or to the speaker's 'evaluation' of the proposition (e.g. Chafe 1986, Palmer 1986, Mithun 1986, Kärkkäinen 2003). This misses the fact that evidentiality is concerned with the specification of the source. The inclusion analysis works well for adverbials with clausal scope such as 'apparently' in (10), which marks both hearsay and uncertainty:

(8) *Apparently*, he is very nice.

However, unlike *apparently* in (10), despite this formal similarity, an evidential expression or extension of an expression has no effect on the actual meaning of the target proposition, unlike appraisal comments, i.e. it does not affect the truth value or the relative certainty of the proposition.

(9) It might rain. (no evidence, just an evaluation)
(10) It might *be going to* rain. (only with evidence e.g. clouds on the horizon)

[5] See Boye (2009a, 2009b) and Disney (forthcoming) for discussion and more examples.

Support for this view is provided by Nuyts (2001: 386), who says that where a 'commitment' is being expressed, it is actually to the epistemic value of the whole utterance *including* the evidential expressions, and not to the content of the proposition alone. That is, in (10) the 'possibility' signalled by *might* has scope over *be going to rain* and not just *rain*, as is the case in (9).

It is the multiplicity of meanings signalled by a meta-comment that seems to be the cause of the problem for people who insist on an 'inclusion' model, and it is this that the domain matrix approach is useful for. A good example of this sort of multiplicity of meaning, one of which has a salient evidential function is the case of Romance conditionals, e.g. (11) below (from Squartini 2001: 306) and (12) (from Dendale and Tasmowski2001: 345). Squartini (ibid.: 205) says of his example that "the form traditionally called Conditional, among other more prominent and frequent uses, can also occur in contexts expressing report, hearsay or unconfirmed information". Aikhenvald considers these "evidential extensions" (2004: 148).

(11) *Secondo le ultime informazioni il president avrebbe lasciato Roma ieri.*
COND PstPrt
'According to the latest information the president left Rome yesterday'

(12) *ll y aurait de nombreuses victimes*
COND
'There are, it is said/it seems, many victims'

Dendale and Tasmowski's commentary on (12) claims that

> … the conditional simultaneously evokes: (1) attribution of the information to a third party (= evidentiality), (2) uncertainty of the information (= modality) and (3) non-commitment of the speaker regarding the information (2001: 345)

It is hard to establish which of these three meanings, if any, is primary. It is difficult to establish the primary meaning because it is context that allows us to gauge this in particular usage events and examples such as this have none; as noted above, the relative salience, or prominence, of each function varies according to context or genre. The categorisation problems stem from attempts to analyse interacting functions into discrete ones, something that is not always possible, and one simply cannot tease apart evidential meaning from other meanings with any degree of reliability. This is where the domain matrix approach can add to the understanding of the interaction between constructions that invoke concepts like evidentiality and epistemic modality.

This does leave the question of how to decide if a construction has an evidential function open. This can be most easily and reliably ascertained by hypothetically posing the question 'How do you know?' to the speaker of a proposition. If the answer codes the source in some way, clearly it must be considered 'evidential'. This is why a sentence like (13) is not an evidential and why (14 a-b) are:

(13) He will fail. Q: *How do you know?* A: *I don't know, it's just an opinion.*
(14) a. I see he failed Q: *How do you know?* A: *I have his grade in front of me*

b. He is going to fail. Q: How do you know? A: *I can perceive a situation and scanning forward in time I predict this result.)*

The above argument claims that evidentiality and epistemic modality, or 'stance', are separate conceptual 'domains'. It should be noted that an evidential comment is still mediated subjectively by the speaker and the appraisal comment can always be assumed to have a source, i.e. the speaker, so a comment can never be exclusively one or the other. Rather than consider this to be a problem, the approach taken here embraces this sort of interaction between domains. This view of meanings as being co-existing domains converges with the idea that evidential comments are ubiquitous, but simply may not be salient in every instance. Where a source is not overtly specified, a source may by convention be assumed to be a default, i.e. the speaker, and therefore backgrounded. It also may be that 'certainty' is assumed (and therefore default) unless modified, but further consideration of this is beyond the scope of this paper.

