

Grammaticalization and subjectification of the future The case of English, Dutch and German

1. Introduction

There is a widespread linguistic consensus that grammaticalization and subjectification go hand in hand for grounding predications, which in the case of modal auxiliaries and tense markers situate a state of affairs in a particular epistemic region (time, reality) vis-à-vis the ground (i.e. the speech event, its participants and the situation in which it takes place) (cf. Langacker 1991a: 315 ff.). This claim has been substantiated for many phenomena (e.g. Traugott 1989 on must, shall and will; Langacker 1991a-b on be going to and French aller; Traugott 1996 on the epistemic meanings of promise and threaten). In this paper, we focus on the correlation between grammaticalization and subjectification for the most important future markers in English, Dutch and German, i.e. will, be going to, zullen, gaan and werden.¹ More specifically, the main questions are: what are the relative degrees of grammaticalization of these auxiliaries and does a higher degree of grammaticalization correspond to a higher degree of subjectification, both intralinguistically and interlinguistically?

The paper could be considered as an exercise in “contrastive cognitive corpus linguistics”, a succession of “c’s” that jointly or separately characterize a good part of the work of Barbara Lewandowska-Tomaszczyk (e.g. Lewandowska-Tomaszczyk 1996, 1999) and of the people she inspires, reflected perhaps most noticeably in the PALC volumes (as of Lewandowska-Tomaszczyk -- Melia 1997). The “c” for cognitive stands for the cognitive linguistics of Langacker. Here, we particularly need his model of subjectification. Langacker (1991a-b, 1999, 2002, 2003, 2006) regards the process of subjectification as a shift of (parts of) an objectively construed entity, which is the overt target of conception, to the subjective plane, which covers the implicit way of conceiving an entity. The difference between objectivity and subjectivity in Langacker’s theory can be illustrated by the deictic lexical item now and the grounding predication of the present tense (cf. Brisard 2001: 271). The former puts forward the present time as part of the proposition, whereas the latter does not act as an explicit element of the expression but as a temporal perspective from which the content of the proposition is presented. In technical cognitive terminology, now is said to belong to the objective scene, which is also often called the immediate scope of predication (in opposition to the “broad” scope of a predication) or, informally, the stage or the general locus of attention (Langacker 2003: 8), while the present tense establishes a link between the profiled state of affairs and the ground in a subjective and offstage manner. As is shown in Mortelmans (2004), the view of subjectification as implicitization offers an adequate description of increasing subjectivity as a concomitant process of

grammaticalization for grounding predications.² The change of meaning can be summed up as a development from an entirely objective predication in Figure 1 over an in-between stage in Figure 2 to a maximally subjective predication in Figure 3 (diagrams adapted from Langacker 1991b: 216).

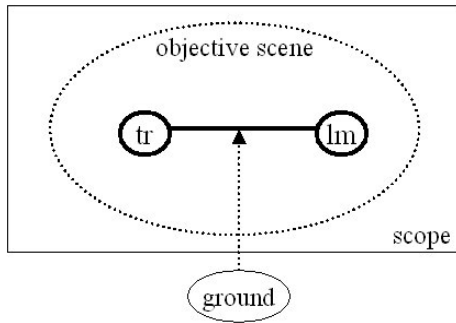


Figure 1: objective relation

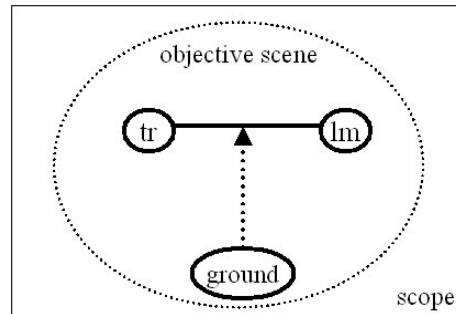


Figure 2: intermediate relation

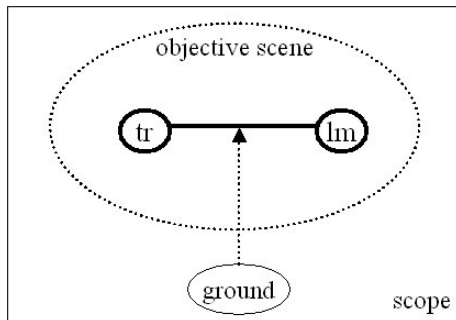


Figure 3: maximally subjective relation

In Figure 1, the abstract relation between the trajector (tr) and the landmark (lm), respectively, the first and second participants of a process in cognitive grammar, is purely lexical. Its semantics does not have a built-in reference to the ground, which is therefore placed outside the general scope of predication. In Figure 2, the ground falls within the general scope of the predication and is even part of the objective scene. The bold oval and arrow indicate that (certain components of) the ground is (are) profiled or, differently, focal to the relation. In Figure 3, the ground stands outside the immediate scope of predication but inside the general scope. The chief elements of the ground, i.e. the speaker and hearer, are implicitly or subjectively construed as “view[ers] of the focused entity onstage” (Langacker 2003: 8).

