Raising as grammaticalization: the case of Germanic SEEM-verbs

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This paper is concerned with a reanalysis of raising verbs such as English *seem*, German *scheinen* and Dutch *schijnen*. It is argued that the notion of Raising is best seen as an instance of the grammaticalization phenomenon known as subjectification. The history of these verbs is traced from main verbs to verbs which can be analyzed as having evidential notions. Based on the data, it is argued that subjectification in this sense is not necessarily subjective, but can express objective situations. Next, the notion of raising is applied to verbs that are not traditionally considered to be raising verbs in the literature, such as the Swedish verb *lär*, which occupies the same semantic area as the other verbs discussed. The paper concludes with some remarks on the nature of evidentiality and its relation with epistemic modality.

1. Introduction

The relation of the speaker to what he or she is saying has occupied philosophers for centuries. In modern linguistics this question was reformulated by Benveniste (1958), but more or less ignored in the Anglo-Saxon world until the advent of the grammaticalization movement and the renewed interest in using diachronic data for explaining synchronic states of the language.[1]

One outcome of this process is the recognition of subjectivity (or subjectification) as a force in language change. Research focusing on this aspect of language change is most commonly associated with the work of Traugott (e.g., Traugott (1989, 1997); Traugott & Dasher (2002)). Traugott (1997:185) defines this process as: "[T]he historical pragmatic-semantic process whereby meanings become increasingly based in the speaker's subjective belief state, or attitude toward what is said." In other words, linguistic elements (usually verbs) change their meaning, or acquire new meanings while retaining their old ones, through a process of grounding the action more overtly into the speaker's deictic sphere. The relation between deixis and subjectivity was explored in Lyons (1982) in a philosophical way. Fleischman (1989) uses the notion of temporal distance in a number of verbal semantic areas to press her point that language is essentially egocentric. This viewpoint is underscored by the present study.

This paper is concerned with the relationship between subjectification, evidentiality, and raising verbs. In the last decade many studies on evidentiality have seen the light of day, culminating in a book-length study (Aikhenvald 2004). There is, however, considerable disagreement as to what counts as an evidential.

Evidentiality has been described as being a modal category (see e.g. Palmer (1986, 2001), Willett (1988) and many others), or as being a partly modal category (Van der Auwera & Plungian 1998), but as has been argued in De Haan (1999a, 2005) this is not the entire picture. In those studies, as in the present one, evidentiality is conceived as a deictic relationship between speaker and proposition. This deictic relationship can take any number of forms, including modal ones, but the basic meaning is one of relative distance between speaker and proposition. For this reason, evidentiality is referred to as *propositional deixis* in De Haan (2005).

This deictic relation will be illustrated in this paper by examining the syntactic category known as *raising* verbs. Raising is a notion from formal syntax (see e.g. the classic treatment in Postal (1974) and essentially any textbook on formal syntax) which equates sentences (1a) and (1b) by postulating a subject movement from a lower clause to a higher one. The subject John in (1a) is raised from its position in the lower clause (1b).

(1)   a.   John seems to be at home.
      b.   It seems that John is at home.

It turns out that raising verbs quite often have subjectification properties and in this paper we will look at those raising verbs that have evidential properties.

This paper is built up as follows: section 2 contains a brief overview of the raising phenomenon in generative grammar, and section 3 discusses the notion of subjectification. Section 4 is a discussion of the evidential properties of the English verb *seem* while section 5 does the same for the German and Dutch verbs *scheinen* and *schijnen*, respectively. Section 6 considers the Swedish verb *lär* which is not normally considered a raising verb but does qualify as a subjectification verb.

2. Raising in generative grammar

Almost since the beginnings of generative grammar it has been known that there is a distinction between (2a) and (2b).[2]

(2) a. John seemed to leave.
     b. John tried to leave.

This difference is referred to as a difference between *raising* verbs and *control* verbs. Even though (2a) and (2b) appear to have the same structure, in fact they do not. It can be demonstrated that these sentences must be distinct underlyingly, as is shown by the following sentences with pleonastic (semantically empty) subjects.

(3) a. It seemed that John left.
     b. *It tried that John left.

Control verbs such as *try* cannot be used with expletive subjects since they need to assign a theta role to the subject, and a control verb cannot therefore be separated from its subject by putting it into a separate clause. As *try* and *John* are separated by a clause boundary in (3b), the sentence is ungrammatical.

