

Cyclical Change in Agreement and Other Markings

Elly van Gelderen

Arizona State University
ellyvangelder@asu.edu
Methodology of Morpho-syntactic Change
National Museum of Ethnology, Osaka

Outline

1. My framework/methodology
2. What is the Linguistic Cycle; why is it there?
3. Examples of Cycles
4. Explanations of Change

Preview

- Cycles are the result of reanalysis by the language learner who apply Economy Principles. I argue that the real **sources of change are internal principles**.
- This is very different from models such as Lightfoot's and Westergaard's that examine how much input a child needs to reset a parameter. According to Lightfoot, "children scan their linguistic environment for structural cues" (2006: 32); for these, change comes from the outside

My framework/methodology

Systematic morpho-syntactic change



Minimalist theory

Why are Cycles interesting?

If these are real patterns of change,
then they give insight in the Faculty of
Language

Factors:

1. Genetic endowment
2. Experience
3. Principles not specific to language

Building blocks + derivation

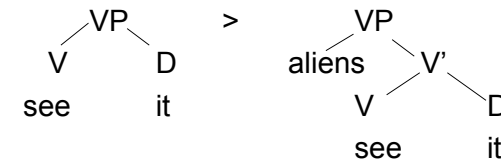
Phrase – head (word)

Functional categories – features

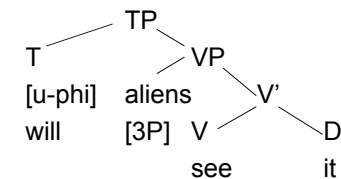
Three layers

Lexicon, selection, merge, move (=internal
merge), and agree; Interpretation at LF +
PF

Starting from the bottom up, with the VP



And functional categories



Economy

Locality = Minimize computational burden
(Ross 1967; Chomsky 1973)

Use a head = Minimize Structure (Head Preference Principle, van Gelderen 2004)

Late Merge = Minimize computational burden (van Gelderen 2004, and others)

(a) Phrase > Head

Full pronoun to agreement

Demonstrative *that* to complementizer

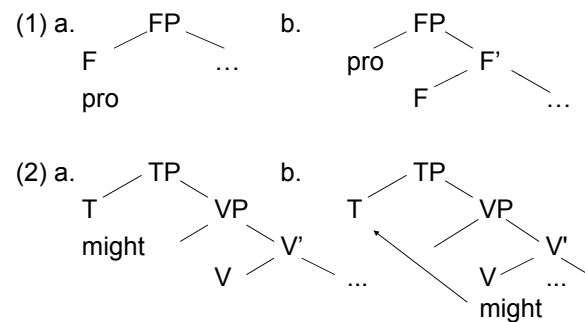
Demonstrative pronoun to article

Negative adverb phrase to negation marker

Adverb phrase to aspect marker

Adverb phrase to complementizer

Head Preference and Late Merge



and (b) higher in the tree

On, from P to ASP

VP Adverbials > TP/CP Adverbials

Like, from P > C (*like I said*)

Negative objects to negative markers

Modals: *v* > ASP > T

Negative verbs to auxiliaries

To: P > ASP > M > C

PP > C (*for something to happen*)

Grammaticalization



Grammaticalization

(1) phrase > word/head > clitic > affix > 0



adjunct > argument > agreement > 0

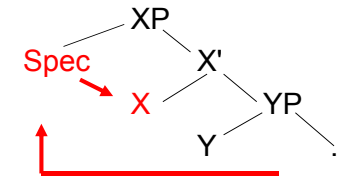
(2) lexical head > grammatical > 0

Cognitive Economy (or UG) principles

help the learner, e.g:

Phrase > head (minimize structure)

Avoid too much movement



The Linguistic Cycle

- Hodge (1970: 3): Old Egyptian morphological complexity (synthetic stage) turned into Middle Egyptian syntactic structures (analytic stage) and then back into morphological complexity in Coptic.

- "one man's morphology was an earlier man's syntax"

Unidirectional and overlap:

Spiral is another term for cycle (see von der Gabelentz 1901: 256; Hagège 1993: 147); it emphasizes the unidirectionality of the changes: languages do not reverse earlier change but may end up in a stage typologically similar to an earlier one. Jespersen (1922: chapter 21.9) uses spirals when he criticizes the concept of cyclical change.