The central questions as formulated in the first paragraph suggest that it is possible to assign definite degrees of grammaticalization and subjectification to each auxiliary verb in its entirety. It is argued, however, in Mortelmans (2006a) that such a view (e.g. Langacker 1991a: 333-337 on

the contrast between the English and the German modals) is an oversimplification and that an analysis at the level of the various uses and forms of the German auxiliaries is more appropriate. A similar case can be made for the Dutch verb zullen. The well-established dichotomy between root modality and epistemic modality, for instance, is reflected in distinct levels of subjectification and grammaticalization.

- (1) a. Hij zal _____ in zijn kantoor zijn.
 he will/shall in his office be
 ‘He will be in his office.’
- b. Hij moet en zal _____ een ijsje.
 he must and will/shall an ice cream
 ‘He wants to and will get an ice cream.’
- c. Dit kleed zal _____ uit.
 this dress will/shall out
 ‘I will get out of this dress.’

In its epistemic use of probability, the auxiliary can typically only be followed by an infinitive as in (1a) (cf. Haeseryn et al. 1997: 1006 for some refinements), in which the speaker evaluating the state of affairs on the basis of his or her knowledge of present reality remains largely implicit. In its root modal use of obligation, zullen can also be accompanied by a noun phrase or a particle as in (1b) and (1c), in which the speaker is clearly present as the source of the modal expression. The verb is compatible with more types of constituents in its nonepistemic reading than in its epistemic reading (cf. Barbiers 1995: 152-162). Epistemic zullen, a more subjective use of the verb, thus exhibits an increased degree of condensation and hence grammaticalization. This more gradual view entails that it is, in fact, not legitimate to talk about the overall levels of grammaticalization and subjectification of a particular auxiliary as these levels can vary from use to use. Nevertheless, for the purpose of comparing the English, Dutch and German future markers in general, we will resort to a verb’s most subjective use as its overall measure of subjectification and to global characterizations of the degrees of grammaticalization.

2. Grammaticalization of the future

Table 1 sums up the overall differences in degree of grammaticalization that are relevant to the discussion in the following sections. Two of the five relations in Table 1 can be assumed to be common knowledge and will only be sketched briefly here: will is more grammaticalized than be going to (cf. Langacker 1991b, Bybee -- Perkins -- Pagliuca 1994, Brisard 2001) and than werden (cf. Mortelmans 2004). The internal differences of zullen and gaan and the relation of zullen with its English counterpart require special

consideration.³

Table 1: relative degrees of grammaticalization

<u>werden</u>	<	<u>will</u>	>	<u>zullen</u>
		∨		∨
		<u>be going to</u>		<u>gaan</u>

2.1. Werden vs will vs be going to

Werden is the only auxiliary verb in German that truly specializes in expressing futurity. Its frequency is relatively low, however, particularly in comparison to the other tense forms. The use of werden is not as unavoidable as that of will in English, which has a higher number of occurrences and is nearly obligatory in certain contexts, such as the apodosis of a conditional and the main clause after a temporal when-clause. Will is, in other words, paradigmatically less variable, i.e. the choice to leave it out or to select other signs is more restricted, and thus more grammaticalized than werden. Moreover, the English verb is a member of the distinctive and homogeneous modal paradigm (e.g. pattern with bare infinitive, no nonfinite forms and no -s ending in the third person singular of the present tense), while werden is an outsider in the German modal verb class (cf. Mortelmans 2004: 195). The difference in degree of grammaticalization indicated by this dissimilarity in paradigmaticity is further confirmed by the levels of integrity of will and werden. The phonological substance of the English auxiliary is often reduced to just one phoneme, i.e. 'l, whereas werden does not erode.

The view that will is more grammaticalized than be going to is supported by numerous arguments, the most conspicuous of which follow here. Both future markers are undergoing a process of attrition but the phonological matter of 'l is noticeably smaller than that of (be) gonna. In addition, the reduced form of will functions as a clitic to the subject, while be going to as a whole has remained syntagmatically independent so far. The paradigm to which will belongs is also more uniform than the paradigm of which Krug (2001) argues be going to is an element. The category of so-called emerging modals is characterized by a phonological tendency only towards the structure consonant-vowel-consonant-schwa with stress on the first syllable (e.g. gonna, wanna, gotta but hafta) and its morphosyntactic features are diverse (e.g. wanna takes do-support but gotta and gonna do not) (cf. Krug 2001: 315, 327). Finally, unlike for will, there do not appear to be any straightforward circumstances under which the use of be going to is regarded as obligatory.

2.2. Zullen vs gaan vs will vs be going to

The Dutch future markers are similar to worden in that they are not very frequent (cf. Colleman 2000: 58-59), especially in contrast to will and be going to. Obviously, this does not mean that Dutch or German speakers are not as concerned with the future as English. In both languages, the present tense can be used to express futurity provided that its default interpretation as a reference to the present is impossible or highly unlikely in the context. The fact that in Dutch the present tense is nearly always an alternative to the future auxiliaries implies that their paradigmatic variability is greater than that of will and be going to. Intralinguistically, it is interesting to consider Bybee's (2003: 605) observation that "a much-noted property of grammaticizing constructions is this increase in type frequency of cooccurring lexical items." The type frequency of gaan is significantly lower than that of zullen. The former cannot be combined with hebben 'have', zijn 'be', gaan 'go', the primary modals and some secondary modals (Haeseryn et al. 1997: 978-979).⁴ The latter, on the other hand, is comparable to the English future markers as the auxiliary can freely occur with any infinitive, even with futural gaan.

