

Where did this future construction come from? A case study of Swedish *komma att V*¹

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1. Introduction

It has been pointed out recently that the combination of corpus linguistics and grammaticalization theory has a mutually beneficial effect (Lindquist and Mair 2004). Corpus-linguistic methodology affords rigorous empirical treatment of historical data, while grammaticalization theory serves as a framework to organize quantitative data into meaningful research questions. In this paper, I will argue that there is a third framework that can be fruitfully combined with both corpus linguistics and grammaticalization theory, namely construction grammar (Fillmore, Kay, and O'Connor 1988; Goldberg 1995; Fried and Östman 2004). A central tenet of construction grammar is that constructions, as conventionalized sequences of morphemes, have direct semantic representations. The semantics of a construction is subject to diachronic change, much as the semantics of lexical items. Studies of grammaticalization have often focused on the semantic developments of items at the word level; a shift in perspective towards the constructional level may yield new insights and a refined view of the workings of grammaticalization.

Bringing together the frameworks of corpus linguistics, grammaticalization theory, and construction grammar, the present paper is a diachronic, corpus-based study of the Swedish future construction *komma att V*. In modern usage, the construction involves the motion verb *komma* 'come', the infinitive marker *att*, and a verb in the infinitive which denotes the predicted action. Examples (1) to (3) illustrate the construction.

- (1) *Blomberg kommer att inviga museet.*
Blomberg comes to inaugurate museum.the
'Blomberg will inaugurate the museum.'

- (2) *Italien kommer att uppträda med olika spelsystem under VM.*
Italy comes to perform with different game.system.PL
under world cup
'Italy will use a number of different strategies in the world cup.'

- (3) *Priserna för röntgenundersökning kommer också att öka.*
 prices.the for X-ray.examination come also to rise
 ‘Prices for X-ray examinations will also increase.’

In these examples, the verb *komma* ‘come’ functions as an auxiliary (Heine 1993), as it obligatorily takes non-finite verbal complements and, together with the infinitive complement, has the grammatical function of indicating futurity. Cross-linguistically, it is a very common tendency for motion verbs to grammaticalize into future markers (Bybee and Pagliuca 1987; Bybee, Pagliuca, and Perkins 1991, 1994; Heine and Kuteva 2002). This motivates the assumption that the *komma att V* construction has undergone a semantic development from ‘physical movement towards a goal’ towards the meaning of ‘prediction’. While there is broad agreement in the field that such a development must have occurred (Bybee and Dahl 1989; Heine and Kuteva 2002), there are different theories as to how the development proceeded. This paper re-opens the case for *komma att V* and tests several claims from the literature against historical data.

In their cross-linguistic survey of grammaticalized future constructions, Bybee, Perkins, and Pagliuca state that “all modal and movement future sources begin with human agents and move from the expression of the intentions of that agent to the expression of prediction” (1994: 270). This predicts that earlier examples of the construction are more likely to involve intentional human agents. The opposite view is held by Dahl, who compares several European future constructions that derive from verbs of coming and finds that none of these involve the notion of intentionality: “At any rate, there is no evidence to suggest that the Germanic de-venitives ever expressed intention” (2000: 322).

The present study treats the view of Bybee et al. as the null-hypothesis, against which Dahl’s claim needs to be substantiated as the alternative hypothesis. Drawing on corpus data from three periods of Swedish, it is tested whether intentionality has ever been a semantic component of the *komma att V* construction, and whether the construction used to be more frequent with human agents at earlier stages. To this end, a representative set of examples is extracted from each subcorpus. All extracted examples of the construction are coded for a set of parameters, such as *animacy of the subject*, *human-ness of the subject*, *intention on the part of the subject*, and *movement on the part of the subject*. If Bybee et al. are right, we would expect to find more human intentional subjects engaged in purposeful movement in earlier corpus data. If Dahl’s prediction turns out to be correct, we would expect to find less human intentional subjects.

If the *komma att V* construction has developed unlike other motion-based future constructions, it still needs to be explained how the construction acquired its present-day meaning. One suggestion is to be found in Traugott: “Passing

comments in various grammars suggest that the come-future originates in ingressive, inchoative, and even resultative expressions” (1978: 378). Christensen (1997: 50) also hypothesizes that the construction has developed out *komma* in the use of an ingressive auxiliary. With the advent of diachronic corpora, hypotheses such as these can be tested on primary data in an empirical fashion.

The paper is organized in the following way. Section two introduces the *komma att V* construction and motivates its status as a grammatical construction in the sense of Goldberg (1995). Section three describes the database and methodology used for this study. Section four discusses the data in detail and examines how the findings bear on the two hypotheses. Section five summarizes the findings and discusses their implications for grammaticalization theory.

2. The *komma att V* construction

It is common for a language to have several grammaticalized future constructions (Bybee, Perkins, and Pagliuca 1994: 243). Swedish is no exception to this tendency. There is no morphological future construction, but futurity can be expressed periphrastically by means of the present tense, often in conjunction with a future time adverbial, as well as with a range of modal verbs, such as *ska* ‘shall’, *komma* ‘come’, and *tänka* ‘think’ (Teleman, Hellberg, and Andersson 1999), as shown in examples (4) to (7).

