On the Pragmatics of Subjectification:
Emergence and Modalization of an Allative Future in Ancient Egyptian

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0. Outline of the talk & Caveat

Outline. This paper will have two parts.

1. First, some theoretical issues regarding grammaticalization and its relation to subjectification.
2. Second, we will illustrate these claims by a presentation of a case-study: the emergence, grammaticalization and modalization of a Future tense out of a verb-less Allative Construction in Ancient Egyptian, an Afroasiatic language spoken and written in Egypt from around 2500 BCE to 1000 AD, until speakers shifted completely to Arabic. The use of Ancient Egyptian linguistic data has at least two advantages:
   a. This language is attested in our written documentation for more than 3000 years, which allows for the study of long term processes of language change;
   b. Most of the studies on subjectification are based on data coming from English, French, Dutch, German and Japanese, but the usefulness of this concept has still to be explored for languages from other families and areas.

Caveat. We won't be discussing 'Cognitive Linguistics' approaches to subjectification (e.g. Langacker, Cornillie, etc.; see Athanasiadou, Canakis & Cornillie 2006), since they are mostly synchronic. Rather, we want to address the Traugottian definition of subjectification, which is diachronic in orientation.

1. Theoretical claims

There are two principal problems that any grammaticalization theory has to account for. The first is the unidirectionality hypothesis. We won't be talking about this today. The second issue is twofold:

1. how functional change comes about?
2. how functional change relates or correlates with formal change?

(By 'functional' we mean pragmatic and semantic changes, and by formal we mean syntactic, morphological and phonological changes.) [**see FigurePart1**]

Draft version as of 8 Dec. 2010

These two questions (1. and 2.) will be developed further in the talk, but we would like to begin with four observations related to grammaticalization that appear to be uncontroversial and will serve as a point of departure [**see FigurePart2**]:

1. Functional change precedes formal change (*passim*, see e.g. Hopper & Traugott 2003: 100)
2. Semantic change in grammaticalization is overwhelmingly regular, proceeding along a finite number of pathways (e.g. Bybee et al. 1994; Givón; Heine & Kuteva 2002).
3. Semantic change results from basic pragmatic mechanisms of everyday usage (e.g. Traugott & Dasher 2001: IITSC). This has been described in an informal way as 'the transfer of context to code' (Givón 2005).
4. The main determinant of formal change is frequency (e.g. Bybee 2001, 2006, 2007, 2008, 2010; Haspelmath 2008).

1.1. Functional/formal changes and subjectification

These four observations are not connected in an arbitrary way. Rather, any theory of grammaticalization has to address how they are mutually related. Most theories assume, in a general sort of way, that functional change motivates formal change, or that the two 'co-evolve.' In any event, no one has seriously argued for the null hypothesis, namely, that there is no relationship between the two. In short, any theory has to account for the ways in which functional change leads to formal change. In this talk, we would like to formalize a proposal that accounts for these observations in a more detailed way (the links with various semantic components usually called for when referring to the notion of subjectification will be systematically underlined).

1.2. Grammaticalization: pragmatic mechanisms and semanticization

As we see it [**see FigurePart3**], the main problem in understanding grammaticalization is to understand how, ultimately, the pragmatics of discourse lead to a rise in text-frequency that in turn lead to the kind of regular formal changes documented. (As said earlier, we consider here that the role of frequency in morphological and phonological change in grammaticalization is well established enough to assume it here.) Moreover, we will focus on how basic pragmatic mechanisms, such as inferencing (see the Invited Inferencing Theory of Semantic Change advocated for in Traugott & Dasher 2001: 5-sq. and the importance of this dimension in Bybee et al. 1994: esp. 285-297), may lead to semantic change.

In a nutshell, the argument is that, at the pragmatic level, one has to distinguish subject-oriented from speaker-oriented inferences. Speaker-oriented inferences are those in which the addressee infers that the speaker is talking about his or her state of mind (or view of the event) rather than that of the subject (Subject-oriented inference). The best way to illustrate this is probably to use an example. Let's consider the well-known case of the English 'going-to' future (this will be useful for the following case-study). In the sentence 'Sebastian is going to move to Berlin,' the addressee can infer that the speaker is either:

1. reporting on Sebastian's intentions [**subject-oriented**] => Sebastian has the intention, wants to move to Berlin;
2. making a prediction of his or her own [**speaker-oriented**] => As speaker, I am predicting that Sebastian is going to move to Berlin.