Zullen is a member of the paradigm of the primary modals (which also includes kunnen 'can', mogen 'may', moeten 'must' and willen 'want to'), some prototypical features of which are that they 1. pattern with a bare infinitive, 2. lack the imperative, the conjunctive and the present participle forms, 3. do not have the regular -t ending in the third person singular of the present tense and 4. are substituting the second person singular of the present tense by the first and third person singular form. There is, however, considerable variation among the members of this paradigm (e.g. mogen still has a conjunctive, zullen does not have a past participle, kunnen, mogen and zullen are characterized by a vowel change between the singular and the plural). All in all, the Dutch paradigm does not measure up to the English modals with regard to paradigmaticity. The verb forms of the English paradigm have been reduced even more (e.g. a single form for all persons and no nonfinite forms) and the variation among members is more restricted.

Gaan does not have any straightforward paradigmatic ties to other auxiliaries. Mainly from a semantic point of view, it might be argued that gaan, blijven 'keep' and komen 'come' constitute a paradigm of aspectual auxiliaries that are typically followed by bare infinitives (gaan can be used as an inchoative marker). But on the formal side, there are no indications of any paradigmaticization of these three auxiliaries. There are no standard verb forms missing and the verb endings are regular. Moreover, komen diverges from blijven and gaan in that its singular present has a shortened vowel and the past tenses of the three verbs all involve different vowel changes. Thus, the degree of paradigmaticity of gaan is considerably lower

than the degrees of zullen and of be going to.

Note, finally, that there are no important differences between the levels of integrity of the Dutch future auxiliaries but that the contrast to will and be going to is sharp. The attrition that is typical of the English verbs and the related cliticization of will are not paralleled in Dutch. The phonological substance of zullen and gaan is not decreasing and both auxiliaries function as free morphemes.

3. Subjectification of the future

3.1. Will vs be going to

The meanings or uses that are usually associated with will are the root concepts of willingness and intention and the epistemic notions of predictability and prediction, exemplified in (2a-d) in this order (examples from Coates 1983: 170, 178).

- (2) a. I don't think the bibliography should suffer because we can't find a publisher who will do the whole thing. ['be willing to/want to']
 b. I'll put them in the post today. ['intend to']
 c. "That will be Celia," said Janet. ['I predict + non-future event']
 d. I think the bulk of this year's students will go into industry. ['I predict + future event']

Will is also employed as an expression of pure future reference (i.e. presenting a predication as potentially real in the future with no with commitment to its actualization or, differently, simply locating a predication in the "post-present part" of the timeline) in generic statements and in matrix clauses with conditional and temporal subclauses, like in (3a-c) respectively (examples from Mortelmans 2006b).

- (3) a. He's not sure he'll have the strength to go back into his room.
 b. "I know that kind of fellow," said Bruno, "You'll never hear another word. He's probably just talking big to impress the lady."
 c. "When the hurricane comes," Christine says hesitantly, "I won't be able to fly home."

In Brisard (1997, 2001), who takes a monosemist perspective, the use of will in the apodosis of conditionals is argued to be the symptomatic externalization of its central features. The verb is analyzed in terms of the impact of evolutionary momentum, i.e. the inescapable force of reality that determines which future events are likely to occur (Langacker 1991b: 278), and in terms of the epistemological parameters [givenness], which denotes that the information is (not) presented as old and known, and [presence],

which stands for the construal of the information as (not) verifiable by presently available indications. Briefly, will is said to represent the conceptualization of events as unactualized or [-given] and as not immediately confirmable or [-present] but as based on premises that are [+given] and [+present]. In conditional clauses, these premises are explicit but they can be generalized to will's other uses. In the root usages of willingness and intention, for instance, the conditions enabling the speaker to say something about a present or future situation boil down to the knowledge of his or her own state of mind (his or her will, convictions and so forth). Similarly, in generic truths, scientific claims or statements about characteristics and habits, past experience and testing are often the premises that allow the speaker to make specific claims with a high degree of confidence.

From a subjectification approach, the semantic evolution from will's "initial" meaning of volition to the "fully modal meaning of contemporary will" (Brisard 2001: 273) can be seen as a change from Figure 4 to Figure 5 (adapted from Brisard 2001: 272).