Hopper & Traugott (2003: 124) point out that the cyclical model is "extremely problematic because it suggests that a stage of a language can exist when it is difficult or even impossible to express some concept" (p. 124).

Internal and External Change

- **Jespersen**: "the correct inference can only be that the tendency towards ease may be at work in some cases, though not in all, because there are other forces which may at times neutralize it or prove stronger than it".
- **Von der Gabelentz** (1891/1901: 251/256): "Deutlichkeit" ('clarity') and "Bequemlichkeit" ('comfort').

Examples of Cycles

Subject and Object Agreement

demonstrative/emphatic > pronoun > agreement > zero

Copula Cycle

a demonstrative > copula > zero

b verb > aspect > copula

Case or Definiteness or DP

demonstrative > definite article > 'Case' > zero

Negative

a negative argument > negative adverb > negative particle > zero

b verb > aspect > negative > C

Future and Aspect Auxiliary

A/P > M > T > C

Data

- Old English Dictionary Texts (all of OE)
- Helsinki Corpus (OE through eModE)
- Oxford English Dictionary
 - <http://dictionary.oed.com.ezproxy1.lib.asu.edu/entrance.dtl>
- Oxford Text Archive electronic-texts etc
 - <http://www.georgetown.edu/labyrinth/>
- Modern corpora: British National Corpus, International Corpus of English
 - <http://sara.natcorp.ox.ac.uk/lookup.html>

Negatives



Two Negative Cycles

I Indefinite phrase > negative = Jespersen's Cycle
 Negation weakens and is renewed. For instance:

- (1) I can't do that >
- (2) I can't see **nothing**

II Verb > negative

- (3) *is-i* *ba-d-o*

she-NOM disappear-PF-PST

'She disappeared' (Binyam 2007: 7).

- (4) *'is-i* *dana* *'ush-u-wa-nni-ko*

she-NOM beer drink-PRES-not_exist-3FS-FOC

'She does (will) not drink beer.' (Binyam 2007: 9).

Negative Cycle in Old English 450-1150 CE

- a. no/ne early Old English
- b. ne (na wiht/not) after 900, esp S
- c. (ne) not after 1350
- d. not > -not/-n't after 1400

Old English:

(1) *Men ne cunnon secgan to soðe ... hwa*

Man not could tell to truth ... who

'No man can tell for certain ... who'.

(2) *Næron 3e noht æmetti3e, ðeah ge wel ne dyden*

not-were you not unoccupied. though you well not did

'You were not unoccupied, though you did not do well'.

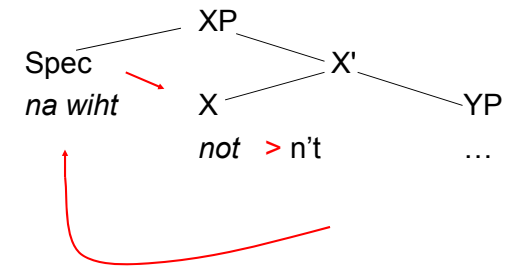
Weakening and renewal

- (1) we **cannot** tell of (*Wycliff Sermons* from the 1380s)
- (2) But I **shan't** put you to the trouble of farther Excuses, if you please this Business shall rest here. (*Vanbrugh, The Relapse* 1680s).
- (3) that the sonne dwellith therfore **nevere** the more ne lasse in oon signe than in another (*Chaucer, Astrolabe* 665 C1).
- (4) No, I **never** see him these days (BNC - A9H 350)

Negative Concord is related:

- (1) **ænig monn ne mæg tuæm hlaferdum hera**
any man not may two lords serve (Northumbrian c950)
- (2) **ne mæg ænig twæm godum ðeowigan**
not may any two gods serve (Mercian C10)
- (3) **Ne mæg nan man twam hlaferdum þeowian**
not may no man two lords serve (Corpus c1000)
- (4) **Ne mayg nam man twam hlaferden þeowian**
not may no man two lords serve (Hatton c1150)
Matthew 6.24

The Negative Cycle



Uralic languages

The origin of the negative auxiliary "may well be related to the verb 'is' (*i-*)" (Simoncsics 1998: 594) and more precisely to a negative copula (Honti 1997: 173).

