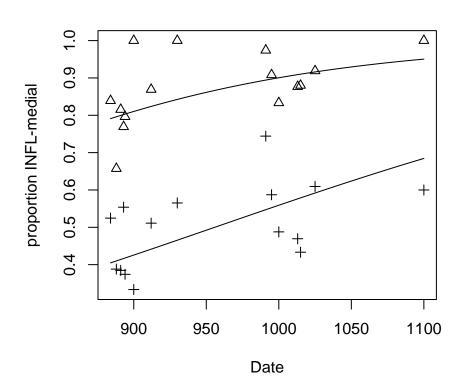# 24.914
Language Variation and Change
Syntactic change

Announcements

- Final papers due session 26
- Course evaluations now open

Syntactic change

- Case study: change from OV word order in Old English to VO order in Middle and Modern English

...þæt ic **ðas boc** of Ledenum gereorde to Engliscre spræce **awende**.
...that I this book from Latin language to English tongue translate
"...that I translate this book from the Latin language to the English tongue."
(AHTh, I, pref, 6; van Kemenade 1987: 16)

...þæt he **his stefne** up **ahof**.
...that he his voice up raised
"...that he raised up his voice."
(Bede 154.28)

...forþon of Breotone **nædran** on scippe **lædde wæron**.
...because from Britain adders on ships brought were
"...because vipers were brought on ships from Britain."
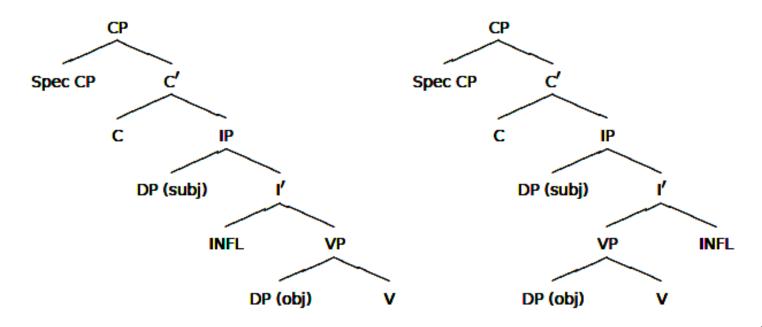(Bede 30.1-2; Pintzuk 1991: 117)

(examples cited from Ian Roberts, *Diachronic Syntax*, Oxford University Press, 2007)

Syntactic change

- Case study: change from OV word order in Old English to VO order in Middle and Modern English

- Syntactic change clearly must be grammar change
  - can't be 'sentence change'
  - Determine the grammar before and after (and during) the change

- Mechanisms of change?
  - Mislearning due to lack of evidence?
  - Learning biases?

- Can syntactic change be gradual?

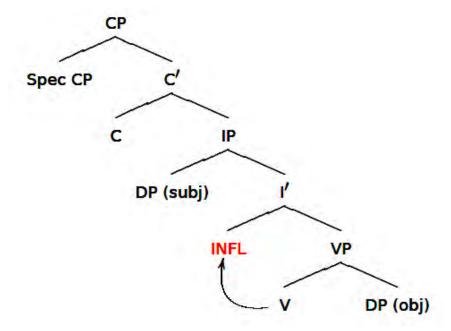- Actuation problem

- Incrementation

INFL-final to INFL-medial

- Pintzuk (1995) argues that a key part of the change from OV to VO is a gradual change in the order of INFL and its complement.
    - INFL starts and final position, but its position becomes variable, with increasing frequency of medial INFL

INFL-final to INFL-medial

- INFL (I) is the position occupied by inflected (tensed) verbs and auxiliaries
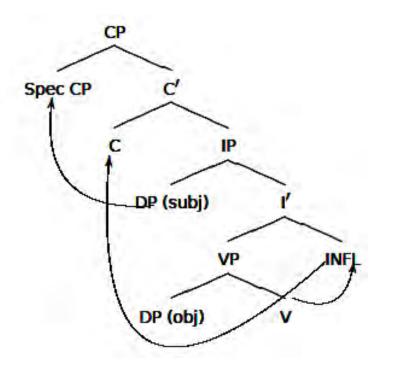 - V moves from inside VP to occupy INFL

Variation in word order

- Actually both OV and VO were possible in Old and Early Middle English

- It is the 'basic' word order that changes

- Analyze surface word order in terms of:
  - Base phrase structure

  - Movement (some optional)

- For example, word order differs in main clauses vs. subordinate clauses

  - In main clauses the verb regularly follows the first constituent ('V2'), as in German, Dutch.

se cyning eode inn
the king went in
"The king went in"
(ÆChom i.528.9)

(example cited from Roberts 2007)

Verb Second in main clauses

- The standard analysis of V2 is that some constituent moves to Spec CP and V/Aux moves to INFL then C
- If the subject moves to Spec CP, this results in SVO order

se cyning eode inn
the king went in
"The king went in" (ÆChom i.528.9)

eow sceolon deor abitan
you shall beasts devour
"beasts shall devour you" (ÆLS 24.35)

(examples cited from Roberts 2007)

Right-extraposition of 'heavy' constituents

- Object DPs and other constituents can be extraposed to the right.