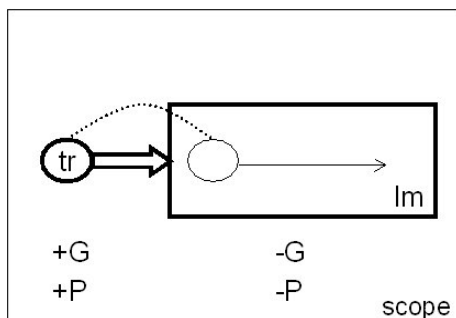


Figure 4: volitional will

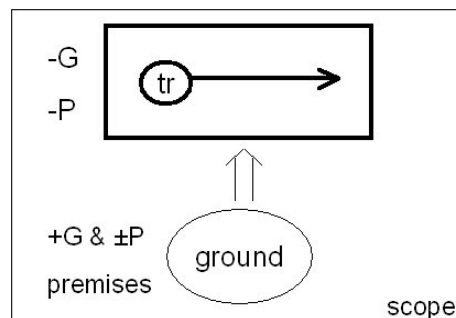


Figure 5: fully modal will

In Figure 4, the modal force of wanting (= the double-barrelled arrow) can be equated with the known (= +g) and present (= +p) trajector, which acts as the source or locus of potency, and targets the realization of an event (= the landmark as an empty process, the trajector of which is identical to the main trajector as indicated by the dotted line) that is situated in the future (= -g and -p) as wanting an event entails that its actualization follows the moment of wanting. In Figure 5, the objective relation of volition has become an offstage connection between the profiled process and the ground. The modal force still targets a [-given] and [-present] state of affairs but has [+given] but resides in implicit [+given] and [+present] premises.

Like will, be going to expresses intention and prediction. The sentences in (4) illustrate the two usages (examples from Coates 1983: 198).

- (4) a. I'm going to draw this so that he can have a full picture. ['intend to']
 b. We're going to have a new mum. ['I predict + future event']

Unsurprisingly, there are semantic differences with will. The intention conveyed by be going to is said to imply the immediate fulfilment of the future main predication and to be premeditated (for an impulsive intention, a speaker will rather make use of will). The predictive power of be going to is marked by a present orientation (Wekker 1979, Coates 1983: 201), i.e. the prediction is based on present indications such as visible forerunners of the event at hand or the early stages of the future event's actualization. Brisard (2001) captures these semantic characteristics in his description of be going to as [-given] and [+present]. The signals at the time of speaking can take various forms as Brisard (2001: 282) points out: "... potential sources or causes of predicted events include the speech participants situated in the ground (all of them indeed bearing witness to their own mental states), but also any material (that is, non-mental) condition that may be relevant for the prediction of the landmark's actualization." In its intentional use, be going to involves (the knowledge about) someone's mental state as the present signal that allows or rules out the fulfilment of the main verb. The threat in (5a) is, in fact, so powerful because of the speaker's and addressee's awareness that it can be carried out. In its predictive use, the present orientation can range from visual indicators as in the epistemic inevitability of (5b) to the knowledge of what has been morally or socially appropriate up until the time of speaking in the deontic inevitability of (5c) (examples from Brisard 2001: 261, 263, 265).

- (5) a. 'I'm going to make you lick that card clean,' said Durieux.
 b. Singh said, 'I think there is going to be a storm.'
 c. You're going to do this job for me without any more argument.

The semantic development that be going to has passed through is represented in Figures 6 and 7 and is a clear case of subjectification. Figure 6 stands for be going to's original meaning and Figure 7 for its present-day meaning (adapted from Brisard 2001: 277, 282).

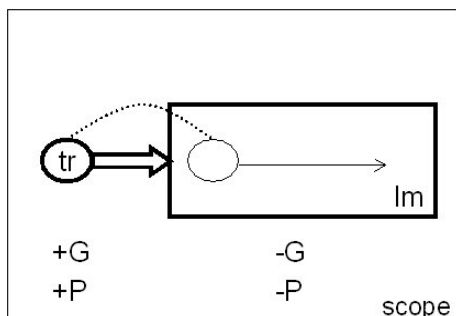


Figure 6: premodal be going to

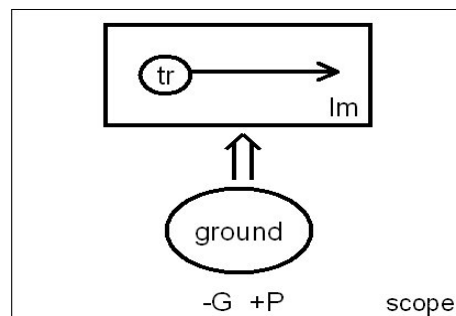


Figure 7: present-day be going to

In Figure 6, a known (= +g) and present (= +p) trajector is the source of the “premodal” force of moving along a path (= the double-barrelled arrow), at the end of which he or she (= coreferentially as signalled by the dotted line) will (= -g and -p) perform the landmark-event. In Figure 7, the force does not come from the trajector but from the ground, which has retained the feature [+p] of the locus of potency in Figure 6 and is thus present at the time of speaking. In contrast to will, which only profiles the main event (cf. Figure 5), the ground in be going to is focal and an integral part of the immediate scope of predication. In conclusion, the future marker be going to is less subjective than its more grammaticalized colleague will.

3.2. Will vs zullen vs werden

Since both English and Dutch have two future markers of very similar origins (the meaning of movement for be going to and gaan and the modal meanings of volition and obligation for will and zullen respectively), one might be tempted to think that the semantics of will and zullen are comparable. If so, we expect zullen to be used in the contexts that are prototypical of will in Figure 5 such as generic statements, claims about habits and general truths (Brisard 2001: 270). But zullen is not acceptable in the Dutch equivalents of the fabricated parallel examples in (6-8). The most obvious translation of will here is the present tense.

