Session 3  Syntactic and Morphological Change

A.  Morphological Change

1. Problems in historical morphology:
   - interaction with phonology (e.g. foot - feet alternation changes domain historically, from phonology to morphology) and syntax (e.g. grammaticalisation).
   - lack of a coherent and generally accepted theory of synchronic morphology (cf. the history of morphology in C20th linguistics).

2. Sturtevant's Paradox:
   Sound change is regular but creates irregularity; analogy is irregular but creates regularity.

3. One of the two most regular and common types of analogy is four-part, or proportional analogy:

<table>
<thead>
<tr>
<th></th>
<th>OE</th>
<th>ME</th>
</tr>
</thead>
<tbody>
<tr>
<td>nom./acc.</td>
<td>stān</td>
<td>stān</td>
</tr>
<tr>
<td>dat.</td>
<td>stāne</td>
<td>stāne</td>
</tr>
<tr>
<td>gen.</td>
<td>stānes</td>
<td>stānes</td>
</tr>
<tr>
<td>pl.</td>
<td>stānas</td>
<td>stānes</td>
</tr>
</tbody>
</table>

4. stān : stānes :: wund : X
   X = wundes

5. Hypercorrection can be seen as a variant of four-part analogy:

   [aus] : [haus]
   [æt] : [hæt]
   [aut] : *[haut]

The same goes for overgeneralisations in child language:

   sing : sang :: bring : X
   X = brang
6. The other regular, common type of analogy is **paradigmatic levelling** (as opposed to analogical extension, or four-part analogy). Whereas four-part analogy typically takes a regular pattern and extends it to forms which were previously irregular, paradigmatic levelling regularises the forms of a single morpheme – that is, it creates greater uniformity within a paradigm by levelling out different allomorphs.

<table>
<thead>
<tr>
<th>OE</th>
<th>ModE</th>
</tr>
</thead>
<tbody>
<tr>
<td>present: ceo[z]an</td>
<td>choose [z]</td>
</tr>
<tr>
<td>past sg.: cea[s]</td>
<td>chose [z]</td>
</tr>
<tr>
<td>past pl.: cu[r]on</td>
<td>chose [z]</td>
</tr>
<tr>
<td>past pple.: (ge)co[r]en</td>
<td>chosen [z]</td>
</tr>
</tbody>
</table>

7. Kuryłowicz and Mańczak: generalisations about analogy:

   a. Some categories are more basic, or unmarked than others (for instance, present tense, singular number, indicative mood), and these tend to be used as the basis for analogy, which remakes other forms on the basis of the unmarked ones.

   b. Markers of grammatical categories should be as clear as possible. Analogy often makes such markers longer, more overt or more complex.

   e.g. Gast - Gäste  
        Baum - Baume > Bäume

   e.g. English -s plural replaces zero marker for some nouns

   c. Redundancy will tend to be eliminated, as will alternation or allomorphy within a paradigm. This would account for cases of levelling, and seems to result from a preference for one form = one meaning.

   d. If a new form is created via analogy, it will tend to take over the basic meaning; and if the earlier, irregular form is maintained, it will be used only in specific contexts. E.g. English brother - brethren.

8. Analogy and **iconicity**:

   a. Iconic isomorphism - one form = one meaning

   b. Iconic motivation - linguistic form reflects non-linguistic reality

9. **Iconic motivation**:

   - Subject predominantly precedes Object: perceptual salience
   - word order reflects order of events
   - markedness of morphological categories correlates with length
   - high front vowels in diminutives, low back in augmentatives
10. One model which attempts to define these natural tendencies of morphological change is **Natural Morphology**; from late 1970s. Dressler, Wurzel, Mayerthaler.
   - attempt to explain morphological change
   - synchronic morphology seen as explicable in terms of history
   - also attempt to account for irregularity / unnatural changes and features.

11. Definition of naturalness: natural/unmarked features should:
   - appear frequently cross-linguistically
   - appear in numerous contexts, in languages which have them
   - be relatively resistant to change
   - result frequently from changes
   - occur often in pidgins and appear early in creoles
   - be early and stable features of child language
   - be lost late or unaffected in aphasia

12. Certain semantic categories are unmarked: e.g. subject, animate, first person, present tense, indicative mood, singular number (NB link with analogy). Certain morphological methods of symbolising such categories are also unmarked. Unmarked means of expression will obey 3 principles:
   - constructional iconicity
   - uniformity
   - transparency

   - same as iconic motivation (cf again analogy)
   - e.g. singular should be shorter than plural - English tree - trees is constructionally iconic; fish - fish is noniconic; and forms like horse - **hor would be counter-iconic. Counterexamples: Hessian dialect hond - hon; Hungarian diminutives Erzsébet 'Elizabeth' - Erzsi 'Lizzy'.