- (4) *Lena åker till Paris nästa år.*
Lena drives to Paris next year
‘Lena will drive to Paris next year.’
- (5) *Om några minuter ska han åka iväg.*
in some minutes will he drive away
‘He will drive away in a couple of minutes.’
- (6) *Blomberg kommer att inviga museet.*
Blomberg comes to inaugurate museum.the
‘Blomberg will inaugurate the museum.’
- (7) *Men först tänker vi bjuda er på middag!*
but first think we invite you for dinner
‘But first we are going to invite you for dinner!’

In the present study, grammaticalized expressions like these are viewed as *constructions* in the sense intended by Goldberg (1995, 2003). A construction is

defined as partially schematic, conventionalized sequence of morphemes with a direct semantic representation. This definition implies that the constructional semantics is non-compositional, including more semantic substance than is present in the meaning of the individual parts of the construction. With respect to the above examples, it also implies that each future construction semantically differs from the others, and is used to convey different shades of meaning. While these fine-grained differences are arguably very elusive (Abraham 1989: 380), a corpus-based approach can reveal patterns of collocation that are indicative of the specific semantics of each construction.

The present study takes the general viewpoint of construction grammar (Fillmore, Kay, and O'Connor 1988; Goldberg 1995; Fried and Östman 2004) and grammaticalization theory (Hopper and Traugott 2003, Traugott and Heine 1991). Within either of these frameworks, constructions are understood as polysemous, having a number of conceptually interrelated functions.

The *komma att V* construction is regarded as the most fully grammaticalized future marker in Swedish grammar (Dahl 1992). Its lexical source is the motion verb *komma* 'come'. A peculiarity of the construction is that it is found with inanimate subjects from very early on. Example (8) shows a usage from 1636 (Christensen 1997: 48).

- (8) [...] *hvadh skeppen medh behörlig stycken*
 what ships.the with equipment
 [...] *och ammunition kommer till at t kosta*
 and ammunitions comes to INF cost
 '[...] what the ships with equipment will cost.'

The meaning of the lexical source is said to have bleached out thoroughly over time, so that *komma att V* in present day Swedish primarily codes prediction (Christensen 1997: 190; Dahl 1992: 62). Translation studies have found that it is most frequently translated into English *will* (Viberg 2002: 96), which arguably is the English future construction that is least colored by modal overtones. Despite the high level of grammaticalization, Christensen (1997: 45) finds that *komma att V* is less frequent in discourse than futures with the modal *ska* 'shall' or futurate uses of the present tense.

In present-day usage, the *komma att V* construction is used to express a broad range of future contexts. It differs from other constructions, such as for example *ska V*, such that it tends to be preferred when speakers talk about abstract developments that do not involve animate, conscious agents. Using the recent corpus-linguistic methodology of collostructional analysis (Stefanowitsch and Gries 2003), Hilpert (2006) characterizes the constructional semantics of *komma*

att V in terms of the main verbs that distinctively co-occur with the construction. Among the most distinctive items are the verbs *påverka* ‘influence’, *öka* ‘increase’, and *förändra* ‘change’, all of which denote abstract developments, as illustrated by examples (9) to (11).

- (9) *Datoriseringen kommer att påverka arbetsinnehållet.*
 computerization.the comes to influence work.content
 ‘Computerization will influence the subject matter of our work.’
- (10) *Flygets betydelse i framtiden kommer att öka än mer.*
 flight.GEN meaning in future.the comes to increase still more
 ‘The importance of aviation will increase even more in the future.’
- (11) *Biotekniken kommer att förändra vår basmat.*
 Bioengineering comes to change our basic.food
 ‘Bioengineering will change our food.’

Alternative Swedish future constructions like *ska V* or *skulle V* are used significantly less often with such verbs, because these constructions carry modal overtones that would clash with the speaker’s intended sense of an abstract development happening by itself.

The preference of *komma att V* with inanimate, abstract subject NPs constitutes a contrast with another Germanic motion-based future, the English *going-to* future. English *going-to* is a similar example of a motion verb grammaticalizing into a future marker (Hopper and Traugott 2003), but it differs from *komma att V* in several ways. First, it is primarily used with the first person singular (Berglund 2000: 175). Additionally, a sense of intention persists in many of its usages (Coates 1983: 200). At the core of the semantic asymmetry lies the fact that the deictic center in the two constructions is reversed. Whereas the English construction is egocentric, the deictic center of Swedish *komma att V* is on the event that is going to happen (cf. Emanatian 1992). This reversal motivates the prime semantic difference between *going to* and *komma att V*, which is that *going to* continues to code intention on the part of the subject, whereas *komma att V* does not imply such a notion.

Christensen (1997) notes that some uses of *komma att V* mean that an action has occurred involuntarily, as illustrated by example (12).

- (12) *Olof kom att sitta bakom ett pelare.*
 Olof came to sit behind a pillar
 ‘Olof ended up in a seat behind a pillar.’