- (6) a. The only ones they’ll eat are the ones that look exactly like the kind you get in boxes at the supermarket. [generic] (Mortelmans 2004: 206)
 b. De enige die ze eten zijn diegene die er precies uitzien als de soort die je in dozen in de supermarkt haalt.
- (7) a. She’ll work all year without taking a holiday. [habit]
 b. Zij werkt het hele jaar door zonder vakantie te nemen.
- (8) a. Excessive exposure to sunlight will cause skin damage. [general truth]
 b. Overdadige blootstelling aan zonlicht veroorzaakt schade aan de huid.

The ultimate test case for will and zullen is the matrix clause of a conditional (or of a sentence with a temporal subclause), which is tailor-made for a [-given], [-present] prediction founded on [+given], [+present] premises. But as the parallel examples⁵ in (9-10) illustrate, it is again the present tense which will typically corresponds to.

- (9) a. Als je die leerschool van intrige en bedrog en intimidatie niet hebt doorlopen, wordt het nooit wat. (HM, 104)
 b. If you haven't been through this school on intrigue and intimidation, you'll never make it.
- (10) a. Maar als je even nadenkt, kom je er wel achter. (HM, 136)
 b. But if you think of it a little, you'll be able to work it out.

The premises in the protasis and the temporal subclause in (9-10) open up mental time slots in the future. Will and the Dutch present tense just fill up these mental spaces. The maximally subjective auxiliary will provides a picture of future reality that fits the context perfectly. The present tense can be said to specify that the event in the main clause takes place within the newly created mental space (cf. Mortelmans 2004: 204 ff.). Zullen, nevertheless, does occur in sentences like (9-10). The examples in (11-12) are cases in point.

- (11) a. Als ik stervende ben, zal ik op mijn kniën naar je toe kruipen.
 (HM, 23)
 b. When I'm dying I shall crawl to you on my knees.
- (12) a. Zij zal blij zijn als ze hier weg is. (HM, 76)
 b. She'll be glad when she's away from here.

The use of zullen is different from the use of will. The Dutch future marker is often regarded as emphatic if there are explicit indications of future time reference, such as conditional and temporal subclauses, and is frequently ascribed modal connotations (Haeseryn et al. 1997: 120-121, 980-981). Unlike will after conditional and temporal subclauses, zullen always introduces a new mental space, in which the speaker or conceptualizer is more obvious as the “assessing force” and thus, to a small extent, objective. The matrix clause in (11), for instance, is not so much a continuation of the mental space that has been opened up by the subclause as a strong guarantee originating from the speaker that he will crawl to the addressee (note the use of the more forceful auxiliary shall in the English translation). Similarly, zullen in (12) really focuses on the speaker's conviction that she will be glad. With respect to degrees of subjectivity of will and zullen, the above observations suggest that will is more subjective than zullen because the implicit speaker is, to some extent, presented more objectively in the latter auxiliary. There is yet considerable semantic overlap between both verbs. Zullen shares the meanings of intention, prediction and predictability with will (and differs from will in its original meaning of obligation). A look at the various uses and their levels of subjectification seems to be required.

In Mortelmans (2006b), the verbs worden, will and zullen are compared on the basis of parallel corpus data.⁶ Two general findings that are relevant to the present discussion are that the number of explicit future markers is

much higher in English than in Dutch and German and, relatedly, that will is often rendered by a present tense in both Dutch and German. As the following survey of different usages will reveal, the ubiquity of the present tense alternative to zullen and werden extends to all uses.

For the expression of intention, which is typical of but not limited to first person subjects, werden, will and zullen are all available, as (13-14) show. The modal force in these sentences clearly originates from the intenders or, in other words, the objective grammatical subjects and is thus not maximally subjective. The correlation of intention with the first person implies that the speaker-conceptualizer is usually put on stage.

- (13) a. Dat zullen moeder en ik nooit verklappen. (HM, 22)
 b. Mother and I will never reveal that.
 c. Das werden Mutter und ich nie verraten.
- (14) a. Das Mädchen wird ihnüberhaupt nicht dazu bringen sich zu waschen. (JH, 133)
 b. Het meisje zal hem er helemaal niet toe brengen zich te wassen.
 c. The girl won't make him wash at all.

Example (15) is indicative of the fact that the present tense in German and Dutch can also be used to convey intention. In English, this option does not exist.

- (15) a. Somebody had better call the police. Yes, Jim, yes. I'll do that now. (NF, 15)
 b. ... Ja, Jim ja. Ich kümmere mich darum.
 c. ... Ja, Jim, ja. Ik doe het meteen.

The above configuration of werden, zullen, will and the present tense is also valid for the meaning of prediction. Epistemic statements about the future can feature all three auxiliaries and the present tense in Dutch and German, which is exemplified in (16-18).

- (16) a. ... - dat wil zeggen, het is honderd procent zeker dat jij gewelddadig aan je einde zult komen. (HM, 51)
 b. ... which means that it's a hundred percent certain that you'll die a violent death.
 c. ... das heißt, es ist zu hundert Prozent sicher, dass du einen gewaltsamen Tod sterben wirst.

