[C1] Introduction to Grammaticalization

Presentation by Melis Çelikkol

Contents:

- A historical summary through 1740s-1990s
  - Structural Properties of Grammaticalization
  - The Continuous Process
- Grammaticalization Theory: Motivation & Definition
  - Examples of the Process
- The Question of Semantic Development
- Takeaways from Heine (2003)
- Criticism
- Response to Criticism

- **My Conclusion**
- **Discussion Points & Your Questions**

A historical summary through 1740s-1990s

1746 - Condillac: Tense suffixes and other verbal inflections can be traced back to independent words.

1785-1805 - John Horne Tooke: Language in its "original stage" is concrete. Abstract phenomena is derived from concrete phenomena.

- Nouns & verbs: *"necessary words"*
- adverbs, prepositions, conjunctions, etc. *derived from* necessary words through "abbreviation" and "mutilation"

1816-1833 - Franz Bopp: The change from lexical to grammatical forms is an essential component of his comparative principles.

1971-1973 - Talmy Givón: There's a need to know of the earlier development stages of language structure in order to understand it.

Anderson: Spatial expressions are more basic than other kinds of linguistic expressions. Thus, the former therefore serve as structural templates for the latter.

"Today's morphology is yesterday's syntax"

1970s-1980s: A number of studies surface; many are concerned with problems of morphosyntactic change. There is a variety of opinions. The diversity of views reflected in the terminology employed:

"**grammaticalization**"

"**grammaticization**"

"**grammatization**"

There are also major differences as to what subject matters the term should cover.

1990s: Grammaticalization studies seem to get equally relevant to understanding language change in situations of extreme language contact and unusual language transmission. Grammatical categories in languages evolve along the same lines as in languages with "natural" language transmission.

Structural Properties of Grammaticalization

According to Lehmann, 1985 the following appear as effects of grammaticalization:

- paradigmatization: the tendency for grammaticalized forms to be arranged into paradigms
- obligatorification: the tendency for optional forms to become used obligatorily
- coalescence: collapsing together of adjacent forms
- fixation: free linear ordering becomes fixed

  decategorialization

- condensation: shortening of forms

  erosion

The mechanisms that make up grammaticalization also make linguistic items belonging to open-class paradigms turn into closed-class items.

Hopper (1991) describes more general effects of the mechanisms, such as:

- layering: older layers of language use may remain to coexist and interact with the newer layers.
- divergence: grammaticalized & original forms coexist side by side.
- specialization: variety of formal choices narrows, an ever-smaller range of forms assumes a general meaning.
- persistence: traces of earlier meanings are likely to survive in the form of grammatical distribution of that item.
- decategorialization

The Continuous Process

The development from less grammatical to more grammatical forms has been described as a continuous process. **Hopper & Traugott (1993)** name this a "cline" and define an example of it to be *"the progression from lexical noun, to relational phrase, to adverb and preposition, and perhaps even to a case affix."*

Heine himself on the other hand, proposes the term "grammaticalization chain" in his earlier works **(1992, 1993)**. In his description:

- the process can be interpreted as a diachronic or a synchronic structure
- it has a linear structure where one end of the chain is both older and less grammaticalized, the other younger and more strongly grammaticalized
- it is a linearly structured family resemblance category.

  Due to the overlapping structure of the grammatical change, "chain" is preferred over "cline."

6

Grammaticalization Theory: Motivation & Definition

Motivation: Successful communication.

- Human strategy includes using linguistic forms for the easily accessible, delineated or concrete meanings to express meaning contents with less of these properties.
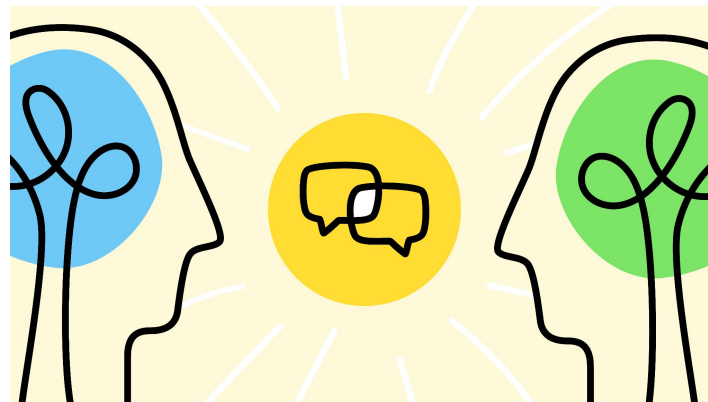
Therefore, in grammaticalization, *grammatical target meanings* are encoded via the use of expressions for the *concrete source meanings* in specific contexts.