Figure 2.3 below gives a rough view of how the evidential and stance domains interact in this way, i.e. that a given meta-comment on a proposition may be a mix of evidential comment and appraisal comment, and that one or both may be prominent. This representation is of course a rather crude one, but the approach itself significantly improves on one that merely claims that e.g. there is some 'primary' meaning and that other meanings are 'back-grounded', although it amounts to the same thing. In this representation, the small circle, the focal entity, is the proposition *It has been raining* in the usage event given under the respective diagram. The domains shown relate to the meta-comment in bold.[6]

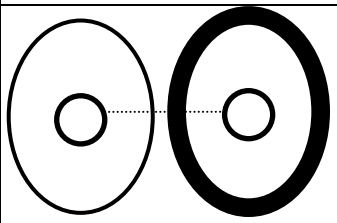
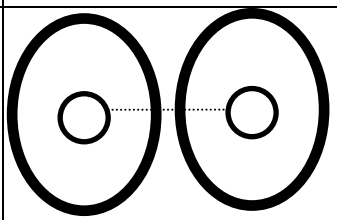
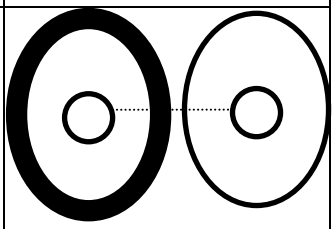
| *Usage event utterance* | A<br>**I am sure** it has been raining | B<br>**Apparently** it has been raining | C<br>It **must have** been raining |
|---|---|---|---|
| *Domain* | *Source Evaluation* | *Source Evaluation* | *Source Evaluation* |
| *Figure showing relative prominence of domains* |  |  |  |
| *Description of above* | *Higher prominence of evaluation*<br>*Source is default (the speaker)* | *Equal prominence: Evaluation coded with source (hearsay)* | *Lower prominence of evaluation Source as 'inference' more prominent* |

Figure 2 Variable domain prominence

[6] Obviously this is simplified and domains relating to time, space and umbrellas are omitted. This diagram is just presented in order to show how domains have varying prominence in usage events.

Clearly, at this interpersonal level, the actual motivation for invoking the source of one's knowledge, at least in languages where the system is optional, is variable and is context, perhaps even genre, dependant. Infantidou (2006) gives a coherent and useful account of evidentiality as a pragmatic function from a relevance theoretical perspective. There is a general social requirement for speakers to disseminate only reliable information, or at least information that can be taken as, relatively, reliable.[7] This is motivated by adherence to Gricean principles of co-operation and relevance. As such, the motivation for evidential function can be seen a kind of social obligation. Givón (1982: 24) says on the motivation for using an evidential expression that ''Propositions that are asserted with relative confidence, are open to challenge by the hearer and thus require – or admit – evidentiary justification'' i.e. evidentiality can be seen as a defence strategy. Also, Nuyts (2001: 386) makes the claim that "if one does not have any kind of evidence pertaining to a state of affairs, one cannot evaluate its probability." i.e. it is part of an (inter-subjective) evaluation strategy.[8]This clearly does not, however, justify including evidentiality under 'stance' systems.

## BE *going to* and the domain matrix

In terms of the domain matrix for BE *going to*, one of the core meanings will be the motion use of lexical GO, as shown in figure 3. The domains are numbered for convenience, but it is not a claim that these are exclusively represented, this is necessarily a sketch. The numbers relate to (1) Motion towards, (2) Intended motion towards, (3) Motion to do, (4) Intended motion to do, (5) Non-motion intention, and (6) non-intention future. The most salient will be domain (1), but going somewhere does imply a continuation into the future, i.e. (2) and probably also salient will be the intention to do something on arrival, but this is unspecified in the construction in this usage event. Obviously, the core domain(s) in the construction can be added to, showing more detail as required. For instance, it consists here at least of the semantics of lexical 'go', the semantics of the present progressive and notions of volition.

[7] The debate on evidentiality and its relationship to reliability is long and is not covered here due to lack of space. I accept that evidentiality does not linguistically code reliability values and that these are language specific inferences. Further debate can be found in Aikhenvald (2004).

[8] Note that these motivations are driven by the needs of the hearer, and not by the speaker. Evidence of this can be seen in the highly ritualised formats required of academic writing and the credibility hierarchy of different sources of evidence in criminal law proceedings, where e.g. observation is ranked higher than conjecture. In a way, medicine also implicitly assumes graded evidential strategies in consultations and diagnosis, in that the doctor's sight and hearing is considered more reliable than the patient's own report, which is in turn more reliable than a report by e.g. an anxious parent whose child is unwell. These are left for further study elsewhere, however.

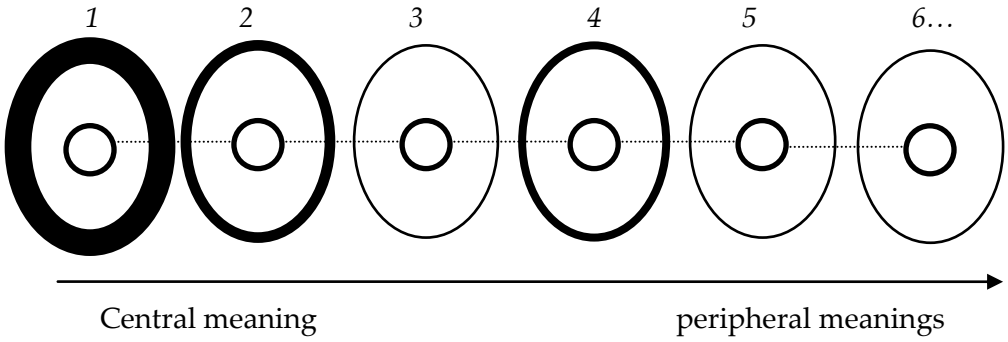



Figure 3 A domain matrix for a locative BE going to use

Figure 4 could be the representation for a purposive use, such as (15). Domain (1) is still highly prominent, and so is (2) for the same reason as above. Here, however, domain (3) is also very prominent.