Now, this is not just another way of invoking subjectification. While Traugottian subjectification privileges the speaker's role in inviting innovative inferences, we would like to emphasize the crucial role of the addressee in interpreting or misinterpreting the speaker's message. In this, it follows approaches that privilege hearers as 'signal misinterpreters,' which have had made much progress in explaining sound change (e.g., Donegan 1993; Ohala 1993). To put it bluntly, a speaker can invite all the inferences he or she wants, but an addressee has to make these inferences in order for them to be propagated. Addressees are the locus of interpretation and misinterpretation, and their role in language change has often been – and should again be – emphasized.

The importance of the distinction between speaker-oriented and subject-oriented inferences can be traced at least to Benveniste (1958), but it has also been argued for — at least implicitly — by Bybee et al. (1994: 176-241) and most recently by Narrog (2010: 420) — even if he applies this distinction somehow differently — who states that "speaker-orientation" is "the crucial dimension in cross-linguistic change of modal markers" (see already the proposals made in Narrog 2005 & 2007) and who more specifically claims that "diachronically, modal meanings always shift in the direction of increased speaker-orientation" and adds that "the increase in speaker-orientation is (...) essentially independent of the dimension of volitivity" (Narrog 2010: 394).

The main point that we would like to make as explicit as possible is that speaker-oriented inferences are those that lead to a rise in text frequency. They do this in at least two distinct ways:

1. Speaker-oriented inferences often involve meanings that occur more frequently that subject-oriented ones, generally speaking. For example the expression of future tense is likely to be more frequent, across text types, than the expression of purpose. This is a hypothesis, which still has to be investigated empirically.
2. Speaker-oriented inferences themselves lead to an increase in frequency through a relaxation in the selectional restrictions of constructions (e.g. in the kind of subjects and predicates that can occur in a construction, see *infra*). This is similar to, Himmelmann's notion of 'host-class expansion' (Himmelmann 2004) that has been applied to the 'be going to' future in Brinton & Traugott (2005: 72-73). [In terms of grammatical constructionalization, this is typified by an increase in productivity, an increase in generality (constructional scope), and a decrease in compositionality, see esp. Trousdale 2010]

As a result of the relaxation of the selectional restrictions of a construction, the construction itself becomes compatible with new type of components. For example, a completive construction in Coptic ('to finish doing something') was reinterpreted as a perfect ('to have done something'), a common grammaticalization path, especially in Africa. Completive

constructions entail, minimally, a volitive agent capable of bringing a process to an end, whereas perfects can have non-agentive or inanimate subjects. This is illustrated by the two following examples (coming from Grossman 2009: ex. 22-23):

> Ecc. 3:15
> *na≠{u}-ouô*   *e≠u-šôpi*   *pe*
> PRET1=3PL-finish   CIRC=3PL-become\INF   PRET2
> It has already been
>
> NHC VI
> *a≠f-[ou]ô*   *e≠f-côhm*
> PST.AFF=3SG.M-finish CIRC=3SG.M-make_filthy
> He has already become filthy

This leads to a rise in the type frequency of a construction, although not necessarily its token frequency (which seems to depend heavily on the nature of the corpus under investigation).

This account provides a principled way to explain some phenomena related to grammaticallization, such as the differential semantic changes observed across person paradigms: for example, first person futures are often conservative in their semantics, since hearers have no reason to infer a difference between a speaker's report of his intention to carry out an action, on the one hand, and a prediction of his that the state of affairs will come to pass, on the other. This difference is salient, however, for third person subjects (see *infra*), and the approach adopted here would predict that first person futures would develop a pure prediction meaning after third persons.

Finally, the spread of a construction to new types of subject and predicates, which is normally attributed to analogical extension (and left at that), is well motivated in this account. The extension is made possible because the new meanings are not incompatible with the same subjects and predicates as is the meaning of the source construction. This is a better explanation than simple analogy, because one would expect analogical change to apply more to less frequent items, and constructions that undergo grammaticalization tend to increase in text-frequency.