Raising verbs such as *seem* have no such restriction since they do not assign theta-roles to their subjects. There is then no problem in using *seem* with a pleonastic subject, as in (3a). The NP *John* is then analyzed as the subject of the verb *leave* rather than of *seem*. It also means that *John* receives a theta-role from *leave* rather than from *seem*. We get sentence (3a) by *raising* the NP *John* out of the embedded clause to the main clause, hence the term *raising verb*.

Exactly how raising constructions are represented in generative grammar depends on the particular version adopted. In classical Government and Binding approaches, a sentence such as (3a) would have a structure like the one shown in (4)

(4) [*e* [seemed [John to leave]]]

Speakers have an option to leave the subject in the lower clause (3a) or to raise it to the subject position of the higher clause (3b). In the first case, the subject position in the main clause will be filled by an expletive subject, such as *it* or *there* (plus tensing of the embedded clause), as seen in (5a) below, while in the second case *John* is moved ("raised") from the subject position in the embedded clause to that of

the higher clause, leaving a trace (the exact nature of which is irrelevant for the present purposes) behind. This is shown in example (5b).

(5) a. [*It* seemed [that [John left]]]
     b. [John seemed [t to leave]]

Note that the analysis presupposes a biclausal structure with the lexical subject, in this case *John*, in the embedded clause. In other words, a sentence such as *John seems to have left* is derived from [*it*] *seemed that John left*. As we will see, this analysis runs into diachronic problems.

2.1. Diagnostics for raising verbs

Within generative grammar there has been an emphasis on producing syntactic diagnostics on how to tell raising verbs from control verbs. As is expected, such diagnostics can differ from language to language, and even within one language a diagnostic test can not always reliably distinguish raising from control verbs.

In English, tests employed include *it*-extraction (6), passivization (7) and the behavior of idiom chunks (8), from Davies & Dubinsky (2004:4-7). The Raising verb *seem* passes these tests while the Control verb *try* does not. Example (8b) is only acceptable under a literal reading with an actual cat, not as an idiom while (8a) is fine under either reading.

(6) a. John seemed / tried to go to school.
     b. It seemed / *tried that John went to school.
(7) a. John seemed / tried to read the book.
     b. The book seemed / *tried to be read by John.
(8) a. The cat seemed to be out of the bag.
     b. The cat tried to be out of the bag.

In other languages different tests must be used to distinguish between the two types of verbs. In French, Raising verbs, such as *sembler* 'seem', allow *en*-cliticization on the embedded verbs while Control verbs such as *pretender* 'pretend' do not (Davies & Dubinsky 2004:12-13, from Ruwet 1991):

(9) a. L'auteur de ce livre semble être genial.
         'The author of this book seems to be brilliant.'
     b. L'auteur semble *en* être genial.
         'The author of it seems to be brilliant.'

(10) a.   L'auteur de ce livre prétend être genial.
          'The author of this book claims to be brilliant.'
     b.   *L'auteur prétend *en* être genial.
          'The author of it claims to be brilliant.'

The generative view of classifying such verbs as either Raising or Control verbs runs into trouble when one considers verbs such as *promise* and *threaten* as well as aspectual verbs such as *begin* which can be either. Examples are (Davies & Dubinsky 2004:10):

(11) a.   The boy promised to pick up a quart of milk on the way home.
     b.   The boy promises to be a gifted musician.
     c.   There promises to be trouble at the concert.

Sentence (11a) is the Control use, while (11b) shows Raising. In the first example *promise* assigns a theta-role to the subject but not in the second one. Sentence (11c) shows that *promise* can appear with expletive subjects, just like *seem*.

From a syntactic point of view one has to conclude that verbs like *promise* and *threaten* are both Raising and Control verbs, depending on the volitional status of the subject. They are therefore called "fuzzy" verbs by Davies & Dubinsky (2004). This is all that can be said about the issue in generative syntax, but this is where things get interesting. It is not really important to state *whether* a given verb is a Raising verb or not, but *why* it is so. In order to answer such a question we will have to look outside syntactic theory to grammaticalization theory to provide answers.

3. Raising in grammaticalization perspective

In this section we will look at raising and consider it from the perspective of grammaticalization theory. It will be seen that raising verbs tend to be verbs that are in the process of being grammaticalized as verbs that fulfill functions that are typically on the left periphery of the sentence.

Looking at the list of verbs and constructions in Langacker (1995:49), shown in (12) below, it becomes clear that most of them express a modal or modal-like function in their raised position. (SSR = Subject-to-Subject Raising).

(12) Some SSR Predicates
     a.   may, will, must, can, be, have, do, used to

b.   sure, certain, liable, (un)likely, apt, bound, destined, supposed, set, gonna, about

c.   seem, appear, tend, chance, turn out, prove, happen, promise, threaten, fail, get, begin, start, come, continue, cease, keep (on), persist, quit, stop, end up.