(15) I am *going to* visit her. (*said as the speaker is leaving*)

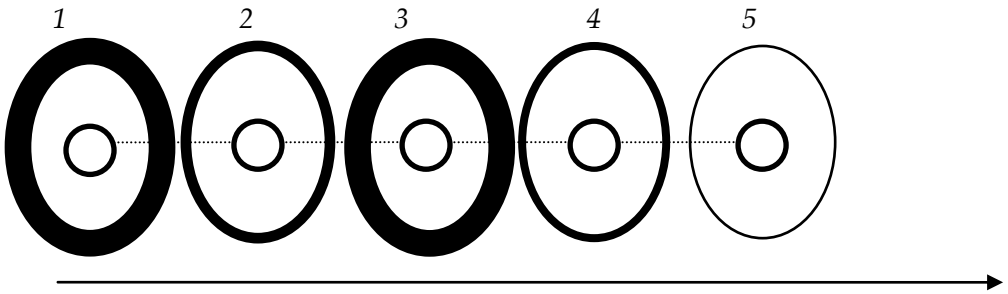



Figure 4 A domain matrix for a present purposive BE going to use

In that case, domain (1) is the most prominent as the sentence is expressing a 'current motion towards a goal'. However, other implied domains are also activated to an extent, but are much less prominent, e.g. an intention to go, or at least to continue going, is implied (2), and there is always an implication that once the destination has been arrived at that there is something to do there (4). In contrast, figure (2) shows the matrix for the purposive *They are going to meet him tomorrow* where there are only 'intentions to go and to do'. Here, (2) is less prominent than it would be if, for instance, a specific destination were overtly stated in the context, whereas in this case only 'not here' is implied by the purposive use:

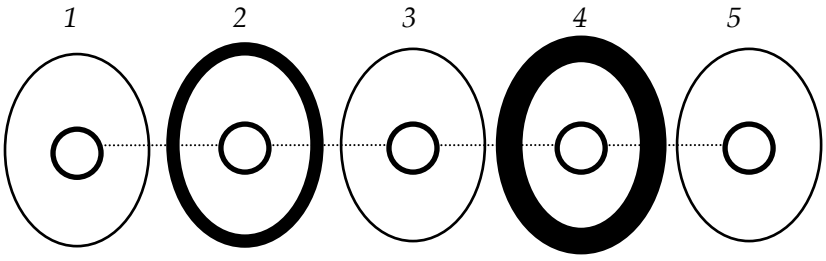



Figure 5: A domain matrix for a future purposive BE going to use

The grammaticalisation process results in a domain matrix shown as figure 3 where only the intention domain has any prominence at all and the motion aspect of the matrix has, as Langacker (1998: 81) says, been stripped away, e.g. as in *I'm going to be here at 6pm*:

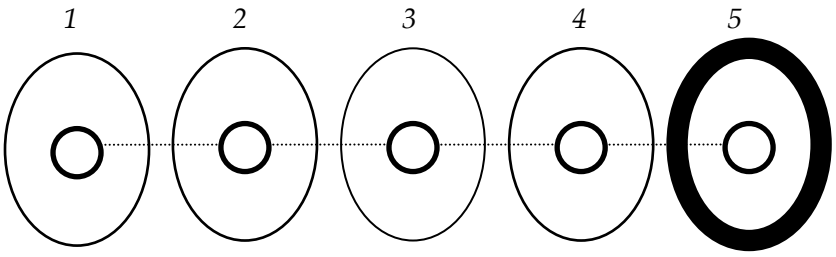



Figure 6: A domain matrix for a future intention BE going to use

This construction developed a non-intention use after this and in order to explain how this could happen it needs to be shown what else is immanent in the core domain matrix that can be left over once notions of 'motion' and then 'intention' have gone. For theory internal reasons, this is necessarily going to be even less concrete. It can be said that at a more abstract level, a given volitional entity 'merely' exists and as such this level is immanent, and therefore available as a meaning domain, when any reference is made to any entity, even humans.

The BE *going to* construction contributes only part of the meaning of the larger construction of which it is a part, i.e. here it is BE *going to* + infinitive. However, as noted above, it arguably does not actually have 'a meaning', but takes its full potential range of meaning (its complete domain matrix) into each usage event. Its discernable 'meaning' is only set when it is actually used in that context at that time and in that larger construction of which it is a part.