14. Uniformity: one function = one form.

15. Transparency: each derived form/process in a paradigm should have one meaning.

16. Gothic *dags 'day'*
   
<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>dags</td>
<td>dagos</td>
</tr>
<tr>
<td>Accusative</td>
<td>dag</td>
<td>dagans</td>
</tr>
<tr>
<td>Genitive</td>
<td>dagis</td>
<td>dage</td>
</tr>
<tr>
<td>Dative</td>
<td>daga</td>
<td>dagum</td>
</tr>
</tbody>
</table>

   - generally constructionally iconic (but note the genitive)
   - transparent: each suffix signals a single combination of case and number
   - not uniform: although each form has one function, the same function isn't always expressed by the same form
17. Predictions:
- no morphological phenomena conflicting with all three principles
- morphological change will tend to produce forms and patterns which conform more closely to the three principles

18. How do unnatural forms and processes develop?
- conflict between speaker and hearer. E.g. Proto-Germanic nominative plural 'drop' *drupan-ir > Proto-Norse *drupan > Old Swedish *drupa, which is also genitive, dative and accusative singular and genitive and accusative plural. Later Swedish drupa > drupar; casual speech and certain dialects, drupar > drupa.
- conflicts of naturalness, e.g. agglutinating versus inflecting languages in terms of transparency versus optimal length of words.
- universal / system-independent versus language-specific / system-dependent criteria for naturalness. Often the system-dependent ones win; that is, naturalness sometimes depends on which language you’re in at the time.

B Syntactic Change

Four issues in syntactic change - these overlap with some of the more general questions raised above: some issues are picked up from Session 2 on OT and Sound Change, and others will be relevant to Session 4 on Grammaticalisation.

1. Word-order change
Attempts to explain word-order change characterise some of the earliest formal linguistic approaches to syntactic change. Strong typological basis.

- Lehmann, Vennemann; 1970s. Work based on Greenberg's implicational universals:
  Universal 2: In languages with prepositions, the genitive almost always follows the governing noun, while in language with postpositions, it almost always precedes.
  Universal 3: Languages with dominant VSO order are always prepositional.
  Universal 4: With overwhelmingly greater than chance frequency, languages with normal SOV order are postpositional.

- from these, Lehmann and Vennemann identify two polar types of language
  a. VO, Prep, NG, NA consistently HEAD-MODIFIER
  b. OV, Post, GN, AN consistently MODIFIER-HEAD

- consistency is preferred because of, and is acribed to, a general principle
  Lehmann: 'a structural principle of language'
  Vennemann: 'principle of Natural Serialization'
- if a language changes away from consistency by a shift in one parameter, subsequent changes will follow, returning the language to consistency, albeit with the opposite order from its starting point:

a. VO, Prep, NG, NA = consistent language

b. VO > OV
   OV, Prep, NG, NA - violates Natural Serialization

c. Prep > Post other parameters gradually
    NG > GN shift into line with the
    NA > AN altered clause order

d. OV, Post, GN, AN = consistent language

BUT
- very few languages are consistent
- many changes take place without the following, counterbalancing type (Lehmann, Vennemann - these languages are in a state of flux; just wait...)
- Natural Serialisation is a restatement - description, not explanation
- explanations may rely instead on processing, parsing difficulties. Say a language had the Noun before the Adpositional phrase (like English flowers in a vase), BUT instead of having Prepositions, had Postpositions (like Japanese). You would then have discrepant serialisation, with head first in the larger constituent, because the N precedes the AdpP, but head last in the smaller one, because the Adposition is last. This would produce sentences like:

   *Voices children swings parks in on of.*

2. **Syntactic Change and Acquisition**

Focus on Lightfoot's work, though he is by no means the only linguist to try to account for syntactic change using a combination of formal theory and acquisition.

- integration of language acquisition, change and formal grammar in terms of parameter setting, or 'fixing option points defined in Universal Grammar' (Lightfoot 1991: ix).

- why are parameters reset?

- the child as degree-0 learner.
  
  Degree-0 complexity: *Lucy called.*
  Degree-1 complexity: *Peter explained [that Lucy had called]*
  Degree-2 complexity: *I heard [that Peter explained [that Lucy had called]]*
- children use only degree-0 structures (main clauses plus a little bit) in setting parameters. Hence, word order in OE changed from OV to VO because the number of 'clues' to underlying OV word order available in main clauses reduced dramatically in this period.

- even degree-0 structures may not always be part of the triggering experience. E.g. *Him liked pears*, although clearly marked as OVS, changes to SVO. Lightfoot argues that this is because:
  a. loss of inflections had caused a reanalysis of *The king liked pears* as SVO.
  b. children, on the basis of the majority of evidence, then set their parameters to SVO.
  c. they consequently could not analyse *Him liked pears*, where the morphology conflicts with the syntax, and such constructions therefore become obsolete.