The verbs in (12a) are auxiliaries, those in (12b) are atemporal predicates, according to Langacker, although they naturally have to co-occur with *be*. (12c) contains aspectual verbs and other verbs that require *to* + infinitive and/or a form with *–ing*.

Most, if not all, of these verbs and constructions involve a closer relation between the statement and the speaker of the utterance, as already noted in Langacker (1995) and Barron (1997). We will see that the grammaticalization process involved here is *subjectification*, or the forging of a relationship between the speaker and the proposition he/she is uttering. This relationship can take different forms: a belief or attitude towards the proposition (Traugott 1995:32), expressions of affect (Finegan 1995:4), or the evidential status of the proposition (as will be argued below is the case with *seem* and its counterparts in German and Dutch).

The process of subjectification has been described for a number of verbs on the list shown in (12), including *promise* and *threaten*, for which Traugott (1997:186-91) identifies the following stages:[3]

Stage I: main verbs with subject control of the predicate; subject is animate.
Stage II: (16th century) introduction of meaning 'portend', 'presage' in transitive sentences; subject controls predicate; can be animate or inanimate.
Stage III: (18th century) raising stage, speaker views proposition as likely and evaluates it positively (*promise*) or negatively (*threaten*).

Examples of Stage II and III are:

(13) a.   the Title of this Paper promising some Experiments about the Production of Electricity, I must not omit to recite.
(1675-1676 Boyle, *Electricity and Magnetism* 20-21, Stage II)

b.   The Capitol promised to be a large and handsome building, judging from the part about two thirds already above ground.
(1795 Twin, Stage III)

Some of the syntactic tests for Raising verbs also hold for *promise* and *threaten*. Example (14a) and (b) show expletive subjects and idiom chunks, respectively (Traugott 1997:189):[4]

(14) a.   It promises to be a hot and grueling day.
               (1992 *Independent*)
     b.   But if push ever did threaten to come to shove …
               (1992 *Economist*)

Stage III verbs are not on a par with Raising verbs like *seem* as Traugott (1997:188) states. The subject still has some thematic relation to the verb. In other words, Raising, like so many phenomena in linguistics, is a continuum (as stated in for instance Traugott 1997 and Langacker 1995). This continuum can be characterized in a number of different ways: from full control to non-control, from full thematic relation of the subject to non-thematic relation, or from objective to subjective. In any case, it is clear that we are dealing with a grammaticalization phenomenon and not with a parametric opposition [±Raising verb].

In fact, what is commonly known as Raising may encompass different grammaticalization phenomena. Subjectification is one, exemplified by such verbs as *promise* and (as will be explained in the next section) *seem*. What to do with verbs such as *begin, persist* and *finish* is less clear, however. They do not obviously involve subjectification but rather seem to involve grammaticalization of aspectual distinctions. A sentence such as (15a) may better be analyzed as (15b), i.e. a grammaticalization of aspectual distinction. There is little if any sign of loss of subject control. Note also the lack of expletive subject possibility, as seen in the ungrammaticality of (15c).

(15) a.   John began to work.
     b.   John [began to work].
     c.   *It began that John worked.

If we leave aspectual verbs out of the present discussion, we have seen that Raising verbs, then, are instances of the grammaticalization process of subjectification. We will use the term *raising* for all instances which involve subjectification. One consequence of this classification is that modal verbs, such as *must* and *may*, are here considered raising verbs in both their epistemic and deontic senses. This is a point of debate in the current generative literature (see e.g. Wurmbrand 1999), but it is here assumed that both involve grammaticalization (from a full lexical verb) to the left periphery of the sentence. It is of course true that deontic modals can express a modal force that does not stem from the speaker (as in a sentence like *you are not allowed to exceed the speed limit*) but they do involve a loss of subject control. And of course deontic modality is a grammaticaliza-

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tion waystation on the road to epistemic modality. Epistemic modality is doubtless an instance of subjectification and hence it is justified to group them both as Raising verbs.

As mentioned above, subjectification can take a number of different guises, depending on the precise relation between the speaker and the proposition. We will now turn to a number of verbs in the Germanic language family that can be analyzed as being evidential in nature, that is, they mark the source of information a speaker has for the utterance. They include the English verb *seem* and its German counterpart *scheinen* (with some notes on Dutch *schijnen*) and the Swedish verb *lär*.

The subjectification here takes the guise of speaker's evidence for the proposition.