In this example, somebody got to sit behind a pillar. Although the action of seating was carried out by the agent himself, we understand that some outer circumstances restricted the agent's freedom of action, so that he had to seat himself behind a pillar. The involuntariness reading of the *komma att V* construction cannot apply to future events; it only applies in examples that are in the past tense or the perfect (Christensen 1997: 45).

A last thing to note about the *komma att V* construction is that it has undergone syntactic reduction over the past centuries. While we see the preposition *til(l)* in early examples such as (8), present-day Swedish examples such as (9) does not have it. The infinitive marker *att* is retained in most written genres of Swedish, but in spoken discourse, and increasingly in written genres, it is omitted and the non-finite verb directly follows *komma*, as in example (13).

- (13) *Vi kommer visa många nya spännande produkter.*
 we come show many new fascinating products
 'We are going to present many fascinating new products.'

In spoken discourse the infinitive marker *att* is pronounced /o/, such that we see it orthographically rendered as *å* in very informal writing or quasi-phonetic transcription of speech, as in example (14).

- (14) *Du kommer å ångra dig!*
 you come to regret self
 'You're going to regret this!'

Variants such as these, which are based on diachronic change as well as synchronic variation, make it difficult to achieve an exhaustive extraction of the construction from a corpus. However, it is important to accommodate at least all known variants in order to make the data as representative as they can be. The next section discusses methodological issues in detail.

3. Data and methodology

The present study uses Swedish corpus data from three different periods of time to investigate changes in meaning and use of the *komma att V* construction. In particular, the hypothesis that even early uses do not co-occur with animate, intentional agents is investigated. All used corpora are publicly available on-line over the homepage of the linguistics department at the University of Gothenburg, Sweden (<http://spraakbanken.gu.se>).

The first subcorpus is the so-called *Källtext*, a collection of Old Swedish texts of about one million words. The texts are partly religious, legal, and literary, comprising for example *Saint Birgitta's revelations*, *Peder Månssons art of farming*, and the five books of Moses. There is some uncertainty as to when these texts were composed. It is, however, safe to assume that most of them were written between 1300 and 1450. The second subcorpus, *äldre svenska romaner*, consists of 57 Swedish novels from authors such as C.J.L. Almqvist, Victoria Benedictsson, and Hjalmar Söderberg. Taken together, these constitute about 3.7 million words of running text. The novels were originally published between 1839 and 1940. The third subcorpus, *Bonnier's romaner II*, comprises a newer set of Swedish novels which were published in 1980 and 1981. This subcorpus contains 4 million words. The present analysis makes the assumption that these texts are comparable, as each subcorpus consists of written texts from literary, elevated genres. Along with this assumption goes the caveat that results from these data may not necessarily carry over to other genres such as journalese, or spoken discourse.

Each text was electronically searched for the lemma *kom*. The search retrieved the full verbal paradigms with orthographic variants, as well as noise words such as *kommunism*, which were cleaned from the concordance. The initial search yielded 4.900 examples from the *Källtext*, 17.400 examples from the *Old novels*, and 18.500 examples from *Bonnier's novels*.

The cleaned concordances were then semi-manually searched for instances of the *komma att V* construction. Dahl (2000: 320) characterizes the original form of the construction in the following way:

- (15) *komma til(l) at(t) <full verb>*
 come to INFM INF

There are several reasons for conducting a broader search first, and then proceeding with semi-manual post-editing of the examples. In modern usage, the preposition *till* has been lost, and the infinitive marker *att* is frequently omitted. In addition to Dahl's construction template it is worth pointing out that intervening elements may occur between the specified items. In many examples, such as (16), the subject of the sentence occurs after *komma*, which is due to obligatory V2 word order in Swedish. Example (17) shows that adverbs may occur between the infinitive marker *att* and the full verb, yielding a Swedish split infinitive construction. Especially in earlier examples such as (18), there is frequently a spatial elaboration of the preposition *till*. While example (18) is clearly different from modern uses of *komma att V*, as it encodes literal movement and the purpose of that movement, it may be instructive to keep examples like (18) in the analysis in order to determine their relation to the modern construction.

- (16) *Då kommer Courtney förhoppningsvis att ha ett bra svar.*
 then comes Courtney hopefully to have a good answer
 ‘In that case Courtney will hopefully have a good answer to that.’
- (17) *Jag kommer därför att omgående begära mitt avsked.*
 I come therefore to immediately demand my dismissal
 ‘I will therefore immediately ask to be dismissed.’
- (18) *oc kom til sanctum ambrosium at lat sik døpa*
 and came til Saint Ambrosius to let self christian
 ‘And [he] came to Saint Ambrosius to be christianed.’

The post-editing of the concordance considerably reduced the number of examples. The search for the target construction in the Old Swedish concordance yielded 60 examples. The numbers of examples for the two other corpora were much higher, so a random subset of 200 examples was chosen for each sub-corpus. All of these examples were coded for four semantic parameters that are crucial to the hypotheses under investigation. These parameters are *animacy of the subject*, *human-ness of the subject*, *intention on the part of the subject*, and *movement on the part of the subject*. Changes in the parameter values are viewed as reflecting ongoing grammaticalization.