- (17) a. Martha won't say much, she's always hugged her griefs close.
(NF, 81)
b. Martha wird nicht viel dazu sagen, sie hat ihre Kimmernisse nie preisgegeben.
c. Martha zal niet veel zeggen, die heeft haar verdriet altijd gekoesterd.
- (18) a. Over een uurtje is hij klaar. (HM, 75)
b. In einer Stunde ist er fertig.
c. He'll be finished in an hour or so.

The modal relation here is subjective. The grammatical subjects in (16-18) are not involved in the epistemic evaluation. It is the speaker who is responsible for the assessment and, as such, he or she is not entirely implicit but can be argued to be partially objectified (cf. Langacker 2006). The obvious impact of evolutionary momentum on the evaluation of future reality makes that the ground cannot be considered maximally subjective.

In its use as an expression of pure future, will is hardly ever rendered by werden or zullen. Example (19) is a rare exception. The default choice in German and Dutch is the present tense, as in (20).

- (19) a. Er ist nicht sicher, ob er die Kraft haben wird, zurück in sein Zimmer zu gehen. (JH, 125)
b. Hij weet niet zeker of hij de kracht zal hebben om terug zijn kamer in te gaan.
c. He's not sure he'll have the strength to go back into his room.
- (20) a. Dad and my brother and his lot aren't here yet, but, by the time they arrive, I count that there'll be twenty-four guests. (NF, 7)
b. Dad und mein Bruder samt Familie sind noch nicht hier, aber mit ihnen sind wir vierundzwanzig.
c. Pa en mijn broer en zijn gezinnetje zijn er nog niet, maar als die eenmaal komen, tel ik vierentwintig gasten.

The conceptualizer locating the predications in (19-20) in the future stays in the background and evolutionary momentum "fades from the picture, [and] what remains is a simple future-tense predication based on the time-line model" (Langacker 1991b: 278). The relation is thus subjectively construed.

For epistemic judgements about the present, i.e. predictability, English once again uses will, while German and Dutch prefer the present tense as illustrated in (21). The sole exception in the corpus data is (22), in which werden and zullen combine with the particles wohl and wel 'well'.

- (21) a. Nu belt hij weer. Nu worden er instructies gegeven. (HM, 130)
b. Now he'll be calling again, and giving instructions.
c. Jetzt telefoniert er wieder. Jetzt werden die Instruktionen erteilt.

- (22) a. Als dat dus zulke pre-alfabetische geniën waren, dan zal hier toch ook wel iets interessants staan, nietwaar. (HM, 63)
 b. And if they were such preliterate geniuses, then there'll be something very interesting here, won't there?
 c. Wenn es also wirklich solche präalphabetischen Genies waren, dann wird hier doch wohl auch etwas Interessantes stehen.

Similarly to epistemic futurity, the grammatical subject is not the locus of potency of the modal relation and the speaker is characterized by a small degree of objectification. The role of evolutionary momentum is different, however, as Langacker (1991b: 275) notes: “Hence it is not reality, but rather the speaker's knowledge of present reality, whose continued evolution must be assessed and projected into the future. The notion of evolutionary momentum therefore receives a more subjective construal because it is now attributed to known reality, which lies within the province of the conceptualizer.”

The behaviour of will, zullen and the Dutch present tense in matrix clauses with temporal or conditional subclauses has already been examined above. With respect to German, let it suffice to say that German follows Dutch in that the present tense is the natural, maximally subjective filling of the mental space created by the subclause and werden opens up a new mental space (cf. Mortelmans 2004).

Will in generic statements and habituais cannot be translated as the auxiliaries werden and zullen. As (23) shows, the German and Dutch present tenses are the right equivalents (for the sake of completeness: in some generic and habitual cases, English too can employ the present tense).

- (23) a. Gewoon negeren, dan houdt hij vanzelf op. (HM, 21)
 b. Simply ignore him, then he'll shut up by himself.
 c. Einfach ignorieren, dann hört er von ganz allein auf.

In line with Langacker (1991b: 281), the prediction that the speaker makes in (23) is argued not to be founded on present reality, which is backgrounded completely, but on the structure of reality: “In other words, the force-dynamic relationship evoked by will is now viewed in generalized fashion as an aspect of the world's structure.” Since the basis of generic claims and habituais is “unanchored in time and reality” (Langacker 1991: 281), these usages can be regarded as extremely subjective.

Table 2 summarizes the distribution of the future markers over the various uses that have been distinguished. As the final column indicates, these uses have been arranged in order of increasing degree of subjectivity. Intention has the grammatical subject as its onstage locus of potency. In the use of epistemic future, the subject is not the origin of the modal force any more, the speaker is partly objectified and the impact of evolutionary

momentum is clear. In the cases of epistemic present and pure future, evolutionary momentum is more implicit: in the former use, it is construed more subjectively as the speaker’s knowledge of present reality, and in the latter case, it is weakened to the timeline model (because of the partial objectification of the speaker in instances of epistemic present, one might argue that this use is slightly more objective than pure future). In matrix clauses with conditional and temporal subclauses, the prediction follows naturally from the objective premises in the subordinate. Predictions of generic and habitual natures, finally, involve an entirely subjective basis that is not tied to time and reality.