By way of illustration, the contribution of BE *going to* is slightly different in each example below and the reading clearly depends on the elements it combines with. Here, 'kill', a prototypical agentive verb, has an objective, observable effect (death). Taken out of any wider context, the likelihood of a highly prominent 'intention' domain fades from (16) to (18) according to subject type: (16) gets a firm agentive reading, and (18) is extremely low in agentivity. Context would determine for (17) the actual reading it gets, i.e. whether the speaker knows this is the agent's intention, or whether the speaker has some evidence for the claim.

(16) I am going to kill you.
(17) He is going kill you.
(18) This is going to kill you.

This fluidity in meaning is particularly clear in the case of 3rd person subjects, because with 3rd person reference there is always a certain amount of guesswork involved. Where such guesswork involves the future, it amounts to a 'prediction' and it follows that there is an immanent 'prediction' meaning underlying all future reference at least for 3rd person reference, including BE *going to* + infinitive. It is clearly more abstract

than an 'intention' and it is restricted to non-volitional contexts. In an actual usage event, something like (17) would be ambiguous, thus causing the 'blurring' predicted by Bybee et al (1994: 300). After the more concrete motion and intention meanings are gone, this meaning remains, and while the ambiguity would be especially frequent around 3rd person subjects the 'prediction' domain would also be available for others.

Further to this, while the relative prominence of 'intention' still fades according to subject type, in (19-21) the predictive domain of BE *going to* is more highly prominent throughout, because this time the complement verb concerns a subjective, unobservable effect (astonishment), and the verb gets a less agentive reading. There is therefore a certain amount of guesswork about the result of the action in all the cases:

(19) I am going to astonish you.[9]
(20) He is going to astonish you.
(21) This is going to astonish you.

By the time there is very low prominence of the intention reading, e.g. in (16) and (19), any meaning that can be assigned to BE *going to* itself is based on the more abstract domains and in fact, it appears to simply be aligned with the meanings of its complements, i.e. *this* is not a agent so *astonish* is not agentive and BE *going to* gets a non-intentional reading. As final extra support for this view, consider (22-23). The complement contributes most to the agentivity domain, i.e. the construction with BE *killed* is more likely to get an intention reading than the one with BE *astonished* as it is itself more prototypically agentive.

(22) You are going to be killed.
(23) You are going to be astonished.

However, the paraphrases with *will* in (22-23) show that BE *going to* does in fact contribute something to the agentive reading as these seem to have even less intentional, at least in isolation from a wider context. Even out of any real context the difference between (22) and (24) seems whether the killing is perceived as planned or accidental, i.e. ± 'volition', and in (23) and (25) whether the speaker has evidence, i.e. ± evidential.

(24) You will be killed.
(25) You will be astonished.

A similar situation can be observed for (26)-(28):

(26) I will astonish you.
(27) He will astonish you.
(28) This will astonish you.

[9] This example is taken from *Hard Times* by Charles Dickens

An analysis based on the course grained distinction in Leech (2004) is not incompatible with this and might claim that the future 'result from present intentions' use has generalised to express a 'result from present causes'. In fact, however, there are examples where this distinction proves inadequate and that there is a more abstract 'prediction based on evidence'. Consider (29) below if said, for example, in March.

(29) It is going to be a hot summer.

This is clearly not a 'result from present causes' of any kind, long range weather forecasts notwithstanding. It has no present 'cause' only present 'indications' on which the proposition is asserted, i.e. it based on evidence situated in the 'immediacy' area of evidential conceptual space.

The domain matrix view, where the relative prominence of domains changes and where a 'new' prominence configuration may become conventionalised as a 'new' meaning is clearly useful for describing the sorts of polysemous constructions as BE *going to* + infinitive. As noted, it is the interplay of all components in a given context that gives the reading of the construction as a whole. The following section uses interrogatives to make distinctions at the domain level even more salient. In (30), the subject has a choice of plan: to be a boxer or to be something else, thus highlighting the 'future intentions' use, whereas asking (32) of an expectant parent highlights the 'future indications' use. This contrasts with (31) where 'he' has no choice but to be 'male'.

(30) Is he going to be a boxer?
(31) *Is he going to be a boy?
(32) Is it going to be a boy?

In (33-36), there is clearly an intention reading because a boy can choose to be ± *good*.

(33) Are you going to be a good boy?
(34) I am going to be a good boy.
(35) Is he going to be a good boy?
(36) Is he going to be good?

In contrast, in (37) the subject entity cannot be considered to be + volitional and therefore the intention domain is not activated and all that is left is 'prediction'.

(37) Is it going to be good?