One additional step in the organization of the data stems from the inclusion of construction grammar into the methodology. For each sub-corpus, the examples were grouped into different construction types, based on syntactic and semantic criteria. For example, in the second sub-corpus, there is a construction *komma för att V*, which obligatorily involves the preposition *för* ‘for’. In examples such as (19), the subject comes to a place for a purpose which is expressed in the prepositional phrase.

- (19) *De kommer för att säga godnatt.*
 they come for to say good night
 ‘They are coming to say good night.’

The example in (19) thus contrasts with the *komma att V* construction, which lacks both the preposition and the purposive reading. Since the search template allows for intervening elements between *komma* and *att*, there is no a priori formal reason to keep these construction types apart. Likewise, it is not warranted to exclude cases like (19) on semantic grounds because of their reference to movement, since it is the very transition from expressing movement to expressing futurity that is being studied in this paper. If semantic and formal criteria are combined however, we see that the differences in meaning correspond to formal

differences, which makes it possible to motivate a separate constructional status for either of the two constructions.

4. Three stages in the development of the *komma att V* construction

This section discusses the data from each subcorpus in detail. In keeping with the objective to combine the three frameworks of corpus linguistics, grammaticalization theory, and construction grammar, it will present quantitative data and statistics, analyses of individual representative examples in their contexts, and characterizations of different construction types that are found in the data.

4.1. Stage I – the *Källtext* corpus

In the concordance based on the *Källtext* corpus, three construction types can be distinguished on formal and semantic grounds. The most frequent construction type with 45 out of the 60 examples is isomorphic to the present-day future construction *komma att V*, but conveys the meaning of purposeful movement. The second construction type matches the template given in (15) *komma til(l) at(t) V*. This type, which must be viewed as a precursor of the later future construction, is instantiated by only eight examples. The third type is structurally identical to the second, except that the verb *komma* is directly followed by the object of the sentence. There are seven examples in the concordance. Semantically, this type is a causative construction.

4.1.1. *komma att V*

At this stage, the construction *komma att V* refers to movement with the purpose of carrying out an action. The verb *komma* is thus being used as a lexical, main verb that takes a purposive complement. Examples (20) to (22) below illustrate that the subjects of this construction tend to be human, conscious agents.

(20) *wi ærom hæer komþne at kôpa os fôdho*
we are hither come to buy us food
'We have come here to buy food.'

(21) *en drothning kom af ytârsta landomen at see salomons rike-doma*
a queen came of farrest lands to see Solomon's riches
'A queen came from far away to see the riches of Solomon.'

- (22) *thiit matte folkit koma at bidhia til honom*
 there may people come to pray to him
 ‘The people may come here to pray to Him.’

At face value, these examples seem to constitute evidence for the claim of Bybee, Perkins, and Pagliuca (1994). Much like early examples of the English *going-to* future, the notion of movement is very prominent. Accordingly, 65% of the examples spatially elaborate *komma* either through a prepositional phrase or a deictic expression. However, examples like (22) also carry the implicature that some action takes place in the future. At this point, it is hard to tell whether this is triggered through the modal auxiliary or through the motion verb. Although the construction at this stage thus shows the potential to evolve into a future marker, other examples in the *Källtext* concordance suggest that it is in fact not the source of the present-day future construction *komma att V*.

4.1.2. *komma till att V*

Only eight examples have the exact form of Dahl’s construction template. The meanings of these examples are sufficiently close to characterize them as instances of a separate construction. The earliest attested examples of this construction that clearly indicate future time reference date back to the 16th century (Viberg 2002). The corpus at hand precedes this date, so we can only expect to find early precursors of the future construction that *komma att V* is in present day Swedish.

The examples differ from the construction discussed above in several ways. First, even at this early stage, the verb *komma* does not necessarily refer to movement. It already codes the more abstract meaning of an inchoative change of state, as in example (23).

- (23) *hörande thera astundan som frälsas skuldo kom iak*
 hearing there wish REL free.PASS guilt came I
swa som pelagrimber til at äruodha
 so as pilgrim to INF work
 ‘Obeying the wish to be freed from sin, I came to work as a pilgrim.’

In this example, the speaker describes the event of becoming a pilgrim. This change of state does not involve physical movement, nor does it involve the conscious intention to induce it. The context makes clear that the act of becoming a pilgrim was brought about by a revelation, and followed naturally thereof.

Example (24) illustrates that the *komma till att V* construction is not confined to human subjects. Again, the sentence denotes an inchoative change of state.

- (24) *jordhen kastes til oc wathnes offtha ath thet kombir*
 earth throw.PASS to and water.PASS often so it comes
til at wäxa
 to INF grow
 ‘Earth is added and often watered so that it will grow.’

This example, from *Peder Månssons art of farming*, describes the requirements for good plant growth, a process which is beyond possible intentions on the part of the subject. Also, the verb *komma* does not refer to physical movement in this example.

The examples suggest that the verb *komma* in the *komma till att V* construction has already undergone a semantic change from ‘movement through space’ to ‘inchoative change of state’ by the 14th century; a finding which unfortunately only postpones the question how the meaning change proceeded, rather than answering it. One example in the concordance that provides a possible scenario for the change is given in (25).