These verbs can be considered evidential verbs rather than epistemic verbs as they pertain to the evidence for a statement and not to the relative confidence the speaker has in the statement.[5]

4. *English* seem

The verb *seem* is without a doubt the quintessential raising verb in English; it shows up in every discussion of the phenomenon in generative frameworks. However, the discussion is usually limited to the syntactic properties of *seem* and very little, if any, attention is paid to its semantics. This is a shame as the semantics can shed light on why *seem* behaves the way it does.

The verb *seem* can appear in a number of syntactic constructions. The most important ones for the present discussion are listed in (16). Other areas that are of interest here but omitted for reasons of space are collocations of modals and *seem*, such as *can't seem to* (see Langendoen 1970, Jacobson 2006) or constructions such as *seems as (though)*, both of which merit separate discussion.

(16) a. John seems ill.
　　 b. John seems to be ill.
　　 c. John seems to like Russian Romantic poetry.
　　 d. John seems to me to have very little experience in this area.
　　 e. It seems that John is ill.
　　 f. John is ill, it seems.

The constructions range from *seem* being the sole verb in the sentence (16a), the copular use of *seem*, to a construction with expletive

subject (16e). Example (16b) shows a sentence with an overt copula, the first combination of *seem* with other verbs. Sentences (16c-d) are the 'raising' construction verbs, (16e) the 'unraised' one. Sentence (16f), finally, shows a parenthetical construction.

One way in which *seem* (and also *appear* and *look*) differ from other subjectification verbs is that it is possible to insert an overt phrase stating the person in which the proposition is grounded (known as the *conceptualizer* in Cognitive Grammar, see e.g. Langacker 1995:49), namely the phrase *to me* as in (16d). Such a conceptualizer is impossible to combine with for instance modal verbs:

(17) a. There seems to me to be a problem.
     b. *There must to me be a problem.

Sentences (16a) and (16b) at first glance seem to have an equivalent interpretation and hence seem to be variants of each other. There are subtle meaning differences, however. A sentence such as (16a) is typically used when the speaker is deictically close to the action, within visual range. Sentence (16a) shows *seem* in something akin to a visual evidential construction. Sentence (16b) has no such restriction and can be used in case the speaker has both direct and indirect evidence. This distinction recalls the distinction in perception verb constructions, where combinations with infinitival constructions typically mean that the action is in the same deictic sphere as the speaker as in (18a), while constructions with an embedded clause have no restriction on placement of action and speaker as can be seen in (18b).

(18) a. I heard John cross the street.
     b. I heard that John crossed the street.

Sentence (16e) with expletive subject is considered to be the semantic equivalent of (16b). However, example (16f) recalls similar "modal tags" such as *I think…* discussed in Thompson & Mulac (1991), as for example (1991:313):

(19) It's just your point of view you know what you like to do in your spare time I think.

The claim that *it seems* acts like a tag is given a boost by seeing that it can function independently at the end of a sentence, as in (16f). Consequently, (16a-f) show a grammaticalization continuum. The verb *seem* becomes progressively more grammaticalized.

4.1. History of seem

The verb *seem* is according to the OED a borrowing from Old Norse but does not appear until Middle English. The earliest example in the OED dates from ca. 1200. In Old English the verb *þyncan* served the role of *seem,* although it is unclear whether that verb involved raising. From the examples in Denison (1993:221) it would seem that subjectification was a factor.[6]

(20) ðær   him   foldwegas   fægere   þuhton
     where   them.DAT   earthways.NOM.PL   beautiful.NOM.PL   seemed.PL
     'where the paths seemed beautiful to them.'
     (*Beowulf* 866)

The verb *seem* originally was used as a main verb meaning 'to be suitable, befit, beseem.' Examples in the OED and in Denison (1993) date from about 1200AD until the early 17th century. An example from around 1300AD is shown in (21), from OED (entry I1a), Denison (1993:224):

(21) Hire semes curteys forto be, for she is fayr so flour on tre
     'It befits her to be courteous / she seems to be courteous, as she is fair as a flower on a tree.'
     (*Havelok* 2917)

Even in the earliest examples is it very hard to distinguish between a main verb reading of 'befit' and the raising reading of 'appear.' Even in its main verb reading, *semen* already shows a high degree of subjectification. It appears to be impossible to pinpoint a time of transition. Other construction types, with *seem* in its meaning of 'evidence', appear quickly in the data, and all types are attested as early as the 14th century. Some examples from the OED are:

(22) a.   construction of the type *seem to be*
       A yongman þat semed to be an egypician.
       'A young man who seemed to be an Egyptian.'
       (a1300 Cursor M. 5698)
   b.   construction of the type *seem to V*
       … þe tre þat semed to bren …
       'the tree that seemed to burn'
       (a1300 Cursor M. 5749)
   c. impersonal constructions of the type *it seems to*
       it semet wel ðat ye spies ben
       'it seems so, that you are spies.'