In (34-36) the prediction domain inherent in all third person reference is more prominent, but because being 'good' is seen as something under the control of the subject entity, the intention domain is readily salient. Langacker (1998) makes a similar point about the subject and control. However, this is lost with a non-animate subject in (37). Further, compare (36) with (38) where the subject has no control over the future state of *happiness* and there is therefore no 'intention' reading available:

(38) Is he going to be happy?

Similarly, in (39) there is no intention reading, but this is for a slightly different reason. While in (35) one can intend to be *good* but not to be a *boy*, in (39) one can intend to be a *boxer*, but cannot intend to be *good*, only hope to be so. But the schematic construction is, on the face of it, identical.

(39) a. Is he going to be a good boxer?
b. Is he going to be good?

In (39) being a boxer is presupposed as a planned event, thus 'using up' the intention domain, and *good* can then be interpreted as requesting a judgment of some sort. This is based on personal knowledge or rather it is based on the evidence according to current indications.

The question now is whether the historical development of this use supports the argument made above about immediacy and current indications being immanent in BE *going to*. Elsewhere (Disney 2009) I claim that a use synonymous with 'about to' developed almost immediately from the 'intention' use after it in turn developed from the purposive. This synonymy is described by Poole (1646: 26) who, being a language user at that time, was in a good position to make such an observation e.g. (40).

(40) […] she fell suddenly sick and died. As she was *going to* breath her last, she saw me grieve as much as if I had been her own.

Initially, the more abstract non-movement/non-intentional BE *going to* use allowed non-volitional uses only in the very limited environment of 'immediacy'. The problem is that the available data do not have any examples earlier than this because we only have written data which are very unlikely to include 'immediate' events. Clearly, constructions that are restricted to an 'immediate' time frame are not going to appear in such data. Therefore a certain amount of guesswork is inevitable. Further, the initial frequency of the non-volitional use would most likely be lower in the sort of everyday conversation where these changes occur, and in fact *about to* itself is almost exclusively intentional in a corpus of Shakespeare's complete works. An examination of uses in the EEBO[10]corpus at the turn of the 17th to 18th Century reveals that of 300 examples only 26 are purposive, only 11 are non-intentional and only two of these are non-immediate (e.g. 41). That compares to BNC rates that are almost evenly divided, according to Berglund (2000) and my own figures, which allowed much less unresolved ambiguity.

(41) That is, she was *going to* die unmarried, and without being dispos'd of according to the Privilege of her Condition. (c.1700 EEBO a33918)

That an immediacy use developed earlier than a distal future is understandable given that the core domain of BE *going to* is rooted in a current activity.

[10] Early English Books Online

## BE *going to* vs. *will*

There are of course many ways in which English users can refer to the future, including present simple aspect, subjunctives etc. There is a particularly interesting distinction between BE *going to* and *will*, that this section briefly notes. Detailed discussion on this can be found elsewhere, e.g. Leech (2004), Quirk et al (1985) Haegeman (1989), and space prohibits much discussion here. I do, however, wish to note some issues that have arisen in the literature and which can be understood better from a domain matrix perspective. That is, instead of attempting to attribute 'a meaning' to 'a construction' here, what these constructions are used to express can be thought of as intersecting continua consisting of variable domain prominences. The balance between the axes results in discernable, if very subtle, differences in their usage patterns and in fact the predictive uses described above of BE *going to* + infinitive exhibit overlap with predictive uses of *will*, and there is also some overlap with 'intention' uses too. The overlap is quite difficult to pinpoint, and usually amounts to the speakers' desire to highlight one particular facet over another. This is in line with the domain matrix view where, according to Langacker (2008: 49) domains "can be suppressed or overridden". In brief, BE *going to* has an intention use for plans made in the past whereas *will* has an intention use for plans made in real time, or in a time frame one can label as 'immediate' (42)-(43).[11]Similar to early 'predictive' uses of BE *going to*, this use of *will* is extremely hard to find in historical data because of its association with 'immediacy' (see Disney forthcoming).

(42) I am going to do it tomorrow. (i.e. *pre-planned*)
(43) I will do it tomorrow. (i.e. *decided as one is speaking*)

However, plans made in the past can be thought of as relatively certain, especially in an environment where scheduling is important, e.g. television newsrooms, where (44) may be heard. For them, 'certainty' is worth highlighting in this context so that need has overridden the expression of an 'intention'.

(44) We will bring you live coverage of that event as it happens. (BBC24 news 14/09/09 c. 13.20)

In contrast, *will* has a prediction use for future events that rely on knowledge gained previously (45), perhaps 'general knowledge', whereas BE *going to* has a prediction use for events based on knowledge gained in real time (46), or from an 'immediate' observable situation.

(45) He will crash.
(46) He's going to crash.