Southern Sami

- (1) **Idtjim** (*manne*) *daejrjeh*
NEG-PST-1S (I) know
'I didn't know' (from Bergsland 1994: 44).

Renewal: N. Sami and Finnish

- (1) *In leat goassege dahkan dan* N. Sami
 NEG-S-1 be never do-PART it-ACC
 'I have never done that' (Trosterud p.c.).
- (2) *En ole koskaan maistanut sellaisia leipiä*
 NEG have never tasted such bread
 'I have never tasted such bread' (from Sollid 2002).
- (3) *e-i-kö Pekka ole kaupungi-ssa*
 NEG-3S-Q P.be-PRES town-INE
 'Isn't Pekka in town?' (Brattico & Huhmarniemi 2006).

Two main strategies in Athabaskan, one:

- (1) *'ele' k'est'aaze* Ahtna
 NEG it-NEG-cut-NEG
 'He isn't cutting it' (Kari 1992: 123)
- (2) *nezú-híle* Chipewyan
 be.good-not
 'It is not good' (Li 1967: 420)
- (3) *bebí nedá yíle* Bearlake
 baby 3-heavy NEG
 'The baby is light' (Rice 1989: 1101)

and the second:

- (1) *do he tce nin yai* Hupa
 not EMPH out 3-PSTcome
 'He didn't come out' (Goddard 1905: 31)
- (2) *k'aa tinaktän* Upper Tanana
 NEG I-freeze-it-solid
 'I won't freeze it solid' (from Kari 1993: 55)
- Compare (2) with (3):
- (3) *tendhghaaghetltenęę* Lower Tanana
 t+n+dh+gh+gh+es+l+ten+ęę
 FUT+QUA+NEG+QUA+QUA+1S+CAUSE+ice+NEG
 'I won't freeze it solid' (from Kari 1993: 55)

Languages using *do/doo* or *du/dú*

| | | |
|-----------------------|---------------|---------------|
| Ahtna | Koyukon | Alaskan |
| Lower Tanana | Upper Tanana | |
| Sekani | <i>du/dú</i> | |
| Bearlake Slave | Hare | Eastern |
| Chipewyan | Sarcee | |
| Hupa | Mattole | Pacific Coast |
| Bear River Athabaskan | <i>doo/dó</i> | |
| Apache | Navajo | Southern |

Languages using a form of 'I'

| | | |
|------------------------------------|--------------------------|---------------|
| Ahtna Lower Tanana | ?Koyukon Upper Tanana | Alaskan |
| Sekani Bearlake Slave Sarcee | Chipewyan Hare | Eastern |
| Hupa Bear River Athabaskan | Mattole | Pacific Coast |
| Apache | Navajo | Southern |

Two Cycles

- Using an indefinite, e.g. nothing/never/a bit
– English, French, Arabic
- Using a new verb
– Chinese
- Using both
– Koorete, Athabaskan

The Subject Cycle

- (1) demonstrative > third person pron > clitic > agrmnt
- (2) oblique > emphatic > first/second pron > clitic > agrmnt

Basque verbal prefixes *n-*, *g-*, *z-* = pronouns *ni* 'I', *gu* 'we', and *zu* 'you'.

Pama-Nyungan, inflectional markers are derived from independent pronouns.

Iroquoian and Uto-Aztec agreement markers derive from Proto-Iroquoian pronouns

Cree verbal markers *ni-*, *ki-*, *o-/ø* = pronouns *niya*, *kiya*, *wiya*.

Some stages

Japanese and Urdu/Hindi: full pronoun

(1) *watashi-wa kuruma-o unten-suru kara.*

I-TOP car-ACC drive-NONPST PRT

'I will drive the car'. (Yoko Matsuzaki p.c.)

(2)a. *mēy nee us ko dekha*

1S ERG him DAT saw

b. *aadmii nee kitaab ko peRha*

man ERG book DAT read

(3) *ham log `we people'*

(4) *mēy or merii behn doonō dilii mēy rehtee hē*

I and my sister both Delhi in living are

English: in transition

(a) Modification, (b) coordination, (c) position,
(d) doubling, (e) loss of V-movement, (f) Code switching

Coordination (and Case)

- (1) **Kitty and me** were to spend the day.
- (2) %while **he and she** went across the hall.