The speaker involvement can take the form of expressing an opinion (in the 'befit' interpretation) or evidence (in the *seem* reading). It is therefore best to analyze the meaning shift in *seem* as a shift from one type of subjectification (opinion) to another (evidence).

5. Seem-*verbs in German and Dutch*

5.1. *German* scheinen

The question whether the German verb *scheinen* 'seem' is a raising verb has been debated in the literature, with arguments on either side of the debate (for arguments for analyzing *scheinen* as raising verb, see Olsen (1981); for arguments against see Reis (1982), cited approvingly in Diewald (2000:345ff)). The main reason against analyzing *scheinen* as a raising verb analogous to English *seem* in Reis (1982) is the fact that all types of sentences with *scheinen* can occur without an overt subject. This includes infinitival sentences (examples from Diewald (2000:346):

(23) a.   Heute scheint getanzt zu werden.
          'There seems to be dancing going on today.' [lit. 'today seems being danced]
     b.   Ihm scheint geholfen zu werden.
          'He seems to be helped.' [lit. 'Him seems helped to be']
     c.   Es scheint ihm geholfen zu werden.
          'It seems he is being helped.' [lit. 'it seems him being helped']

Note the absence of a subject in (23a), with the adverbial *heute* 'today', taking the place of a subject. A literal translation (**Today seems to be dancing*) is ungrammatical. In (23b), the argument in first position is the dative object of *geholfen* 'helped' and not a subject, as the pronoun is not in the nominative. This is the main argument against the equivalence of *seem* and *scheinen*. Nevertheless, their semantic functions are strikingly similar and so we will take a closer look at the grammaticalization process of *scheinen*, which is altogether more transparent than *seem*.

Its history is well-known and an examination is illuminating for an understanding of the subjectification phenomenon. The discussion here is based on Askedal (1998) and Diewald (2000, 2001), but see also Newman (1981) for an early discussion of the same phenomenon.

The auxiliary verb *scheinen* is derived from the main verb *scheinen* meaning 'shine, radiate'. This use goes back to Old High German,

but to this day *scheinen* can be used as a main verb. The subject is normally a celestial body (sun, moon) as is shown in (24), from Diewald (2000:48):

(24) er lâzit sunnûn sîna scînan filu blîda.
        he lets sun his shine very brightly
        'He lets his sun shine very brightly.'

The verb *scînan* is used as a main verb in (24) and as can be seen the verb can be used with an adverbial phrase. There is no trace of grammaticalization in this example, but there is a sense that sentences such as these are most salient when the speaker is present at the event. In other words, there is a pragmatic sense that there is a visual connection between the event and the speaker.

This visual relation can be made more overt by looking at metaphorical extensions of the verb *scînan* that allow the use of the verb in constructions other than with celestial bodies, for instance with gemstones.

(25) do vant he enen edelen stein, de lecht was unde schone schein.
        'there he found a precious stone that was light and clear.'

Then the meaning is extended from concrete to abstract properties:

(26) zi in quam boto scôni, engil scînenti.
        'They seemed to them like fair angels.'

According to Diewald (2000:351; 2001:100), based on DWB, the first instances of *scheinen* with an infinitival complement occur in Early Modern German, first without *zu* 'to' and later with *zu*. The first verb is *sein* 'to be.'

(27) a.   der glaub scheinet klein sein, ist aber viel edler und besser.
          'Faith seems to be small, but is much nobler and better.'
          (Luther 4, 135, in DWB 14, 2449)
    b.   und ob ich zwar scheinte nur ein zwerg zu seyn gegen meinen feind.
          'and if I seemed only to be a dwarf against my enemy.'
          (Simpl 3 (1684) 668, in DWB 14, 2442)

The addition of a copular verb to an already copular construction does not seem to add much to the meaning, but it may be a signal

that *scheinen* can now be used saliently in non-actual contexts, such as conditionals (27b) and with abstract entities. In other words, these are uses involving situations that are not necessarily in the speaker's deictic sphere.

From a syntactic point of view the addition of (*zu*) *sein* makes a new construction type available ([*zu*] *V scheinen* 'seems to V') and this puts *scheinen* on the road to auxiliarization. Fairly soon after *zu sein*, other verbs come to be used with *scheinen*. In the second part of the 18th century this construction was already very common, and in Modern German the *zu V scheinen* construction is the most common construction, accounting for about 50% of all instances of *scheinen*, according to Askedal (1998:4).[7]

The biclausal construction *es scheint, daß* … also stems from the 18th century, but does not seem to be common before the 19th century. Askedal (1998:2-4) counts just two examples in Goethe (his representative for the 18th century) with a subordinate clause, while there are 120 examples in Goethe with an infinitival clause.