[11] Of course, domain prominence can be shifted by intonation and stress, so that if *will* in (45) carries the nuclear tone, the meaning then includes the notion of a previously decided plan.

Again there is an overlap between them when arguably either is equally possible and the choice is determined by other factors. This can also be used to explain weather forecasters' patterns when making predictions. Often, BE *going to* is the first future reference used,[12] and fairly often the final one. Mostly however, they use *will*.[13]Clearly, they have evidence for the predictions they are making, such as meteorological data and previously observed patterns, but there are three points that make *will* more appropriate to this genre. Firstly, here again *will* highlights 'certainty', which is more important to the viewer than the notion of evidence. Secondly, and perhaps related to the first point, the tendency for BE *going to* to be used at the start and, less often, at the end, can be seen as an evidential 'frame' for the whole forecast. Using a such a frame may reduce the need for further evidential reference. In fact, this sort of single instance framing has been observed in Wintu narratives (Schlichter 1986: 49) which otherwise has an obligatory evidential system. Indeed, she reports (ibid.: 47) that one morpheme is used "for predicting future events which are somehow felt as being imminent", just like English BE *going to* described above. It remains to be seen if, in the absence of BE *going to* being used as the evidential frame, whether some other deictic evidential device, such as *As we can see*, is consistently used.[14]The range of basic uses, where the other aspects, like certainty, are not highlighted by the speaker is shown as operating on two axes in table 1.[15]

| | **immediate** | **past** |
|---|---|---|
| **More volition** | I will do it tomorrow<br>(***plan*** *decided at the* ***current*** *moment of speaking*) | I am going to do it tomorrow.<br>(***plan*** *based on* ***previous*** *decision*) |
| **Less volition** | He's going to crash. (***prediction*** *based on knowledge of* ***current*** *situation*) | He'll crash!<br>(***prediction*** *based on* ***previous*** *knowledge* |

Table 1 The continua distinguishing BE going to and will

In general, the uses of *will* and BE *going to* overlap to a certain extent and there are examples where both are possible, but this is to be expected, as BE *going to* in general seems to be "taking over" even more functions of *will*.

[12] This is regrettably based on anecdotal evidence and awaits a full study. However, a cursory look through the ICE-GB corpus does reveal an interesting pattern.

[13] Or rather they use very few verbs at all, but that is also left for another study.

[14] The third point is rather more conjecture than fact. Weather bulletins tend to be spoken rather quickly and have a limited time slot. Obviously, *is going to X* is longer and harder to say than *will X*, at least in its long form, and may be the more prescribed pronunciation for informative broadcasts, with an avoidance of *gonna*. Where *gonna* is not discouraged, the proposal here would suggest that it would occur with a high frequency.

[15] This is discussed in more detail in Disney (forthcoming)

It is, of course, not as simple as table 1 suggests, but this does seem to represent the distinctions at a maximally general point. However, these contrasting constructions do also have related uses that at first glance appear to contradict the claims made in table 1. In (47), there is a situation where there is current evidence for the proposition, i.e. the door bell rings, yet BE *going to* would seem to be unacceptable.

(47) That will be the postman. (*on hearing the door bell ring*)

One explanation may be that this is because the prediction of who exactly is at the door is not based on knowledge gained in the current situation, but on knowledge the speaker already possesses, perhaps the delivery is regular or the postman has a distinctive way of ringing the bell.

In (48), on the other hand, the fact about hitting one's thumb with a hammer and knowledge of the pain that causes may count as 'previously held knowledge', but *BE going to* is used and *will* would be unusual here.

(48) That is going to hurt. (*on seeing someone hit their thumb with a hammer*)

To explain this, one may say that the fact that the event is non-volitional and occurring immediately in front of the speaker triggers the use of the construction typically associated with this type of situation, i.e. the evidential domain expressed by BE *going to* is triggered. The fact of the previously held knowledge is necessarily less prominent and *will* is not used. Compare the situation in (49), where BE *going to* would be unacceptable. Here, the event is yet to occur, and therefore not 'immediate', so 'previous knowledge' is more important to foreground as the evidence for the claim in the proposition.

(49) That will hurt. (*on seeing someone about to deliberately hit their hand with a hammer*)

In fact, the fact of the evidence is backgrounded in favour of the 'certainty' part of the meaning of *will*. It is precisely this area that there is overlap between BE *going to* and *will* for future reference and precisely why there is so much confusion and debate about the distinction between evidentiality and epistemic modality, let alone between *will* and BE *going to*.