- (25) *swa ath dywrr komme ey til ath bitha the wngo trän.*
 so that animals come not to INF bite the young trees
 ‘so that animals do not come to / do not start to bite off the young trees.’

In (25), it cannot be unambiguously determined whether *komma* refers to movement through space or a change of state. If we assume the more literal sense of ‘animals coming here’, the sentence still carries the implicature that this event will bring about an inchoative change of state, namely that ‘animals start to bite off the trees’. Over time, through re-iterations of similar examples, the implicature may be strengthened to such a degree that the sense of movement is weakened until it is fully absent (Traugott and König 1991). In examples (23) and (24) we see the result of such a process. The form *komma till att V* can thus be characterized as an inchoative construction.

4.1.3. *komma OBJ till att V*

Seven examples have the form *komma OBJ till att V*, which is structurally identical to the inchoative construction, except that the verb *komma* is directly followed by the object of the sentence. The structural similarity is reflected in a number of semantic similarities, but primarily the *komma OBJ till att V* construction must be viewed as a periphrastic causative (Viberg 2002). Example (26) illustrates the construction.

- (26) *walmogho frö komber människio til ath sowa*
 walmoga seed comes human.being to INF sleep
 ‘Walmoga seed makes you sleep.’

The example describes the effect of a sedative that numbs a person and induces sleep. Like in the construction *komma till att V*, the verb *komma* does not denote movement, but an inchoative change of state. In human conceptualization, changes can happen spontaneously or as a consequence of a causing event. Old Swedish grammar reflects this difference in conceptualization by giving speakers the choice between *komma till att V* and *komma OBJ till att V*. At the heart of the relation between the two constructions lies the ergative nature of inchoative *komma*, which functions much like English verbs such as *melt* or *open*. The causative construction obligatorily presents the role of the causer as the subject, whereas the inchoative construction presents the undergoer as the subject. In the causative construction, the undergoer consequently bears the function of the direct object.

Another similarity of the two constructions is that the undergoer of the change is not acting intentionally. In *komma till att V* we find that the animate subjects do not change because they intend to do so. In *komma OBJ till att V* the undergoer is the direct object. As such, even if it acts, it is not pursuing its own intentions, but merely acts as a reflex of some external cause. Example (27) illustrates a type of action that is induced by the causee, and thus devoid of the agent's own intentions.

- (27) *ther skikkadhe iak folkit saman oc kom them til at kifwa*
 there sent I people together and came them to INF fight
 'I sent people there and made them fight.'

The next example illustrates how a caused action may sometimes represent the exact opposite of the undergoer's intentions. In (28), the causer tries to make a pious woman act against her beliefs, but is unsuccessful.

- (28) *han forma ey at koma hänne til at bryta gudz*
 he can not INF come her to INF break god's
budhordh
 commandment
 'He cannot make her violate god's commandment.'

In summary, the form *komma OBJ till att V* can be characterized as a causative construction that shares both the sense of *komma* as an inchoative change of state and the participant of an unintentional undergoer with the *komma till att V* construction. These correspondences suggest that the grammaticalization of a verb such as *komma* may be visible in more than just one constructional environment.

4.1.4. Parameter values in the first sub-corpus

The search template based on the structure given by Dahl (2000: 320) extracts more than just one construction type from the corpus, which makes the analysis of the data more complex, but also possibly more instructive. Table one summarizes the 60 examples found in the concordance according to construction types and the coded parameters. The quantitative data is not analyzed statistically, but serves as a basis for discussion.

Table 1. Parameter values in the *Källtext* concordance

	<i>komma att V</i>		<i>komma till att V</i>		<i>komma OBJ till att V</i>	
	yes	no	yes	no	yes	no
animate	40	5	7	1	4	3
	89%	11%	88%	12%	57%	43%
human	35	10	5	3	4	3
	78%	22%	63%	37%	57%	43%
intention	33	12	1	7	4	3
	73%	27%	12%	88%	57%	43%
movement	39	6	1	7	0	7
	87%	13%	12%	88%	0%	100%

The table shows that all three constructions differ from each other in their preferences. The purposive movement construction *komma att V* strongly prefers animate, human, intentionally moving subjects, which comes as no surprise. The inchoative construction *komma till att V* also prefers animate human subjects, but, contradicting the prediction of Bybee, Perkins, and Pagliuca (1994: 270), the construction does not express the intentions of these subjects. Neither do we see much reference to movement, as would be typical for early usages of motion-based future constructions, such as for example English *going-to*. Of the three constructions, the causative *komma OBJ till att V* shows the weakest preference for animate human subjects. At this stage, the construction allows human, intentional causers along with inanimate and consequently unintentional causers, such as sedatives. The construction is not used to convey a sense of movement.

In summary, the Old Swedish data present evidence for the hypothesis that the *komma att V* future construction has developed in a different way than most other motion-based futures. In particular, we have found evidence for the

observation made by Traugott (1978: 378), that the development into a future construction has involved the intermediate stage of an inchoative construction. The verb *komma* as an inchoative marker is found in two related constructions. One of them is a causative construction, the other must be viewed as the precursor of the modern Swedish future construction.