The examples of biclausal *scheinen* are used in the interpretation of 'appear' and not in the modern meaning of 'assertion of evidence'. The verb *scheinen* is used more as a main verb than as an auxiliary. Note also the overt use of the conceptualizer *ihm* 'to him' in (28), a third person. In the 19th century the subjectification was already present, as is seen in (29), from the works of Theodore Fontane (Askedal 1998:52). The sentence shows the modern meaning of assertion of evidence.

(28) … schien es ihm endlich in trüben Stunden, daß dieses Handwerk weniger als irgendein andres den nötigen Aufwand von Zeit und Kräften verdiene.
'it seemed to him in the darkest hours that this craft less than anything else should deserve the necessary investment of time and manpower.' [it came to him …]

(29) Es schien, daß Trude antworten wollte, aber …
'It seemed that Trude wanted to answer, but …'

More common in Goethe is a biclausal sentence with *als* (*ob / wenn*) 'as if', with 16 examples. This construction is indeed more subjectified than the regular construction in (30) as it involves speaker involvement. Goethe uses this construction nine times without an overt conceptualizer.

(30) es schien, als könnte sie sich nicht von dem Anblick des
    Verwundeten losreißen.
    'It seemed as if she couldn't tear herself away from the look of the
    wounded.'

The final stage in the development is the use of a form of *scheinen* as a parenthetical element. An example, from Diewald (2001:99):

(31) Er ist, scheints, nicht zuhause.
    'He is, apparently, not at home.'

We are dealing here with full subjectification, as there is not even the slightest syntactic connection between the subject and the utterance. From the discussion it would appear that *scheints* as a parenthetical still has all the possible meanings that the subjectification verb *scheinen* has. The parenthetical obviously does not have the meaning of the full verb 'shine'. The parenthetical stage is again reminiscent of Thompson & Mulac's (1991) discussion of parentheticals as epistemic markers.

5.2. *Dutch* schijnen

The Dutch verb *schijnen* is cognate with German *scheinen* and it has traversed the same grammaticalization stages, from main verb 'shine' to subjectification verb denoting evidence. In Modern Dutch the verb *schijnen* has the same range of meanings as the German verb *scheinen* but there is as yet no parenthetical stage, comparable to example (31). The relevant diachronic data are summarized in (32) – (36), from de Haan (1999b:80-3).

(32) Stage I: main verb
    -Die maene scheen scone ende clear.
    'The moon shone bright and clear.'
(33) Stage II; to be(come) visible
    Haer arme, … haer been, haer hooft, daer bloet dor sceen.
    'Her arm, her leg, her head, there blood was visible.'
(34) Stage III: abstraction
    Nonne die ooc heilich scinen
    'Nuns who appear holy as well.'
(35) Stage IV: construction *schijnen* + main verb
    Si hooren dat woort Gods ende schinen houden die gheboden Gods.
    'They hear the word of God and seem to keep to God's
    Commandments.'

(36) Stage V: abstract and impersonal subjects
    a.   In groter ellendichede hebbic gheweest, alst mi wel scijnt.
        'I have been in greater misery, so it seems to me.'
    b.   Nu saelt scinen wat wi doen sullen.
        'Now will it become apparent what we will do.'

The development runs along two pathways: from objective to subjective attitude, and from concrete to abstract situations. Both pathways interact in establishing the current meaning and construction pattern of *schijnen*.

The difference between Stage II and III lies in the fact that the verb *schijnen* starts to be used in situations in which the connection between speaker and perception is no longer necessary, but the connection becomes one of speaker and deixis. It is at the development of stage II that we can place the start of the subjectification process, and hence of the evidential development.

The data and analysis presented so far point to the conclusion that subjectification is not the same as subjective. That is to say, the grammaticalization process of subjectification does not necessarily entail a change in degree of confidence with respect to the proposition. It is perfectly possible for a speaker to *objectively* assert a proposition or to assert evidence for a proposition, and that is what is going on with *seem*-verbs. A speaker asserts that there is evidence for a given proposition without adding his or her subjective viewpoint. Of course, it is possible that the original objective element subsequently becomes more subjective through pragmatic extensions, but that is a different phenomenon and should be kept separate from the original subjectification process mentioned here.