## Conclusion

I have shown how with BE *going to*, the relative agentivity of the complement verbs and the subject type all contribute variable domain matrices to form the domain matrix of particular instances of constructions that use BE *going to* + infinitive. The discussion shows how domain prominence can be ambiguous, e.g. in (4-7), and that there is ambiguity between actions and states (7-10). I have also demonstrated how stative BE can appear in constructions with BE *going to* with agentive / intentional readings (15a)

as well as non-intention ones (17a). Finally, I show a difference based on whether an actor can be thought of as having control over a state e.g. the differences shown between (15b) and (17b). Bearing in mind that the non-intention and prediction domains are already inherent in BE *going to*, I would claim that the ambiguity such examples as these represent allowed the intention reading to be stripped away, leaving the inherent 'result of a cause' or 'prediction' domain as the most prominent. These then became conventionalised over time to become the PDE 'prediction use'. This conventionalisation process is well understood and in actual usage events it only needs successive, regular, slight mismatches between the domain prominence of what is said and what is inferred to allow another stage of conventionalised meaning to begin to develop. With BE *going to*, as with all grammaticalised constructions, this stage is based on more abstract domains with increased subjectivity. The 'new meaning' will therefore also be more abstract and have increased subjectivity. In actual usage events, where there is pressure to be as clear as possible, it would be unsurprising to find that speakers would find ways to reduce the ambiguity and mark for the 'new' meaning in some way. Such strategies would of course be more necessary in the early stages, before the use of that domain were more fully conventionalised through frequent employment.

In terms of the development of the predictive sense of BE *going to*, I show elsewhere (Disney 2009, forthcoming) and in line with the research mentioned above (e.g. Langacker 1998) that after the ambiguous purposive stage, the non-movement intention meaning implicit in this conventionalised the 'intention' meaning. Overtime, the 'immediacy' meaning was also stripped away, allowing the construction to be used, as with the intentions, for more distal events. As the possibility to refer to the less immediate future grows, then the frequency will rise, encouraging perhaps further changes. Also, that the non-intentional use has been slower to expand in use than its sister is also understandable, given that the core domain is strongly agentive. There is no reason, however, that 'It is going down the hill' could not have existed in reference to e.g. a rock rolling, and hence a non-volitional motion is, of course, immanent in the core construction. I show elsewhere (Disney 2009, forthcoming) how and when this seems to have occurred. The final point raised above relates to how BE *going to* contrasts with *will* with respect to future reference. A model was given that showed how the distinction may operate on dual dimensions, allowing for overlap in the system. Overlap is non-problematic, because for BE *going to* to have taken over any uses from *will* actually requires it and in fact, overlap is essential to language change.

## References

Aikhenvald, A. (2004). *Evidentiality*. Oxford: Oxford University Press.

Anderson, L. B. (1986). Evidentials, paths of change and mental maps: typologically regular asymmetries. In Chafe, W., and Nichols, J. (eds.). *Evidentiality: the linguistic coding of epistemology.* USA. Norwood, NJ: Ablex Publishing Corp. 273-312.

Barton, Ellen L. (1993). 'Evidentials, argumentation, and epistemological stance'. *College English* 55(7), 745–769.

Boye, K. (2007). 'Semantic maps and the identification of cross-linguistic generic categories: Evidentiality and its relation to Epistemic Modality'. Accessed on 16/10/2009. www.eva.mpg.de/lingua/conference/07-SemanticMaps/pdf/boye.pdf

Boye, K and Harder P. (2009). 'Evidentiality: Linguistic categories and grammaticalisation'. *Functions in Language* 16:1, 9-43.

Brinton, J. and Traugott, E. (2005). *Lexicalization and Language Change: Research Surveys in Linguistics.* Cambridge: Cambridge University Press.

Berglund, Ylva. (2000). *Gonna* and *going to* in the spoken component of the British National Corpus. In C. Mair and M. Hundt (eds). *Corpus linguistics and linguistic theory. International conference on English Language Research on Computerized Corpora,* Amsterdam: Rodopi.

Bybee, J., Perkins, R., & Pagliuca, W. (1994). *The evolution of grammar: tense, aspect and modality in the languages of the world.* Chicago: University of Chicago Press.

Chafe, W. (1986). Evidentiality in English conversation and writing. In Chafe, W., and Nichols, J. (eds.). *Evidentiality: the linguistic coding of epistemology.* USA. Norwood, NJ: Ablex Publishing Corp.

Chafe, W., and Nichols, J. (eds.). (1986). *Evidentiality: the linguistic coding of epistemology.* USA. Norwood, NJ: Ablex Publishing Corp.

Chung, S. and Timberlake, A. (1985). Tense, aspect, and mood. In Shopen, Timothy (ed.). (1985). *Language typology and syntactic description: Grammatical categories and the lexicon*, (3). Cambridge, England: Cambridge University Press.

Clift, Rebecca (2000). 'Stance-taking in reported speech'. *Essex Research Reports in Linguistics* 32, 1-31.

Croft, W. (2000). *Explaining language change: an evolutionary approach.* New York: Longman.

Croft, W. (2008). 'Evolutionary Linguistics'. *Annual Review of Anthropology*. 37, 219-234.