4.2. Stage II – the *Old novels* corpus

In the second subcorpus, we re-encounter the three constructions that could be distinguished in the *Källtext* corpus, but the constructions have changed in either form, meaning, or both. The most frequent construction type is now a future construction with the form *komma att V*. There are reasons to argue that the inchoative construction *komma till att V* has lost the preposition *till*, yielding the shorter form. In turn, purposive movement is no longer expressed by *komma att V*. If speakers want to convey this meaning, they use the form *komma för att V*, which unambiguously denotes a purpose through the preposition *för* ‘for’. The causative has also lost the preposition *till*, but has not undergone the meaning change from inchoative to future time reference. Instead, we observe only a slight change in meaning. At this stage, animate causers are no longer found. The construction has become restricted to abstract, inanimate causers.

4.2.1. *komma för att V*

Examples conveying literal movement are strongly associated with the specific form *komma för att V*. As the expression of futurity has gained in relative frequency, examples expressing movement have become rarer. Whereas the purposive movement construction accounted for 75% of the data in the first subcorpus, such examples account for only 18% of the data in the second subcorpus. All subjects in the concordance are human and animate; all of them act intentionally. Example (29) shows a representative usage.

- (29) *Jag har kommit för att tala med dig om din bok.*
 I have come for to talk with you about your book
 ‘I have come to talk to you about your book.’

Most but not all examples involve the preposition *för*. Of the 35 examples, 32 have the form of example (29). The remaining three movement examples do not have the preposition, but differ structurally from the future construction *komma att V*. As illustrated in (30), these examples elaborate *komma* with an adverbial phrase.

- (30) *Till all lycka kom han tidigt nog att rädda barnet.*
till all luck came he timely enough to save child.the
'Luckily he came in time to save the child.'

4.2.2. *komma att V*

With 139 tokens, the most frequent construction type in the Old Novels concordance is *komma att V*. This equals an increase in relative frequency from 13% in the first subcorpus to 70% in the second subcorpus. This construction shows a strong semantic relation to the inchoative construction found in the first subcorpus, but it has undergone formal and semantic changes. The preposition *till* is lost, and the constructional semantics now clearly denotes future time reference. In most examples, there are no intervening elements and no spatial or adverbial elaboration of the individual constituents. This can be viewed as a sign of proceeding grammaticalization. As the preposition *till* is no longer there, the resulting collocation *komma att* is reanalyzed as a single constituent, so speakers tend not to place material between the two words. As in the first subcorpus, the construction selects both animate and inanimate subjects. Both types are shown in examples (31) and (32).

- (31) *Men du kommer att tycka om mina föräldrar!*
but you come to like PART my parents
'But you are sure going to like my parents!'
- (32) *Saken kommer att avvecklas mycket hastigt*
thing.the comes to handle.PASS very speedy
'The issue will be dealt with very fast.'

Examples with inanimate subjects have become more frequent, from 12% in the first subcorpus to 27% in the second subcorpus. As a consequence, the rate of non-intentional subjects has also increased. The majority of subjects is still human; these subjects strongly tend to act non-intentionally. In most cases, they are experiencers or undergoers of a change they cannot control, as in example (33).

- (33) *De kommer sannolikt att göra betydande förluster.*
they come probably to make significant losses
'They will probably face significant financial losses.'

In the first subcorpus, the constructional semantics of *komma till att V* denoted an inchoative change of state. In the corresponding construction of the second subcorpus, this meaning is still present in examples that are in the past tense

or the perfect aspect. In example (34), reference to future time is not possible, because the described event lies in the past.

- (34) *Så småningom kom hon att förstå att han menade allvar.*
 so gradually came she to understand that he meant earnest
 ‘It began to dawn on her that he was being serious.’

The inchoative meaning of *komma* thus persists in examples such as (34), which are fairly parallel in meaning to English expressions like *I came to hate him* (Dahl 2000: 321), both because of the gradual nature of the phenomenon as well as the lack of intention on the part of the subject. Christensen (1997: 191) suggests the title *aspectual komma* for this construction. Aspectual *komma* is found in 34 out of the 139 tokens of the *komma att V* construction, which equals 24%. It thus constitutes a minor use in this period of Swedish, and reflects the rise of the emerging future construction. The persistence of inchoative meaning in this construction constitutes evidence for the hypothesis that the construction *komma till att V* is indeed the precursor of the modern Swedish future construction.

In summary, it is fair to say that *komma att V* has fully grammaticalized into a future construction by the 19th century. The constructional semantics at this stage denotes a human experiencer who is about to undergo a change of state.

4.2.3. *komma OBJ att V*

Like the future construction *komma att V*, the causative construction *komma OBJ att V* has shed the preposition *till* in this period of Swedish, further motivating the relation between the two respective pairs. Unlike the future construction, the causative has not gained much in relative frequency. From 12% causative examples in the first subcorpus, it has risen to 18% of the second subcorpus. In absolute numbers, 34 examples have the structure exemplified in (35).

- (35) *Värmen från elden kom mitt ansikte att hetta.*
 warmth from fire.the came my face to heat.up
 ‘The warmth of the fire made my face heat up.’