If this analysis is correct, it has major implications for grammaticalization studies, not only for the notion of subjectification, but also for those that take *unidirectionality* as a cornerstone of grammaticalization theory. It is possible that an original subjective modal can become "objectivized", rather than the more familiar objective-to-subjective route.[8]

6. Swedish *lär*

We will now turn to a subjectification verb of a different kind, namely the verb *lär*, which is one way of expressing indirect evidence in Swedish.[9] The indirect evidence is typically that of hearsay, but in isolated cases it may be possible to have an inferential interpretation.

A prototypical example is shown in (37).

(37) Hannah lär ha studerat norska.
  'Hannah is said to have studied Norwegian.'

The verb *lär* is usually considered to be a modal verb in descriptions of Swedish grammar (e.g. Björkstam 1919, Holmes 2003) despite the fact that it has an unorthodox morphology. Unlike other modal verbs, *lär* is not conjugated for tense and appears before all other modal verbs in the sentence.

(38) Sten lär kunna spela piano.
  'Sten is said to be able to play the piano.'

The verb *lär* is not normally considered a raising verb in formal analyses of Swedish verbs. The usual raising verbs are limited to *seem*-verbs such as *verka* and *förefalla* 'seem, appear'. In the present analysis there is every reason for considering *lär* a subjectification verb, as there is a deictic relationship between the speaker and the proposition. Syntactically, there is no connection between the subject and *lär* as the verb does not assign a theta-role to the subject.

  The origin of *lär* is slightly in dispute. Most sources agree with Björkstam (1919) in stating that the origin is the main verb *lära* 'learn', but there is a minority that believes that the verb *läta* 'let' is the origin. Arguments for this position can be found in Svensson (2005).

  There are four basic meanings given for *lär* in SAOB (1942), summarized and illustrated with examples in (39) below:

(39) a. *Temporal auxiliary denoting FUTURE*:
      Iag wet thet läre så gå dig.
      I know it LÄR so go you
      'I know it will be so for you.'
                                                    (SAOB 16:1684).
  b. *Modal auxiliary expressing assumption:*
      Nägra mål pa hörnor och frislag lär det inte bli i VM.
      any goals on corner:PL and free.shots LÄR it NEG become in WC
      'There won't be any goals on corners or penalties in the world cup.'
                                                    (SAG 4:305)
  c. *Regional: speaker expression of obligatoriness*:
      Jag lär väl ge hästarna nattfoder, sade han.
      I LÄR surely give:INF horse:PL:DEF night.feed, said he
      'I guess I have to give the horses food for the night, he said.'
                                                    (SAOB 16:1685)

d. *Auxiliary expressing reported opinion, rumor, hearsay:*
Hon lär ha studerat i Heidelberg
She LÄR have:INF studied in Heidelberg
'She is said to have studied in Heidelberg.'   (SAG 4:305)

The pure future interpretation of (39a) is no longer possible in Modern Swedish, it having been subsumed under (39b). Similarly (39c) is not possible in the standard language. This leaves two main interpretations in Modern Swedish: the *predictive* meaning of (39b) and the *assertive* meaning of (39d).[10] The relative ordering of these four interpretations is not to be determined with the same degree of certainty as the ordering of *seem*-verbs in the previous section. The future meaning of (39a) is attested from the late 16th century in SAOB, but does not seem to have survived beyond the early 19th century.[11] The predictive reading is first attested in SAOB in the middle of the 17th century and survives until the present day. The first attested example of assertion stem from the early to middle 18th century, and examples can be found right up to the present day.[12] On the basis of this data and discussions such as Björkstam (1919) we can then posit the following development:

(40) Future   >   Prediction   >   Assertion

An argument against adopting a raising analysis and favoring a subjectification analysis is the fact that *lär* cannot occur in 'unraised' contexts, similar to *it seems that…* Thus a sentence such as (41), the "unraised" variant of (38), is ungrammatical.

(41) *Det lär att Sten kunna spela piano.

This shows that *lär* is at the stage where there is no evidence for a raising analysis, but this does not mean that there is no subjectification. All it means is that *lär* is not (yet) as far on the grammaticalization continuum (exemplified in (16a-f) above) as *seem* or *scheinen / schijnen*.

7. Conclusions

The purpose of this paper has been to show that so-called raising verbs are in fact verbs that are undergoing or have undergone a certain grammaticalization process. In the case of verbs like *seem* and

German *scheinen* that process is subjectification. Due to the original meaning of the verbs in question, the end product of this subjectification process is a verb with an evidential meaning, though this is not the only possible outcome of subjectification.