       þu hafast gecoren [$_{DP}$ þone wer]
       thou hast chosen   the   man
       (*ApT* 34.23; Fischer *et al.* 2000: 148)

       þæt [$_{IP}$ ænig mon t$_j$ atellan t$_i$ [$_I$ mæge$_i$] [$_{NP}$ ealne þone demm]$_j$]
       that   any   man   relate   can   all   the   misery
       "that any man can relate all the misery" (Or 52.6-7)

       (examples cited from Roberts 2007)

- But 'light' constituents, like pronouns and particles, cannot be extraposed.
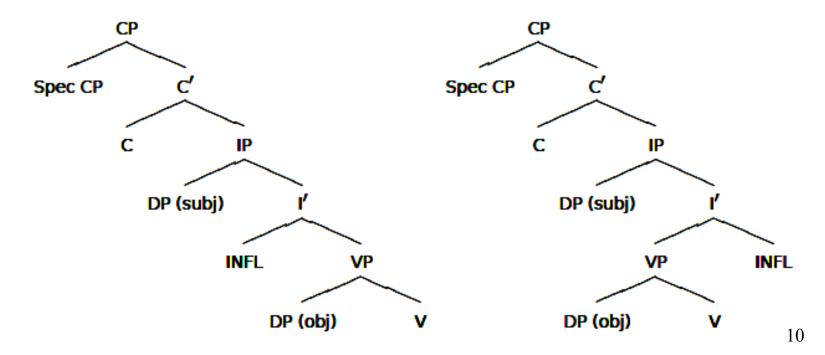- Cf. heavy NP shift in modern English
       I gave the book that I bought last week to Alex
       I gave to Alex the book that I bought last week.
       *I gave to Alex it.
  - But in OE, full nouns count as heavy.

Evidence for final and medial INFL in subordinate clauses

- So there is considerable ambiguity as to the underlying word order
  - Probably a factor contributing to the possibility of change
  - Determining underlying order requires analysis (by linguists and children)
- Pintzuk (1995) argues that there is evidence for both final- and medial INFL base structures in OE
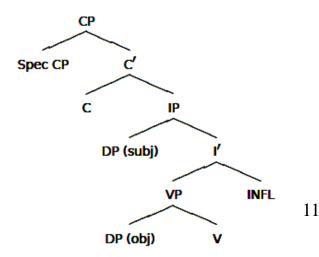
Evidence for final INFL in subordinate clauses

- Finite verb in final position, preceded by two heavy constituents

  þa [$_{IP}$ apollonius afaren t_i [$_i$ waes$_i$]]
  when Apollonius gone   was
  "when Apollonius had gone" (ApT 5.12)

  swa [$_{IP}$ þa oþre   ham t_i [$_I$ comon$_i$]]
  as   the others home   came
  "as the others came home" (ChronA 98.4 (917))

  (examples cited from Roberts 2007)

- If finite verb is in medial INFL, then preceding constituents must occupy higher positions
  - but there is only one XP position between INFL and C
- So INFL must be final

11

Evidence for medial INFL in subordinate clauses

- Given the possibility of rightwards movement of objects, why would we need to posit medial INFL?
  - Non-final finite verbs can be derived from final INFL by movement

þu hafast gecoren [$_{DP}$ þone wer]
thou hast chosen   the   man
(*ApT* 34.23; Fischer *et al.* 2000: 148)

(example cited from Roberts 2007)

Evidence for medial INFL in subordinate clauses I

- Particles and pronominal objects always immediately precede the main verb when it is final
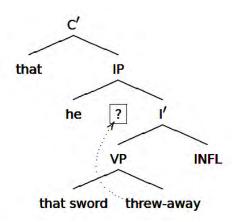
  ðeah   hit ær   <u>upahæfen</u> wære
  although it   before <u>up-raised</u> was
  "although it was raised up before" (CP 34.6)

  swa þæt se scinenda lig   his locc <u>up-ateah</u>
  so   that the shining flame his locks <u>up-drew</u>
  "so that the shining flame drew his locks up" (ÆCHom ii.514 2-3)

  þonne þæt brast-ligende fyr   on   slæpe <u>hi   awrehte</u>
  when the   cracking   fire   from sleep <u>them   aroused</u>
  "when the crackling fire aroused them from sleep" (ÆLS 31.882-883)