- there are clear implications here for what we mean by 'change' and 'explanation'. Note Lightfoot's sequence of events: cues to OV order are reduced; children reset parameters; there are certain later consequences, e.g. in the loss of particular constructions. Lightfoot's model does not offer an explanation for the initial reduction of those cues to OV order, and he explicitly argues that it should not and cannot do so: 'Some changes take place while grammars remain constant...Although they do not reflect changes in grammar, such changes nonetheless affect the triggering experience' (1991: 160). These initial changes are ascribed to external factors such as expressiveness, borrowing...

- but the trend in much of historical linguistics is also to be interested in change in the outward manifestation of language, i.e. linguistic behaviour, i.e. E-Language in Chomsky's term; in which case, we should be explaining the difference in the primary linguistic data too. If you are a typical generativist, and only interested in what happens in internal grammars, i.e. in the linguistic system, i.e. in I-Language, then you need only worry about what happens when the child is motivated to construct his or her grammar in a way that will be different from the hypothesised grammar in his or her parents. The actual change in the parents' speech DOESN'T MATTER, since it is not a change in the grammar.

- there need be no conflict here as long as we can determine which sorts of changes should be explained by the formal model, and which should not. Harris and Campbell (1995) are not confident that this distinction is a clear one.
3. Change, Evolution, and Uniformitarianism

- the Uniformitarian Hypothesis. Perhaps most familiar to historical linguists in Labov's (1972: 275) formulation: to use the linguistic present to explain the past, '...we necessarily have to operate under a uniformitarian principle. We posit that the forces operating to produce linguistic change today are of the same kind and order of magnitude as those which operated in the past...'

- but (Deutscher 1999) the sense of 'uniformitarianism' has shifted in more recent linguistics: Croft (1990: 204) '...the hypothesis is uniformitarianism: languages of the past (at least, those we can reconstruct or find records of) are not different in nature from languages of the present. Therefore, the typological universals discovered in contemporary languages should also apply to ancient and reconstructed languages.'

- the two interpretations are not equivalent (if a person jumps off a high building, his state at the top and bottom will be rather different, but the force of gravity is in operation throughout). The synchronic interpretation is also vague, and if we strengthen its interpretation, plain wrong.

- Deutscher (2000): clear evidence from the written record, showing the development of sentential complementation in Akkadian. Corpus of dictated letters. Early period, 2000-1500BC kīma is a causal adverbial conjunction; in the earliest letters, it means 'as', 'like', 'when', and 'because'.

\[
\text{kīma udammiqak-kuničī dummiqā-nim}
\]
as I did favours to you(pl.) do favours (imp. pl.) to me
'as I have done you favours, do me favours' (Deutscher 2000: 40)

- some cases of kīma are found in ambiguous contexts, where they could be interpreted as either 'because' or 'that' (Deutscher 2000: 44):

\[
\text{kīma šuddin-am lā' nilēū ana beli-ja aqbi}
\]
that/because collect.(inf.-acc) not we can to lord-my I-said
'I spoke/said to my Lord because/that we were unable to collect (them).'

- finally, kīma is used in cases where the causative interpretation is no longer viable (Deutscher 2000: 45):

\[
\text{kīma eql-am...ana rēdī iddin-u anna ītapal}
\]
that field(acc). to soldiers(gen.) he-gave(sub.) yes he-answered
'he acknowledged that he gave a field to the soldiers'

If there is an earlier, attested period of Akkadian without finite complementation, and a later period where such structures do appear, this conflicts with the synchronic version of uniformitarianism, though not with the diachronic interpretation.

- in cases of this sort, is what we are seeing language change, or the end of linguistic evolution?
4. Some general issues in syntactic change

- historical data; increasing use of corpora allows a more quantitative approach to research on completed change, in parallel to work on change in progress
- may reintroduce the social context, and also issues of the implementation of change. This may refocus work on the gradual nature of (some) changes: note Lightfoot's parameter setting is a one-off 'decision' on the part of each learner, but change in the triggering experience will not generally be catastrophic in this way. Kroch (1989): spread of do-support in English, both through the community and from construction to construction (including, initially, affirmative declarative clauses).

- can syntactic changes be grouped together as general types, or under general headings?
- Harris and Campbell (1995): limited number of mechanisms underlie particular changes across languages - reanalysis, extension, borrowing
- relevant to next session on grammaticalisation

Dekkers, Joost, Frank van der Leeuw and Jeroen van de Weijer (eds.) (2000) *Optimality Theory: Phonology, Syntax, and Acquisiton*. OUP. Chapters by Ackema and Neeleman; Anderson; Bresnan; Broekhuis and Dekkers.