Table 2: uses and degrees of subjectification of will, werden and zullen

	English	German	Dutch	
intention	<u>will</u>	<u>werden</u> present tense	<u>zullen</u> present tense	ground onstage ↓ ground offstage
epistemic future & new mental space apodosis	<u>will</u>	<u>werden</u> present tense	<u>zullen</u> present tense	
epistemic present & pure future	<u>will</u>	(<u>werden</u>) present tense	(<u>zullen</u>) present tense	
with conditional and temporal subclauses	<u>will</u>	present tense	present tense	
generic statements & habituals	<u>will</u> present tense	present tense	present tense	

With regard to the relations of will, werden and zullen, Table 2 reveals that these three auxiliaries are equally subjective in the uses of intention and epistemic future but that the most subjective uses of werden and zullen (i.e. epistemic future and, to a lesser degree, epistemic present and pure future) are definitely not as subjective as will’s most subjective use (i.e. generic claims and habituals). Crucially, these distinctions in the degree of subjectification correlate with the findings on the different levels of grammaticalization in Table 1. The hierarchy werden < will > zullen pertains to the three verbs’ degrees of grammaticalization as well as of subjectification. Differently, the highly frequent and highly grammaticalized auxiliary will is compatible with maximally subjective construals of the ground, whereas the less frequent and less grammaticalized auxiliaries werden and zullen are less compatible or incompatible with highly subjective construals of the ground.

3.3. Zullen vs gaan

For gaan, there are three uses that are usually distinguished (Haeseryn et al. 1997: 975-981). In (24a), the verb means ‘to move so as to do what is expressed by the infinitive’. As the event that the infinitive refers to follows the act of moving, this use of gaan already contains the concept of futurity. In (24b), gaan expresses inchoative aspect and can be paraphrased as ‘begin to’. Again, the notion of posteriority is present since the infinitival process, obviously, extends into the future. In (24c), the auxiliary is considered as a future marker.

- (24) a. Ik ga slapen.
 I go sleep
 ‘I’m going off to bed.’
- b. Hij gaat nu duidelijk beter spelen.
 he goes now clearly better play
 ‘He’s really starting to play better now.’
- c. Het gaat regenen.
 it goes rain
 ‘It is going to rain.’

The type of future that gaan is said to express ranges from immediate (early accounts, which maintain a connection with the French futur proche, cf. Coleman 2000: 54) over very likely (De Rooij 1986: 19-23) to present-oriented future (De Schryver 1979: 218). Obviously, these three views are not unrelated. The immediate future may be assumed to be more certain than the remote future and often depends on present intentions and the like. In the same way, a high degree of certainty may be the “result” of the limited span that a prediction about the nearby future has or of the existence of present signs. And likewise, if a statement about the future is based on present circumstances, the realization of the future event may be virtually certain or is perhaps likely to be close by.

The characterization of gaan as an expression of present-oriented futurity is reminiscent of Brisard’s (1997, 2001) description of be going to as [-given] and [+present]. An important question that arises is whether the feature [+present] applies to gaan as well (the characteristic [-given] follows from the established futurity of gaan’s infinitival complement in all its uses). Inchoative gaan, for one, specifically focuses on the immediately verifiable initial stages of an event. With respect to the other uses, it is indicative that the Dutch verb shares the usage that is put forward as the prototypical example of be going to in Brisard (2001: 265), namely:

- (25) a. Singh said, ‘I think there is going to be a storm.’
 b. Het wordt wel heel donker. Ik denk dat het gaat regenen.
 it becomes well very dark I think that it goes rain
 ‘It is getting very dark. I think that it is going to rain.’

The difference in meaning in the minimal pair in (26) confirms that the prediction of gaan is based on present signals (example from Haeseryn et al. 1997: 980-981).

- (26) a. Wat zal ik morgen doen?
 what will/shall I tomorrow do?
 ‘What will I do tomorrow?’
 b. Wat ga ik morgen doen?
 what go I tomorrow do?
 ‘What am I going to do tomorrow?’

It is hard to regard (26a) as a real question. In the opinion of Haeseryn et al. (1997), the lower degree of certainty that is inherent to zullen is responsible for this. The lack of confidence is supposed to make it unnecessary for the question to have an answer. In (26b), the very likely future expressed by gaan is argued not to have this effect. We think, however, that example (26b) is a genuine question because it assumes that there is some kind of indication available that warrants a prediction about tomorrow. One can easily imagine the second question being uttered, say, by a businesswoman who is checking her schedule or by a handyman who is looking at a project that is halfway. Example (26a) is odd as a real question because it inquires about one’s own epistemic assessment of the future.

With first person subjects in declarative sentences, gaan is comparable to be going to (and will) in that it can express intention. These parallel corpus examples are cases in point:

- (27) a. Nu heb ik er genoeg van. Ik ga hem op zijn smoel slaan. (HM, 13)
 b. Now I’ve had enough. I’m going to punch him in the nose.
 (28) a. Ik ga liften. (HM, 22)
 b. I’m going to hitch a lift.
 (29) a. Ik ga jou niet vragen hoe je haar vindt, want daar heb jij geen verstand van. (HM, 84)
 b. I’m not going to ask you what you think of her, because you know nothing of these matters.