Grammaticalization theory offers an explanatory account of how and why grammatical categories surface & develop.
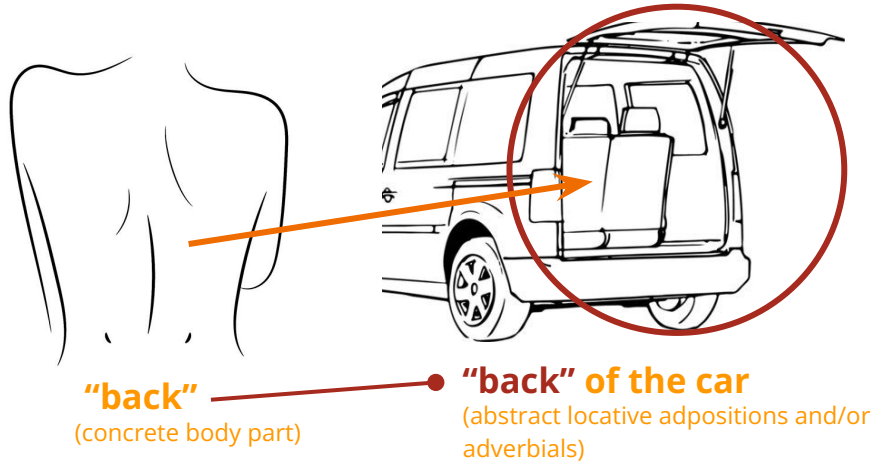
➔ The process of concrete transforming to less concrete is argued in a few ways. Heine looks at:

Conceptual Transfer   *and*   **Context-Induced Reinterpretation**

- Leads according to domains of human experience.

"back"
(concrete body part)

● **"back" of the car**
(abstract locative adpositions and/or adverbials)

- Domains from concrete to less concrete:

PERSON > OBJECT > ACTIVITY > SPACE > TIME > QUALITY

- According to the pragmatic component of the process.
- requires appropriate context
- leads to an increase in:
  - contexts where the grammaticalized item is used
  - the frequency of use of that item

- *"Development from body part noun to locative adposition involves thousands of different contexts and centuries to be conventionalized"*

"Both models capture significant properties of grammaticalization, and both are required to understand why grammatical categories arise."

(5) German:

a. **Während** er vor   dem Fernseher sitzt, trinkt er Kaffee
    while   he in:front to:the TV:set   sits   drinks he coffee
    "While he is watching TV, he is drinking coffee"

b. Während sie ihn um Hilfe bittet, bleibt   er vor   dem
    while   she him for help asks   remains he in:front to:the
    Fernseher sitzen
    TV:set   sit

    (i)   **"While** she asks him for help, he remains seated in front of the
          TV set"

    (ii) **"Although** she asks him for help, he remains seated in front of
          the TV set"

c. **Während** sie gestern   noch krank war, kann sie heute schon
    while   she yesterday still sick was can   she today already
    wieder lachen
    again   laugh
    "Although yesterday she was still sick, today she can laugh already"

According to the context reinterpretation, there is no leap from one domain to another; but a gradual transition from temporal to concessive uses of the word.

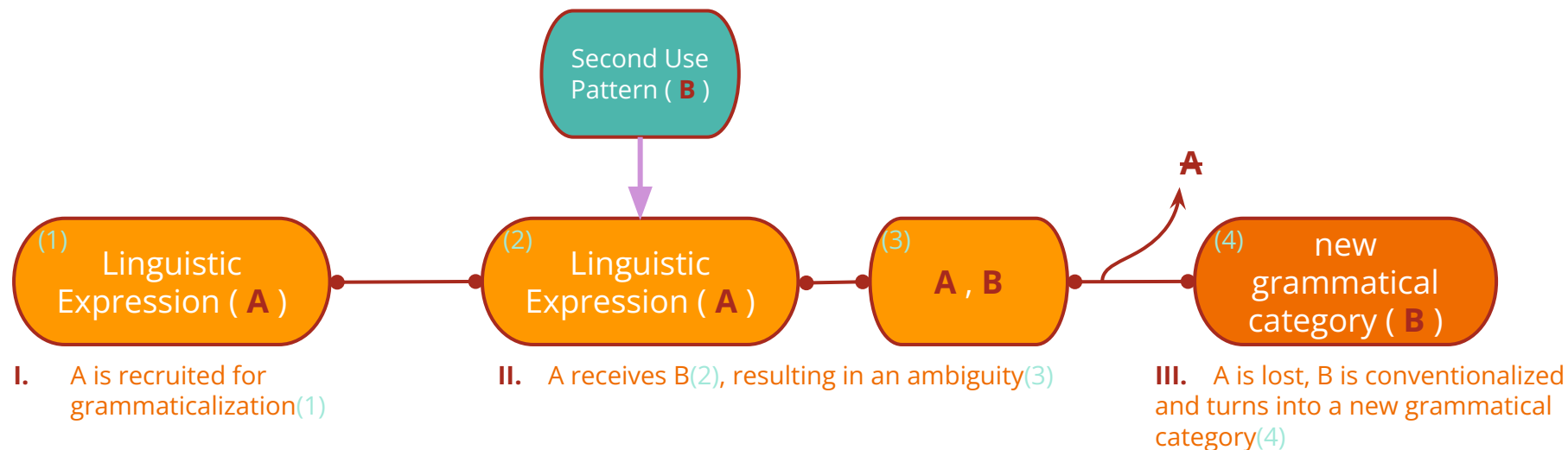*allows for both a temporal and a concessive interpretation*