Position

- (3) She's very good, though **I perhaps I** shouldn't say so.
- (4) **You maybe you've** done it but have forgotten.
- (5) **Me**, I was flying economy, but the plane, ... was guzzling gas

Doubling and cliticization

- (1) **Me**, I've tucking had it with the small place.
- (2) %Him, he
- (3) %Her, she shouldn't do that (not attested in the BNC)
- (4) *As for a dog, it should be happy.

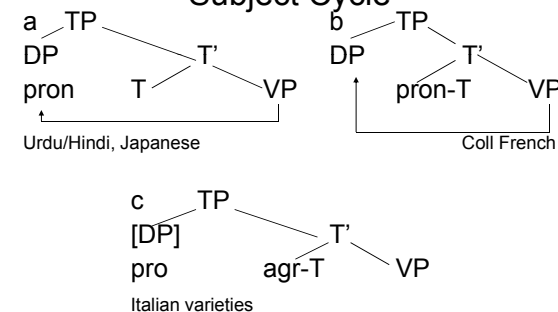
CSE-FAC:

| | uncliticized | cliticized | total |
|------------|--------------|--------------|-------|
| <i>I</i> | 2037 | 685 (=25%) | 2722 |
| <i>you</i> | 1176 | 162 (=12.1%) | 1338 |
| <i>he</i> | 128 | 19 (=12.9%) | 147 |

Loss of V-movement and Code switching

- (5) *What I'm go'n do?*
`What am I going to do'
- (6) *How she's doing?*
`How is she doing'
- (7) **He ging weg* `he went away' Dutch-English CS
- (8) *The neighbor ging weg*

Grammaticalization = Specifier to Head Subject Cycle



Is there an object cycle?

- (1) *(shi) b-i-na-bi-ni-sh-tin* Navajo
1S 3-against-ASP-3-Q-1S-handle
'I teach it to him' (Y&M 1980: 223)
- (2) *be-ghá-yé-n-i-t-tj* Dene Suline
3S-to-3S-ASP-1S-CL-handle
'I have given her to him'
(Li 1946: 419 Rice 1998: 102)

Some differences between the Athabaskan languages:

- (1) *sú bek'ágoweneli* Slave
Q 3S-2S-taste
'Have you tasted it?'
- (2) *sú tuwele k'ágoweneli* Slave
Q soup 2S-taste
'Have you tasted the soup?'
- (3) *deneke gogháyeda* Slave
people-P 3-see-4P
'S/he sees the people'.

Objects cannot double in:

- (1) *meganentan* Kaska
me-ga-ne-0-h-tan
3S-at-ASP-3S-CL-look
'He looks at her'.
- (2) *ayudeni ganentan kaska*
girl at-ASP-3S-CL-look
He looks at the girl(s).

(and Salcha, not shown)

In Navajo, they do:

- (1) *'atoo' yí-ní-dlaa'-ísh*
soup 3S-2S-eat-Q
'Did you eat the soup?'
- (2) *yí-ní-dlaa'-ísh*
3S-2S-eat-Q,
'Did you eat it?' (Jelinek 2001: 23)

Changes Northern > Southern

- Increase of polysynthesis: object **MUST** be marked on the verb
- (Loss of Noun Incorporation, see Rice 2008)

Full object pronoun: Urdu, Japanese, Mokilese

- (1) *měy nee us ko gher me dekhaa*
I ERG 3S OBL house in saw-3SM
'I saw her/him in the house'.
- (2) *kare-wa watashi-o mimashita*
3S-TOP 1S-ACC saw
'He saw me'. (Yoko Matsuzaki p.c.)
- (3) *Ih ka-mwinge-hla arai*
She CAUS-eat-PF them
'She fed them' (Harrison 1976: 87).

Somewhat reduced: Coll. Persian, Kashmiri, English

- (1) *sib-o xord-am-esh*
apple-RA ate-1S-3S,
'As for the apple, I ate it.'
(Ghomeshi 1996: 241)
- (2) *raath vuch-n-ay*
yesterday saw-3S-2S,
'He saw you yesterday' (Bhatt 1999: 48).
- (3) I saw'r yesterday.