The relation between speaker and his or her proposition can take a number of forms, of which epistemic modality is a very important exponent. This can be seen from the fact that Germanic modal verbs are also subjectification verbs. Whether or not they are also raising verbs is relatively unimportant for grammaticalization purposes, as nothing semantic follows from this fact.

As far as the question of whether evidential verbs such as *seem* are also epistemic verbs, the answer to that depends on certain assumptions that one chooses to take and is therefore as interesting as the question of whether verb X is a raising verb or not. All that can be said here is that verbs like *seem* and *must* are not normally used interchangeably, from which fact the conclusion may be drawn that the two are distinct areas. They are, however, both examples of subjectification and that is what matters here.

As to the question of whether and how evidentiality and epistemic modality are related, I would argue that this is the wrong question to ask. In the previous section we discussed the Swedish verb *lär* as having the prototypical functions of *assertion* (of evidence) and *predictive* (of future event based on evidence). It is easy to argue that *assertion* is an evidential category and not an epistemic one. It is not so straightforward to argue the same for *prediction*. It is possible to argue that this is an epistemic or an evidential function, or both. As we are dealing with an assertion of evidence for future events, it is possible to assign *predictive* to either camp, or even to a position in between both. It would seem then that this question cannot be resolved on the merits of arguments and that we need to look for a different type of model to represent this data. In Dooley & de Haan (2006), the question was approached from a semantic map perspective, mapping only lower-level functions (like *assertion*) and leaving higher-level domains (such as *epistemic modality* and *evidentiality*) out of the model. The question of the status of such higher-level domains is to be resolved by performing rigorous intra-linguistic and cross-linguistic comparisons of linguistic elements with a similar range. In a bottom-up model such as the semantic map model higher-level groupings can and should be secondary. The data and analysis of the present article is hopefully a step in this direction.

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Notes

[1]   I wish to thank Mario Squartini and Sheila Dooley for discussions that led to improvements of the paper. The usual disclaimers apply.

[2]   This section only deals with the raising phenomenon in generative grammar. Other formal theories of syntax treat raising differently. LFG, for instance, treats raising not as a movement phenomenon, but as one of identity of structure marked in the lexical entry of *seem* according to Barron (1997).

[3]   For a critical discussion of these proposed stages, see Cornillie (2004, chapter 10).

[4]   Note that the use of expletive subjects is more limited than with *seem*. Sentence (13b), for instance, would be ungrammatical with an expletive:
    i.   *It promised that the Capitol would be a large and handsome building.
With *seem* instead of *promise* (i) would be fine.

[5]   I will remain neutral here on the question of how evidentiality and epistemic modality are related. See De Haan (1999a, 2001, 2005), Squartini (2001, 2004),

and Pietrandrea (2005) for thoughts on the matter. What is relevant here is that both evidentiality and epistemic modality can be expressed with raising verbs and hence can be arrived at through the grammaticalization process of subjectification. See, however, the end of section 7 on how notions such as *epistemic modality* can be handled in the present framework.

[6]   This verb is also attested in Old High German in subjectification contexts, as the following example from Axel (2001:44) shows:

   (i) … so thúnkit mih theiz megi sin.
       'so it seems to me that it may be.'   (Otfrid II.14.91)

[7]   Note however that the texts used in Askedal (1998) are literary texts and may not be wholly representative for the entire language at any point. A more balanced corpus study, taking more genres into account, is highly desirable. On the other hand, Askedal's data are not disconfirmed by the entry on *scheinen* in DWB.

[8]   One such modal is Dutch *moeten* 'must' which developed an evidential (*assertive* in the terminology used here) reading in the 17th-18th century, long after it had acquired epistemic readings.

[9]   This section is partly based on Dooley and de Haan (2006). I am grateful to Sheila Dooley for discussing raising phenomena in Swedish with me.

[10]   These terms come from Dooley and de Haan (2006). The term *assertive* is used to refer to morphemes that have as their basic meaning the assertion of evidence. In the case of *lär* the evidence asserted is that of hearsay. The term *predictive* is used here to refer to the assertion of evidence for an event in the future.

[11]   The first example of *lär* with future meaning in SAOB stems from 1580 while the last one is from 1810. It is true that SAOB lists one example from 1932, but this would seem to be an example from an archaic register. In Modern Swedish this meaning is no longer attested, either in SAG or in the corpus data in Dooley and De Haan (2006).

[12]   SAOB lists a single example for obligation, dating from 1930 when dialectal research was done. As this is not a current meaning of *lär* in Modern Swedish, it is impossible to date this meaning. However, see Svensson (2005) for an attempt to place obligation in a general grammaticalization framework.