Like be going to, the Dutch auxiliary involves (the knowledge about) someone’s mental state as the signal that licences the fulfilment of the main verb (Brisard 2001). In (27), the speaker is fed up with someone’s comments and reacts right away with a prediction which comes very close

to a threat (cf. example 5a). Example (28) is a response to the observation in the context that there are no more trains running. Using gaan here and not zullen, the speaker indicates that this piece of information has been taken into account and that hitching a lift is a planned intention. In (29) too, the intention has been preceded by a certain degree of meditation on the addressee's understanding of 'these matters'. On the whole, the fact that the instances of gaan in (27-29) are rendered by be going to is a strong indication that the Dutch verb does indeed have the feature [+present].⁷

In conclusion, similarly to be going to, the so-called present orientation of gaan amounts to the ground being a profiled and essential part of the immediate scope of predication. As we have seen in Table 2, zullen is compatible with the higher degree of subjectification of epistemic future, which means that the more grammaticalized auxiliary is yet again the more subjective one.

4. Summary

It has been argued that the future markers in English, German and Dutch exhibit the grammaticalization relations represented in Table 1, repeated below, and that these distinctions in degree of grammaticalization have corresponding differences in level of subjectification.

Table 3: relative degrees of grammaticalization

<u>werden</u>	<	<u>will</u>	>	<u>zullen</u>
		∨		∨
		<u>be going to</u>		<u>gaan</u>

The auxiliaries gaan and be going to, which are less grammaticalized than respectively zullen and will, are characterized by the profiled presence of the ground in their semantics since they both provide a picture of the future that is explicitly based on indications that are immediately verifiable at the time of speaking. The auxiliaries zullen and will are compatible with higher degrees of subjectivity. The most subjective uses of the Dutch verb are epistemic present and pure future (note, however, that these meanings are usually expressed by the present tense), in which evolutionary momentum is relatively implicit. The even more grammaticalized English verb will can be used in generic statements and habituals, in which the ground is completely in the background and the prediction is based on the structure of reality. Lastly, the German future marker werden, which has a lower degree of grammaticalization than its counterpart in English, has reached the same level of subjectivity as zullen and is thus also less subjective than will.

Notes

1. Fleischman (1982: 1-2) is right in pointing out that “future reference is never the exclusive property of the single paradigm which grammars label –often arbitrarily– future tense.” English, for instance, is known to be able to express futurity by means of the present progressive and be about to too. From a frequency-based perspective, it is not unreasonable to call will and be going to the primary markers, though (cf. Krug 2001: 310).
2. This model contrasts with the ideas of Traugott, who claims that subjectification is concerned with making the stance of the speaker explicit. Langacker (1999: 150) minimizes the differences but Traugott -- Dasher (2002: 99) clearly react against his overtures: “... although Langacker’s and our views on the ubiquity of subjectivity coincide, we are using the term “subjectification” to refer to substantially different phenomena, and from different perspectives on theory and methodology.” As is argued in Mortelmans (2004), her view fails to distinguish between the strongly grammaticalized English verb will and the intermediately grammaticalized German verb werden, which typically has a strong and overt orientation towards the speaker and which is thus already highly subjective in the sense of Traugott.
3. For a treatment of the traditional parameters of grammaticalization, we refer to Lehmann (1982, 2002). The notions of integrity, structural scope, paradigmaticity, bondedness, paradigmatic variability and syntagmatic variability are taken as known in the present discussion.
4. In Southern Dutch (Belgium), no such restrictions exist and the token frequency of gaan is also higher (Colleman 2000: 61). There appears to be a regional difference in the degree of grammaticalization of the verb, which is supported by the observation that it can have an outright epistemic and thus subjective use in Southern Dutch (example from Van Ostaeyen -- Nuyts 2004: 13):
 - (i) Hij gaat die opdracht weer niet goed uitgevoerd hebben.
 he goes that task again not well carried-out have
 ‘(I expect that) he will once again not have carried out that
 task properly.’
5. They are taken from the Dutch novel De ontdekking van de hemel by Harry Mulisch and its English translation. The abbreviations following the examples refer to the page numbers in the source text.
6. More specifically: 79 items from Judith Hermann’s Sommerhaus, später (henceforth referred to as JH) and the translations in English and Dutch; 159 items from Nicci French’s The memory game (henceforth referred to as NF) and the translations in German and Dutch; and 100 items from

Harry Mulisch's De ontdekking van de hemel and the translations in German and English.

7. For a comprehensive semantic comparison of gaan and its more grammaticalized counterpart be going to, we have insufficient_parallel corpus data. Let us note, however, that two of the three traditional uses of gaan are difficult or impossible to translate as be going to. As (i) illustrates, the aspectual meaning 'begin to' cannot be expressed by the English marker. Example (ii) shows that spatial gaan (with an overt reference to a location) is not rendered by be going to either but by go and, in which the lexical meaning of go comes to the fore. Unlike in the case of gaan, the spatial origin of be going to seems to be fading away.
- (i) a. Hij gaat nu duidelijk beter spelen. (cf. example 24b)
 b. He is starting to/*is going to play better now.
- (ii) a. Ik ga even op zolder kijken, bij de kleintjes. (HM, 18)
 b. I'll go and have a look up in the attic, at the little ones.

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