Thus, previous work (Heine et al 1991) treats **both** models as integral parts of the one and the same overall device.

According to the conceptual transfer, the concept from domain of time is transferred to the domain of logical relations between clausal propositions.

9

4 interrelated mechanisms:

I. desemanticization
- semantics
- loss in meaning content

"semantic reduction" or "bleaching"

II. extension
- pragmatics
- use in new contexts

"context generalization"

III. decategorialization:
- morphosyntax
- loss in morphosyntactic properties characteristic of the source forms

IV. erosion
- phonetics
- loss in phonetic substance

"phonetic reduction"

Through these mechanisms, linguistic items, <u>lose</u> in *semantic, morphosyntactic, and phonetic substance*, but also <u>gain</u> in *properties characteristic of their uses in new contexts*. In this context, extension, decategorialization & erosion presuppose desemanticization.

Heine's (1993) aforementioned overlapping model is explained in the below figure:

I. A is recruited for grammaticalization(1)

II. A receives B(2), resulting in an ambiguity(3)

III. A is lost, B is conventionalized and turns into a new grammatical category(4)

Examples of the Process

(2) Swahili (Bantu, Niger-Congo):

> "want" loses its lexical semantics = **desemanticization**

a. a- **taka** ku- ja
C1:PRES[10]- want INF- come
"He wants to come"

lexical use of verb "want" — **extension**

b. a- **taka-** ye ku- ja
C1- FUT- C1:REL infinitive- come
"he who will come"

future marker in relative clause; — **decategorialization**

c. a- **ta-** ku- ja
C1- FUT- INF- come
"He will come"

reduced to "ta-" in c. — **erosion**

> Similar examples can be presented in the verb "thélo" (want) in Greek and the English "**will**"

➔ Heine (2003) finds that the shift from volitional verb "want" to the future tense marker "will" is present in many languages.

➔ *If one looks at the "**will**" in English:*

- The volitional verb serving as the main verb is grammaticalized to a future tense marker, with the erstwhile verbal complement assuming the role of the main verb;

  ○ This leads to decategorialization and erosion:

  I will ⟶ I'll

- "will-future" has retained properties of the erstwhile "lexical verb will" in specific contexts involving subordinate clauses.

  ○ *"Do as you will!"*

➔ This general process observed in English is expectedly shared by the Swahili example.

(7)   Swahili (Bantu, Niger-Congo):

a.   A-   na-   taka   ku-   ni-   ita
     C1- PRES- want   INF- me-   call
     "He wants to call me"

lexical use of verb "want"

b.   A-   na-   taka   ku-   fa
     C1- PRES- want/PROX   INF- die
     i   "He wants to die"
     ii   "He is about to die"

an instance of the overlap stage (both A & B are possible)

c.   M-   ti   u-   na-   taka   ku-   anguka
     C3- tree C3- PRES- PROX   INF- fall
     "The tree is about to fall"

inanimate referent allows the ruling out of "want"

> Here, "taka" has developed into a "proximative aspect marker."

14

➔ According to Heine, the same grammatical function may also be derived from two or more different source forms. Future tense markers can be traced back to a number of different lexical forms.

	Example verb	Future tense marker
Verbs of Motion	go to - *"She goes away"*	going to - *"I'm going to do it"*
Verbs of Volition	want - "I do as I will"	will - *"I'll be there"*

The Question of Semantic Development

According to **the most prominent model** regarding the semantic development in the process of grammaticalization,one component of meaning is lost while the second component is retained.

Other scholars argue that there are gains in addition to semantic loss. While one component of meaning gets lost, another component is added, which is called a loss-and-gain model.