Marshallese

- (1) *E-ar pukot-e (kōj)*
3S-PST look.for-OM 1P
'He looked for us' (Willson 2008: 32)
- (2) *E-ar denōt-i (kweet ko)*
3S-PST pound-OM octopus the
'He pounded the octopuses.'
(Harrison 1978:1075)

Malinche Spanish and S-W Macedonian

- (1) *lo trae un chiquihuite*
it he-brings a basket,
'He brings a basket' (Hill 1987: 74)
- (2) *(Mu) go dade pismoto na dete*
(3S-DAT) 3S gave.3Sg letter+DEF to child
'(S)he gave the letter to a (mere) child.'
(Tomic 2006)

Tohono O'odham and Yaqui

- (1) *Ceoj 'o 'añi: ñ-ceggia*
boy is/was me 1S-fighting,
'The boy is/was fighting me'. (Zepeda
1983)
- (2) *Inepo enchi bo'o-bit-nee*
I you await-FUT,
'I will wait for you' (Dedrick & Casad
1999: 245)

Recap so far

- Several Cycles
- HPP and LMP
- Next
 - Feature Economy
 - More examples

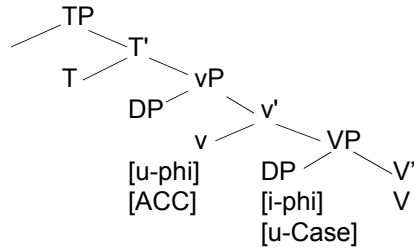
Feature Economy

Minimize the interpretable features in the derivation, e.g:

- (1) Adjunct Specifier Head affix
semantic > [iF] > [uF]
- (2) emphatic > full pronoun > head > agreement
[i-phi] [i-phi] [u-1/2] [i-3] [u-phi]

Chomsky (1995: 230; 381) "formal features have semantic correlates and reflect semantic properties (accusative Case and transitivity, for example)." This makes sense if a language learner uses the semantic features in the derivation, these features turning into interpretable ones so to speak.

What are some of the features?



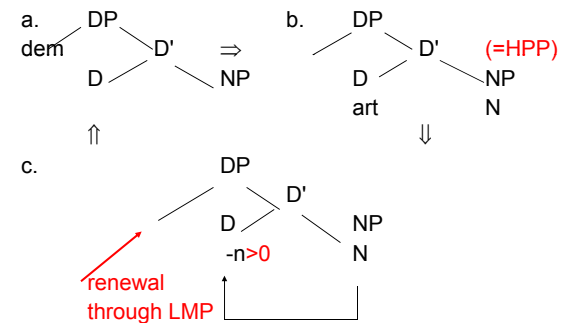
Semantic, interpretable, and uninterpretable

The D-system in English

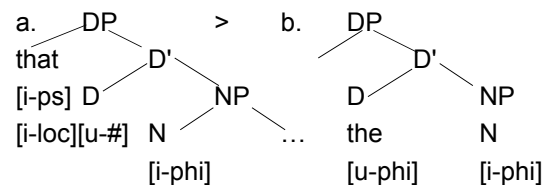
- (1) **se** wæs Wine haten & se wæs in Gallia rice gehalgod.
he was wine called and was in Gaul consecrated
- (2) *hu ða æpelingas ellen fremedon*
how those-NOM.P nobles-NOM.P courage did
'how the nobles performed heroic acts' (*Beowulf* 3)

- (1) *gife to ... þa munecas of þe mynstre*
give to ... the monks of the abbey (Peterborough Chron 1150)
- (2) *the (Wood 2003: 69)
- (3) Morret's brother came out of Scoteland for **th'**acceptacion of the peax
(*The Diary of Edward VI*, 1550s)
- (4) Oh they used to be ever so funny houses you know and in **them** days ... They used to have big windows, but they used to a all be **them there** little tiny ones like that. (BNC - FYD 72)

DP Cycle (old way)



or through Feature Economy:



- Hence
- (1) *I saw the
 - (2) I saw that/those.

Explanations of the Cycle

- Head Preference and Late Merge?
- Or Feature Economy? What is it?
 - Maximize syntax?
 - Keep merge going?
 - Lighter?

Dutch-Afrikaans

- (1) **die man daar**
that man there
- (2) **Daardie** teenstrydighede was egter nie
those contradictions were however not

Conclusions

- Cycles exist
- Economy Principles = Third factor
- Children use these to *analyze* their input + there is language change if accepted.
- Change is from the inside
- Possible Principles: HPP and LMP; Feature Economy