The semantics of the causative construction has remained stable in the respect that the causee is a human experiencer or undergoer, and the caused event is an inchoative change of state. The fact that animate causers are no longer found at this stage suggests however that some changes have occurred. This finding is consistent with Teleman, Hellberg, and Andersson (1999: 512), who state that the change in the *komma OBJ att V* construction is brought about by an inanimate causer.

The finding that the causative construction and the future construction are semantically parallel for a while but diverge thereafter has an interesting implication for grammaticalization theory. Grammaticalizing verbs such as Swedish *komma* may at first appear with the same meaning in several, related constructions. As the constructions develop into increasingly different uses, the semantics of the verb diversifies. Constructional change can thus be seen as a source for verbal polysemy.

4.2.4. Parameter values in the second sub-corpus

Also the data from the second subcorpus allows a distinction of three separate constructions. Several changes reflect the ongoing grammaticalization of the *komma att V* construction. Most importantly, we see a sharp rise in relative frequency of the future construction. This increase happens at the expense of the purposive movement construction; the causative construction shows a minor increase. But it is also instructive to look at changes within the semantic parameters.

Table two summarizes the 200 representative examples according to construction types and the coded parameters. Both the purposive movement construction and the causative construction have become more coherent. The former occurs exclusively with human, intentionally moving subjects, whereas the latter shows only inanimate subjects. The future construction involves more inanimate subjects than before, but still shows a strong tendency towards unintentional, non-moving subjects.

Table 2. Parameter values in the *Old novels* concordance

	<i>komma för att V</i>		<i>komma att V</i>		<i>komma OBJ (till) att V</i>	
	yes	no	yes	no	yes	no
animate	35	0	101	38	0	34
	100%	0%	73%	27%	0%	100%
human	35	0	101	38	0	34
	100%	0%	73%	27%	0%	100%
intention	35	0	19	120	0	34
	100%	0%	14%	86%	0%	100%
movement	35	0	6	133	0	34
	100%	0%	4%	96%	0%	100%

The figures indicate that the purposive movement construction and the future construction show complementary behavior towards the parameters of intention

and movement. Corroborating earlier findings, this tendency casts severe doubt on a conceptual relation between the two constructions.

4.3. Stage III – the *Bonnier's novels* corpus

The third subcorpus contains the same three construction types that were found in the second subcorpus. A change in relative frequencies documents the ongoing rise of the future construction *komma att V*. Whereas in the second subcorpus each construction type showed syntactic and semantic differences from their earlier counterparts, no formal changes can be observed from the second to the third subcorpus. The consistency in form reflects the fact that these two subcorpora are fairly close in time, whereas there is a longer gap between the first and the second subcorpus. Whereas the purposive movement construction and the causative construction have remained semantically stable, the future construction has undergone further semantic change.

4.3.1. *komma för att V*

The purposive movement construction has not undergone syntactic or semantic change, but it has further decreased in relative frequency. It accounted for 18% of the data in the second subcorpus, but represents only 8% of the data in the third subcorpus.

4.3.2. *komma att V*

Although the grammaticalization of *komma att V* was well established in the 19th century, the data from the third subcorpus suggest that the future construction still changed after that. It has further gained in relative frequency, from 70% in the second subcorpus to 89.5% in the third subcorpus. The construction has been observed to undergo formal changes even in present day Swedish. A current development is that the loss of the infinitive marker *att* spreads over an increasing number of different genres (Källgren 1996). This development is already traceable in the concordance, but only four examples out of the representative 200 have the form of (36).

- (36) *Det kommer bli kallt, det får du vara beredd på.*
 it come become cold that must you be prepared for
 ‘It’s going to be cold, that’s something you need to prepare for.’

Interestingly, all of these examples represent speech. The incipient loss of the infinitive marker was driven by spoken discourse, and it seems that the authors

attempt to imitate that genre. It is probably not until much later that the loss of the infinitive marker genuinely affected written genres.

A similar phenomenon is the quasi-phonetic rendering of the infinitive marker as *å*. (37), which is the only example of its kind, also represents spoken discourse. In standard orthography, the words of the sentence would be spelled *det* ‘that’, *aldrig* ‘never’, and *med* ‘with’. As in example (36), the variant form is chosen to achieve an artistic effect.

- (37) *De kommer han allri allri å lyckas me!*
that come he never never INF succeed with
‘He’ll never never succeed with that!’

Besides these formal changes, semantic developments have taken place. A minor change in the constructional semantics of *komma att V* can be observed in the parameter of intention. Here, we see a slight increase of intentional human subjects, as in example (38).

- (38) *För annars kommer jag att spränga oss alla i luften,*
because otherwise come I to blow-up us all into air.the
sade hon sakligt.
said she impartially
‘Because otherwise, I am going to blow up all of us, she said impartially.’

In present day usage, the *komma att V* construction differs from all other Swedish future constructions precisely because of its reluctance to co-occur with intentional subjects (Hilpert 2006). Is there an explanation why we see a rise of examples like (38)? Viberger discusses a similar example, in which a politician declares his best intentions to solve a problem, and suggests that the *komma att V* construction can be used to portray an intended action as more commissive: “The use of *kommer att* makes the statement sound like a commitment due to the basic predictive meaning of this marker” (2002: 98). The *komma att V* construction is used to make the intended action sound less tentative. Diachronically, such usages are an extension of the original constructional semantics. Speakers use the construction in a new context, while exploiting the semantic overtones that stem from the older constructional meaning.