Heine's own implicature model (1993) assumes that grammaticalization may not only involve the addition of a new component but also the loss of the original component.

Bleaching model   AB > B
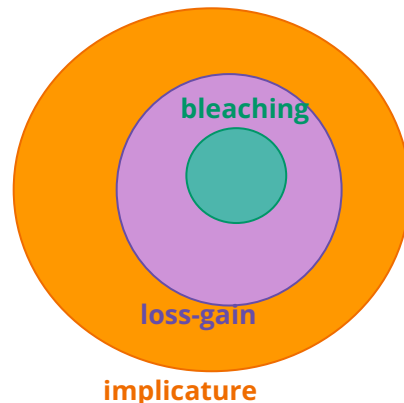**Loss-and-gain model**   AB > BC   *and therefore:*
Implicature model   AB > BC > CD

bleaching

loss-gain

implicature

Takeaways from Heine (2003)

★ The studies of 1700s-2000s have produced a number of generalizations on the evolution of grammatical categories.

★ Heine defines a catalog of commonly observed processes within the domain of tense, aspect, and modality.

- If we summarize its general terms, the processes suggest that verbal aspect categories can give rise to tense categories, or tense categories can be used for the expression of epistemic modality, while processes in the opposite direction are unlikely to happen.

★ As shown earlier, case markers seem **not** to be functional primitives. Historical evidence shows that they ultimately go back to lexical terms, which often derive from body parts, environmental landmarks, and process verbs.

★ Grammaticalization can be held responsible for many kinds of syntactic changes, and the grammaticalization of a morphological item may result in the rise of a new word order arrangement.

- ★ Semantic change has been considered irregular:
  - *"...there are no exact rules for handling semantic change; the final factor here is necessarily the common sense and the experience of the individual scholar."* **(Anttila, 1989)**
- ★ Findings on grammaticalization mentioned in **Heine (2003)** provide a systematic access to semantic change:
  - *"While grammaticalization theory constitutes an enrichment of historical linguistics, since it offers an additional instrument for diachronic reconstruction, it may at the same time challenge already existing reconstructions."*
  - This has been taken as evidence by historical linguists that that property can be traced back to the proto-language concerned.
  - A number of Indo-European languages have used the goal schema (*Y exists to/for X*) for predicative possession (*X has/owns Y*):
    - a construction where the verb is 'be, exist,' the possessee is encoded as the subject and the possessor as a dative complement.

      This can be reconstructed back to Proto-Indo-European?

- ★ **Heine (1997)** shows that the goal schema has not only been used in Indo-European languages but constitutes one of the common means of grammaticalizing expressions for predicative possession **worldwide**.
    - ○ Grammaticalization studies suggest that such a procedure needs to be reconsidered in light of this fact.
- ★ It is noted that the goal schema may have evolved later, being used independently in various Indo-European languages rather than being characteristic of one language.
- ★ Grammaticalization studies may contribute to revising or improving existing lexical reconstructions based on the comparative method.

- In Proto-Bantu:

  - *-béédè 'breast, udder'
  - *-bèdè '(in) front.'
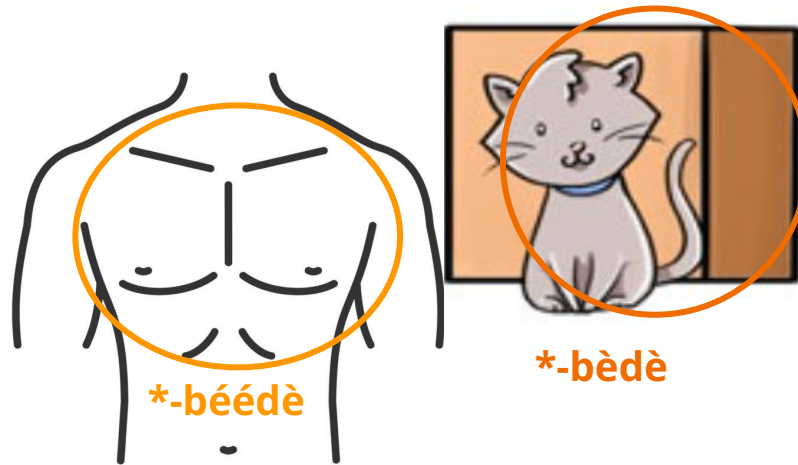
*-béédè

*-bèdè

➜ reflexes of *-bèdè lack some of the nominal properties that reflexes of *-béédè show.
➜ , *-bèdè appears to have undergone erosion:
  ⇢ éé has been reduced to a short vowel, and the tonal contour high–low has been simplified to low–low**.**

★ According to **Heine**, grammaticalization theory is diachronic in the true sense: it allows for historical reconstructions and makes it possible within limits to predict what is going to happen in the future.