In summary, we propose the following path: retraction of subject-oriented inferences and development of speaker-oriented ones [Pragmatic level] <=> relaxation of selectional restrictions [Contructional level] => rise in text frequency (=> morphological and phonological change) [Graph Part4]

On the other hand, this functionally-motivated rise in frequency in turn can lead to the conventionalization and generalization of a construction at the semantic level, in a sort of feedback effect (this goes along with the bybeean notions of strength of representation, exemplar models, and entrenchment).

1.3. Advantages & consequences for the notion of subjectification

The main advantage of this approach is in spelling out in an explicit fashion how functional change comes to be (by articulating the pragmatic and semantic dimensions), and in describing how it motivates formal change: not directly or in an iconic fashion, but rather indirectly, by leading to a rise in text frequency. In our view, it is this connection between speaker-oriented inferences and a rise in text-frequency that has not been made explicitly enough in the literature, although the generalizations upon which it is bases are uncontroversial.

However, we consider that the Traugottian notion of subjectification cannot account for these observations. First, the notion of subjectivity as it has been defined is too vague for the present. Second, and more importantly, it has been presented as a 'mechanism' of semantic change, whereas it is in fact at best a generalization about a tendency of semantic change. In this capacity, it is an *explanandum*, not an *explanans*.

We would argue that the functional dimension of grammaticalization can be better described and explained with a fine grained analysis that takes into account the different facets of the conventionalization of speaker-oriented inferences, i.e.:

1. What types of speaker-oriented inferences are attested? (Their number has to be limited if one wants to account for the regularity in the correlated semantic changes.) In which pragmatic environments do they occur?
2. What selectional restrictions of the construction are relaxed due these contextually available inferences?
3. Is it possible to objectify (or at least argue for) a raise in text frequency (with corpus-based quantitative approach)?
4. Is it possible to show that the new meanings are conventionally coded by the forms, with new form-meaning pairs as result?

These four points will be further illustrated with the case-study that follows.

2. A verb-less Allative Future in Ancient Egyptian (AEg)

Caveat. AEg linguistic data available are heavily dependent on (and have to be problematized in relation with) the genres attested for each period [specific communicative goals => selection of specific registers in the available repertoire] + uneven diachronic distribution**.**

In this part of the talk:

1. we will describe the emergence, grammaticalization and modalization of a Future tense out of an Allative (or 'goal-marking') verb-less construction;
2. we will show how, successively, two distinct types of speaker oriented-inferences lift original selectional restrictions of the construction and lead to a rise in text frequency in agreement with the theoretical claims we just made.

The basic constructional scheme for the Allative Future in AEg is the following:

iw	*f*	*r*	*sḏm*
AUX	subject	allative prep.	infinitive[1]
	he	to	hear

He is going to hear

Typologically, allative constructions that do not comprise a verb of motion at all (as opposed to English "going to + V" or French "aller + V") are poorly documented in the literature as sources for the grammaticalization of Future tenses; however, this phenomenon is attested in some languages of Northeast Africa, for example, in Tigre, a Semitic language spoken mostly in Eritrea:

faǧər	baṣˤə	ʔəgəl-nigis-tu
Tomorrow	Massawa	ALL-we:go\SBJV-it_is

Tomorrow we will go to Massawa

The main interest of this source construction for development of a Future tense is that, while it does not involve a verb of motion at all, yet it observes the pathways of functional change proposed for other Allative Futures, such as the English 'going to' future, which has played such a prominent role in studies of grammaticalization.

The very fact that a future tense can be grammaticalized out of a non-verbal construction with a strong allative semantics supports the claim made by Bybee et al. (1994: 268) that the allative (goal-oriented) meaning — rather than motion alone — is a central factor in the grammaticalization: "First, it is important to note that simple movement does not evolve into future. To derive future, there must be an allative component, 'movement towards', either inherent in the semantics of the verb or explicit in the construction."

Interestingly, the types of changes that the English construction undergoes have been downplayed by Traugott, who claims that this is merely 'raising'. See e.g. Traugott & Dasher (2002: 98): "It is true that in relevant linguistic constructions, the 'objectively profiled subject' may well be attenuated in the process of subjectification. For us this is a matter of construction change (raising) that is consistent with the directionality of semantic change discussed here (less > more subjective)". The same argument is developed in Traugott (2010: 36-37): "in the case of be going to, we find expressions of motion with intent to act in the sixteenth century (5a: I am going to visit the prisoner), intentional non-motion expressions in the seventeenth century (5b: I ha' forgot what I was going to say to you), and finally raising ones in the nineteenth (5c: I am afraid there is going to be such a calm among us, that), which express speaker assessment of the future."