Dendale, P., and Tasmowski, G. (2001). 'Introduction: evidentiality and related notions'. *Journal of Pragmatics* 33, 339-348.

Disney, S. (2009). 'The grammaticalisation of 'BE *going to*''. *Newcastle working papers in Linguistics* 15, 63-81.

Disney, S. (forthcoming). *Verbal expressions of Evidentiality in English and their interaction with modality*. (working title). Unpublished PhD thesis, Lancaster University.

Fischer, O. (2005). 'Expressions of future in present-day English'. *Studia Anglistica Upsaliensia* 126: ActaUniversitatisUpsaliensis.

Freidman, V. (1986). Evidentiality in the Balkans: Bulgarian, Macedonian, and Albanian. In Chafe, W., and Nichols, J. (eds.). *Evidentiality: the linguistic coding of epistemology.* USA. Norwood, NJ: Ablex Publishing Corp. 168-187.

Givón, T. (1982). 'Evidentiality and Epistemic Space'. *Studies in Language* 6: 1, 23-49.

Grice, H. P. (1975). Logic and conversation. In P. Cole and J. L. Morgan (eds.), *Syntax and Semantics*, 3, 41-58. Academic Press, New York.

Heine, B. (1997). *Cognitive foundations of grammar.* New York, Oxford: Oxford University Press.

Heine, B, and Kuteva, T. (2002). *World Lexicon of Grammaticalization.* Cambridge, England Cambridge University Press.

Heine, B, and Kuteva, T. (2007). *The Genesis of Grammar: A Reconstruction.* UK: Oxford University Press.

Hoer, P. J. & Closs, Traugott, E. (2nd Ed.). (2003). *Grammaticalization*. Cambridge: Cambridge University Press.

*Infantidou*, E. (2001). *Evidentials and Relevance.* Amsterdam: John Benjamins.

Jespersen, O. (1933). *Essentials of English grammar*. London: Allen and Unwin.

Kärkkäinen, E. (2003). *Epistemic Stance in English Conversation: A description of its interactional functions with a focus on 'I think.* Amsterdam: John Benjamins.

Haegeman, L. (1989). '*Be going to* and *will*: A pragmatic account'. *Journal of Linguistics* 25, 291-317

Langacker, R. (1987). *Foundations of Cognitive Grammar, I, Theoretical Prerequisites*. Stanford, California: Stanford University Press.

Langacker, R. (1991). *Concept, Image, and Symbol: The Cognitive Basis of Grammar*. Berlin: Mouton de Gruyter.

Langacker, R. (1998). On subjectification and grammaticization. In: Koenig, J. P. (ed.). *Discourse and Cognition: Bridging the Gap.* USA: CSLI Publications, Stanford. 71–89.

Langacker, R. (2008). *Cognitive grammar: A basic introduction.* Oxford: Oxford University Press.

Leech, G. (3rd Ed.). (2004). *Meaning and the English Verb.* UK: Pearson Education.

Mithun, M. (1986). Evidential Diachrony in Northern Iroquoian. In Chafe, W., and Nichols, J. (eds.). *Evidentiality: the linguistic coding of epistemology.* USA. Norwood, NJ: Ablex Publishing Corp. 89-112.

Mushin, I. (2001). *Discourse Analysis: Evidentiality and Epistemological Stance: Narrative Retelling*. Amsterdam: John Benjamins.

Newmeyer, F J. (2001). 'Deconstructing grammaticalization'. *Language Sciences* 23, 187–229.

Noel, D. & van der Auwera, J. (2009). 'Revisiting *be supposed to* from a diachronic constructionist perspective'. *English Studies* 90(5), 599–623.

Nuyts, J. (2001). 'Subjectivity as an evidential dimension in epistemic modal expressions'. *Journal of Pragmatics* 33: (3), 383-400.

Palmer, F. (2nd Ed). (2001). *Mood and Modality*. UK: Cambridge: Cambridge University Press.

Plungian , V. (2001). 'The place of evidentiality within the universal grammatical space'. *Journal of Pragmatics* 33(3), 349-357.

Quirk, R., Greenbaum, S., Leech, G. & Svartvik, J. (1985). *A Comprehensive Grammar of the English Language.* Harlow: Longman Group Press.

Schlichter, A. (1986). The Origins and Deictic Nature of Wintu Evidentials. In Chafe, W., and Nichols, J. (eds.). *Evidentiality: the linguistic coding of epistemology.* USA. Norwood, NJ: Ablex Publishing Corp.

Squartini, M. (2001). 'The internal structure of evidentiality in Romance'. Studies in Language 25(2), 297-334.

Van der Auwera, J. & Plungian, V. (1998). 'Modality's semantic map'. *Linguistic typology* 2(1), 79-124.