★ Some prediction points are defined:

1. If in a given language a new definite article arises then it is likely to be derived from a demonstrative modifier.

2. If a new indefinite article arises then most likely it will have a numeral 'one' as its source.

3. New terms for deictic spatial orientation are most likely to have body part terms as their conceptual source.

4. If a new temporal marker evolves then it is likely to be derived from a locative marker.

★ All these predictions are probabilistic in nature.

★ Grammaticalization theory is not a theory of language change.

★ Grammaticalization constitutes merely one of the factors that determine the history and future development of grammar.

Criticism
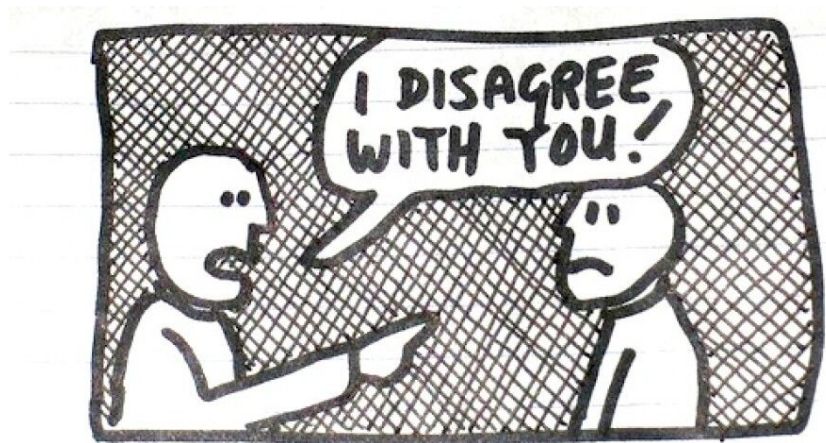
From **Heine (2003)**:

I.   Not all instances of grammatical change are due to grammaticalization.
II. Grammaticalization is not unidirectional.
III. Grammaticalization is not a distinct process.
IV. "Grammaticalization theory" is not a theory.

Traugott (2003) argues:

- Although Heine's grammaticalization chain has substantial consistencies with metaphors or cognitive mappings pertaining to lexical items, the syntactic constraints, most especially restriction to specific syntactic environments such as "in" or "any", are not captured by it.

- Such chains may be used to predict the lexical fields from/into which future instances of grammaticalization may be recruited. But without information on the contexts for change, such models highlight macro level sources/targets before and after the process of grammaticalization has set in, rather than the process itself.

According to Taurgott, different contextual sources will give rise to different instances of grammaticalization due to how crucial the precise syntactic structure of the original construction is, as well as the particular inferences from it enabling grammaticalization.

She defines Heine's chain as one-dimensional, arguing that focus on autonomous lexical items obscures interconnections, which she exemplifies as:

- "the history of *anyway* is presumably inextricably tied up with that of *anyways*, and especially *anyhow*"

Lastly, she states that grammaticalization is not coterminous with change. In her definition, it is:

"The process whereby lexical material in highly constrained pragmatic and morphosyntactic contexts is assigned grammatical function, and once grammatical, is assigned increasingly grammatical, operator-like function."

Lightfoot (2003) especially criticizes the goal of "grammaticalization theory," with the support of other generativists. However, this paper isn't available to our institution.

Response to Criticism

Kuteva & Heine (2008) respond to criticism, stating that:

- there is evidence to suggest that grammaticalization can be defined as a distinct process, leading to the rise and development of new grammatical forms.
- the concern here is to describe grammatical change and the implication it has for a better understanding of language use.
- whether the functionalists' work deserves or needs to be elevated to the status of a theory is not considered to be of real importance by them.
- However, there is still something that can be called a theory of grammaticalization.

END OF PRESENTATION

Time for discussion

My Conclusion

- I agree that even if grammaticalization may not be considered a theory, there are rules present which can make up a theory of grammaticalization.

PERSON > OBJECT > ACTIVITY > SPACE > TIME > QUALITY

- I believe that **Traugott (2003)** makes an interesting point by defining the chain structure as one-dimensional.

- In the end, although one can see valid points while reading criticism of a "grammaticalization theory," I find that there still are rules in the way nature and language evolution work, so my agreement lies closer to **Heine (2003)**.

Discussion Points & Your Questions

A. Do you think "grammaticalization theory" is an achievable goal?

B. To what extent do you think Heine's grammatical chain can be applied to Machine Learning?

Your questions are welcome :)