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[1] Conventionally, we gloss *iw* as an auxiliary; its mains function is originally to indicate that the sentence is fully asserted by the speaker.

2.1. Emergence and Grammaticalization: From Allativity to Future

The Ancient Egyptian data allows us to refine the previous descriptions of the grammaticalization of Allative Futures and to suggest some ideas about the actual mechanisms at work behind the "Subjectification" label.

Stage 0. "MOTION WITH INTENT TO ACT" is not attested for verb-less allative futures for the very reason that the "motion" dimension is not expressed by a specific gram.

Stage 1 (dyn. 0?-dyn 6 [beginning]). "INTENTION TO ACT".

- Selectional restrictions of the construction:
  - Subject = 1st pers. [+anim]&[+intentional]
  - Predicate = [+agentiveSubject]
- Speaker: (assertion)

Urk. I, 224,4-6 (Tomb of Pepyankhheryib; VIth dyn.; Meir)
iw(=i)   *r*   *ir(.t)*   [*ḫ*]*ft*   *mrr.t*[=*s*]*n*
MCM(=1SG)   ALL   do\INF [acc]ording_to   desire[=3]PL
(With regard to those who will act in accordance with what I have said), I will act in accordance with what they desire

The original meaning with the first person is always intentional. This is a typologically well-attested semantic asymmetry, and it can be explained pragmatically. As said earlier, addressees have no reason to infer that there is any difference between a speaker's report of his intentions and his prediction about the event coming to pass. In fact, this meaning is remarkably stable over time, the third persons, and to a lesser extent, the second persons, being the principal locus of change.

It has to be noted that the corpus shows a clear rise in text-frequency of the construction (that is not proportional to the quantitative evolution of our documentation) during the Old Kingdom (c. 2650-2150 BC):

PT (1)	5th Dynasty 4	5th-6th Dynasty 3	6th Dynasty 64

Stage 2 (dyn. 6 [end]). [1] Retraction of subject-oriented inferences (intentionality) and [2] rise of speaker-oriented ones: the role of the speaker becomes prominent and the addressee envisions him has being the source of assertion, which (in this case) leads to the semantics of "prediction".

- Selectional restrictions of the construction:
  - Subject = 1st/2nd/3rd [+anim]&(+intentional); the text-frequency of 2nd and 3rd pers. subject is still very low (*c.* 3 occurrences for each)
  - Predicate = [+agentiveSubject]

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- Speaker: [+assertion] => prediction

mCairo 20003, l. 3-4
iw=ṯn   r   ḏd   m   rꜣ=ṯn (…)
AUX=2PL   ALL   say\INF   with   mouth=2PL
(If you have nothing in your hands,) you will say with your mouth (…)

Urk. I, 224,15 (Tomb of Pepyankhheryib; VIth dyn.out; Meir)
iw   ḥw.t-ḥr   r   ir.t   mrr.t=sn
AUX   Hathor   ALL   do\INF   desire\PTCP.IPFV=3PL
(With regard to any man who shall speak,) Hathor will fulfill their desires

In Old Egyptian (i.e. down to stage 2), the construction cannot be described as a fully semanticized future however — as shown by the selectional restrictions on the subject and predicate types. It will only be the case in Middle Egyptian. This is illustrated by the stages 3a and 3b:

Stage 3a (Middle Egyptian). Retraction of subject-oriented inferences that leads to a relaxation of the selectional restrictions on the types of subject of the construction. Some of the predicates attested do not require an agentive subject anymore.

- Selectional restrictions of the construction:
    o   Subject = [+anim]
    o   Predicate = None
- Speaker: [+assertion]

pBerlin med., rt 1,12-3 (MK)
iw=s   r   iwr
AUX=3SG.F   ALL   be_pregnant\INF
She will become pregnant

See Langacker (1999: 148): "a common type of semantic change involving attenuation in the degree of control exerted by an agentive subject," resulting in "subjectification".