The second subcorpus contained instances of the *komma att V* construction with an aspectual interpretation. These examples retain the older, inchoative semantics of *komma* and are in the past tense or the perfect. This particular usage is also found in the third subcorpus, albeit to a lesser degree. While aspectual *komma* accounted for 24% of the examples in the second subcorpus, it accounts for only 18% of the examples in the third subcorpus. The decline in

relative frequency is another indicator that future time reference is becoming the dominant use of the construction.

Overall, despite the full grammaticalization of *komma att V* it can be observed that the construction continues to change syntactically as well as semantically.

4.3.3. *komma OBJ att V*

Like the purposive movement construction, the causative construction has not changed, but it shows a decrease in relative frequency. It accounted for 18% of the data in the second subcorpus, but represents only 2.5% of the data in the third subcorpus.

4.3.4. *Parameter values in the third sub-corpus*

Table 3 presents the values of the semantic parameters for the examples from the third subcorpus. Both the purposive movement construction and the causative construction have stayed exactly the same with respect to the four parameters.

Table 3. Parameter values in the *Bonnier's novels* concordance

	<i>komma för att V</i>		<i>komma att V</i>		<i>komma OBJ till att V</i>	
	yes	no	yes	no	yes	no
animate	16	0	132	47	0	5
	100%	0%	74%	26%	0%	100%
human	16	0	132	47	0	5
	100%	0%	74%	26%	0%	100%
intention	16	0	34	145	0	5
	100%	0%	19%	81%	0%	100%
movement	16	0	7	172	0	5
	100%	0%	4%	96%	0%	100%

Also the *komma att V* construction has not changed significantly. The construction has not altered its preference for animate human subjects. These parameters are stable at 74%. Also the parameter of movement has stayed the same, reference to movement is still found in only 4% of the examples. The parameter of intention increases from 14% in the second subcorpus to 19% in the third subcorpus. This change reflects the semantic broadening of the construction, as discussed above.

5. Discussion

In the introduction, I suggested that the frameworks of corpus linguistics and construction grammar might bring a new perspective to the study of grammaticalization. The present study was an attempt to put this suggestion into practice. I hope to have shown that a quantitative and qualitative analysis of diachronic corpus data can indeed enhance our understanding of grammaticalization processes.

The importance of construction grammar for the study of grammaticalization has often been pointed out (Traugott 2003, the papers of this workshop, *inter alia*). The present study adds to the existing body of evidence by showing that changes in constructional semantics can drive polysemization: The causative construction *komma OBJ att V* and the future construction *komma att V* developed from the same source, as both involved the verb *komma* in its function as an inchoative marker. The diversification of the constructions made *komma* a polysemous verb, with one grammatical use as a causative verb, and another as a future marker (Viberg 2002).

The main objective of this paper was to determine whether intention was a semantic component of early usages of the *komma att V* construction. Bybee, Perkins, and Pagliuca (1994: 270) argue that movement-based futures evolve from intentional agents moving through space to achieve some goal. An alternative view is held by Dahl (2000: 320), who states that the *komma att V* construction must have grammaticalized from a different source. Corpus data from three different periods of Swedish provide evidence for the second position. The *komma att V* construction developed into a future marker by first becoming an inchoative marker. In addition to the grammaticalization clines for general motion-based future markers proposed in Bybee, Perkins, and Pagliuca (1994), we may thus propose the following path of development for de-venitive future markers:

(39) MOTION > INCHOATIVE > PREDICTION

The possibility of such a development has been pointed out before (Traugott 1978: 378; Christensen 1997: 50), but corpus data allow us to re-state the case on an empirical basis. Apart from the investigated data, there exists some cross-linguistic evidence to further substantiate the proposed path. Ebnetter (1973: 241) describes the Romansh future construction *vegnir a V*, which also has the separate function of an inchoative marker. He characterizes the construction as expressing the ‘objectifying, fateful or coincidental conception of future events’². The Romansh construction is thus strikingly similar to the Swedish

construction. In passing, Ebnetter mentions yet another comparable inchoative construction in Swiss German, which is used in connection with weather phenomena (1973: 242). The existence of these constructions motivates the hypothesis that the proposed cline applies cross-linguistically for de-venitive futures. A good testing ground for this claim are African languages, which exhibit a wide range of future constructions that have developed out of verbs of coming (Emanatian 1992; Heine and Reh 1984; Welmers 1973). The present study thus replaces one hypothesis with another, in the hope that it will soon be tested.

Notes

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2. My translation, MH.

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Corpus Data

Old Swedish: [<http://spraakbanken.gu.se/lb/konk/>], date of download 11-01-2004

Old Novels: [<http://spraakbanken.gu.se/lb/konk/>], date of download 11-01-2004

Bonnier's Novels II: [<http://spraakbanken.gu.se/lb/konk/>], date of download 11-01-2004