Stage 3b (Middle Egyptian)

- Selectional restrictions of the construction:
    o   Subject = None
    o   Predicate = None
- Speaker: [+assertion]

Sh.S., 119-120
iw   dp.t   r   iy.t   m   ẖnw
aux   boat   all   come\INF   from   home
A ship will come from home

According to the preserved documentation, it is difficult to decide whether stage 3a and stage 3b are two distinct stages or if they belong to one and the same momentum. Anyhow, in Middle Egyptian, the construction is now functionally a future construction: there are many examples with non-agentive and inanimate subjects, which necessitate a purely predictive meaning and exclude intentional readings. Moreover, the construction is found in subordination, which is typical of 'older' futures and unattested in Old Egyptian

As argued before, the best explanation for the rise of a purely predictive meaning is a pragmatic one. As we saw, *Subject-oriented inferences* — that interpret the speaker as talking about the intentions of a human subject — were quickly replaced by *speaker-oriented inferences* — that interpret the speaker as predicting something about the subject (asserting that a predication will take place in the future). This led to the relaxation of the selectional restrictions on the types of subjects and predicates.

As already mentioned, this distinction is salient mainly in the third person, for reason that should be obvious by now. Indeed, only these speaker-oriented inferences allowed inanimate subjects and verbs that exclude control of the subject over the event. Only these speaker-oriented inferences provided the conditions that promoted a rise in text-frequency (since temporal meanings are more common than expressions of intention in many kinds of discursive situations, and an increase in the range of subjects and verbs permitted naturally increases text frequency).

2.2. Formal Changes and Modalization of the Construction

It is only after the future meaning of the construction was semanticized that other features of advanced grammaticalization appeared. This will be illustrated with the stages 4 and 5.

Stage 4 (Late Egyptian). At the formal level: loss of compositionality + morphological reduction. The auxiliary *iw* becomes the only one that may be used for the expression of futurity and, correlatively, the allative marker *r* becomes optional (at least at a graphemic level), the future meaning being now completely up to the construction

> P. Chester Beatty I, rt 2,2 (= *LES* 38,10-11)
> *iḫ   p3   nty   iw=n   ø   ir=f*
> what   ART.M.SG   REL   FUT=we   ø   do\INF=it
> "What will we do?" (litt. "what is it that we will do it?")

Stage 5 (Latre Egyptian [end]). Rise of speaker oriented inferences: the addressee does not conceive of the speaker solely as an assertive, but merely as manipulative source. Therefore, a weak manipulative meaning (that could be seen as an "increased degree of intersubjectivity") emerges with 3rd pers. subject ("optative") and is not limited not to an available inference with 2nd pers. subject:

> P. Leyde I 362, vs 1-2 (= K*RI* II, 927,5-6)
> *iri   Ptḥ   in.t=n*
> FUT   Ptah   bring_back\INF=us
> May Ptah bring us back

The acquisition of manipulative functions by future/prediction markers was documented in as many as 13 out of the 76 languages of Bybee et al.'s (1994: 273) sample. Joined by Narrog (2010: 397), they (1994: 211) explain this change as follows: "In a situation in which the speaker has authority over the addressee, a prediction about the addressee can be interpreted as a command. While English future markers have arguably not semanticized an imperative function, an imperative-like reading of *will* is available in context, and has frequently been mentioned in the literature." The Egyptian data are interesting insofar as they document the existence of a direct pathway between future and optativity when the future construction is used with 3rd pers. agentive subject.

3. Conclusions

In this talk, we described two types of *speaker-oriented inferences* that were paralleled by the retraction of *subject-oriented* ones. In our case study, the addressee makes speaker-oriented inferences, considering the speaker:

- as the source of assertion (Semantic: intention => future);
- as a manipulative source (Semantic: future => optative).

As a result, the distinction between "Subjectification" and "Intersubjectification", depending on the actual definition of these terms, might be misleading. This point was already clear in Benveniste's 1958 paper and it has again been pointed out by Narrog (2005: 692): "[A]s speaker-orientation means orientation towards the speaker and the speech situation, it potentially also includes an increasing orientation towards the addressee as part of the speech situation". To be fully explicit, a speaker-oriented inference in which the addressee takes into consideration the nature of the speaker's assertion will be subjectively oriented, while if the addressee pays attention to the speaker as a manipulative source, this will inevitably result in an "intersubjective" expression.

Now, other types of speaker-oriented inferences are obviously to be described, even if one has to expect their number to be limited in order to account for the well-documented regular semantic paths in grammaticalization studies.