- If the finite verb is non-final, particles can stay in final position

  þæt   he <u>wearp</u> þæt sweord <u>onweg</u>
  so that he <u>threw</u> that sword   <u>away</u>
  "so that he threw away the sword" (Bede 38.20)

  swa þ   hy   <u>asettan   him   upp</u>   on ænne sið
  so   that they <u>transported themselves inland</u> in one journey
  "so that they transported themselves inland in one journey" (ChronA 132.19 (1001))

13

(examples cited from Roberts 2007)

Evidence for medial INFL in subordinate clauses I

- Verb is generated in final position
- Particles and object pronouns are generated in preverbal position and cannot move rightwards because they are light.
- Verb can move to medial INFL, leaving particles/pronouns in final position.
- If INFL were final, there would be nowhere for V to move to

- If particles/pronouns could move rightwards then they should be able to appear in final position following OV.

Evidence for medial INFL in subordinate clauses I

- Verb is generated in final position
- Particles and object pronouns are generated in preverbal position and cannot move rightwards because they are light.
- Verb can move to medial INFL, leaving particles/pronouns in final position.
  - If INFL were final, there would be nowhere for V to move to
  - If particles/pronouns could move rightwards then they should be able to appear in final position following OV.

Evidence for medial INFL in subordinate clauses II

Negative concord – comparison to Flemish

- Flemish: negative concord

  > dan ze   <u>niets   nie</u> t_i willen [$_v$ zeggen]$_i$
  > that they <u>nothing not</u>   want   say
  > "that they do not want to say anything"

  - cf. English dialects.

- If the VP is moved to the right, there is no concord

  > dan ze   <u>nie</u> t_i willen [$_{VP}$ <u>niets</u>   zeggen]$_i$
  > that they <u>not</u>   want   <u>nothing</u> say
  > "that they do not want to say nothing"

- Analysis: VP raised above 'not', so negative concord is impossible

  - must be within the scope of negation

  (examples cited from Roberts 2007)

Evidence for medial INFL in subordinate clauses II

Negative concord – comparison to Flemish

- Old English: negative concord

> þæt þu   nanne brydguman næfre me ne namige
> that you   no   bridegroom never me not appoint
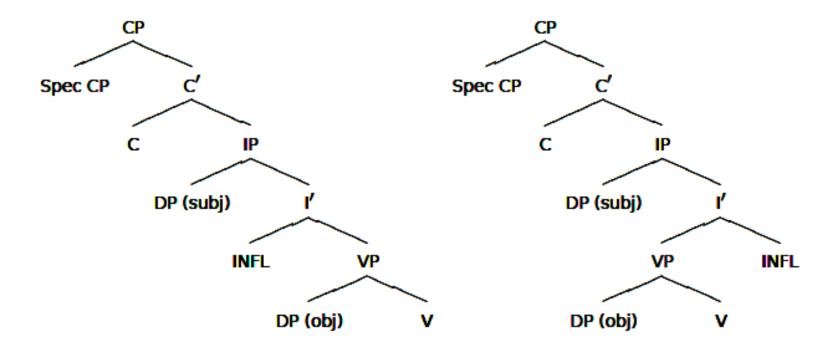> "that you never appoint a bridegroom for me"

- Negative concord is still observed when the VP follows the finite verb/Aux

> þæt heora nan ne mehte nanes wæpnes gewealdan
> that them   none not could no   weapon wield
> "that none of them could wield a weapon" (Or 103.24-25)

- Analysis: V has moved leftwards to medial INFL, leaving VP within the scope of negation
  - If INFL were always final, this word order would have to be derived by rightwards movement of VP
  - but then negative concord should be impossible as in Flemish

(examples cited from Pintzuk 1995)

Summary so far

- During the period in which OE developed into ME, we see evidence that both medial and final INFL were possible in subordinate clauses

Summary so far

- Pintzuk argues that both structures were possible in main clauses as well

- Evidence for final INFL comes from sentences in which finite verbs appear in final position, preceded by at least two heavy constituents
  - occur 'at a low but significant frequency'

  him þær se gionga cyning þæs oferfæreldes forwiernan t_i [$_I$ mehte$_i$]
  him there the young king the crossing prevent could
  "the young king could prevent him from crossing there" (Or 44.19-20)

  se manfulla gast þa martine t_i [$_I$ gehyrsumode$_i$]
  the evil spirit then Martin obeyed
  "The evil spirit then obeyed Martin" (ÆLS 31.1050)

- It is harder to distinguish movement to medial INFL from movement to C (V2) – see Pintzuk pp. 241-4

(examples cited from Pintzuk 1995)

Summary so far

- While there is evidence for medial and final INFL, some word orders are ambiguous between the two

> þe   god worhte   þurh   hine
> which   God wrought through him
> "which God wrought through him" (ÆLS 31.7)
>
> þæt Libertinus mihte ðis   gedon
> that Libertinus might this do
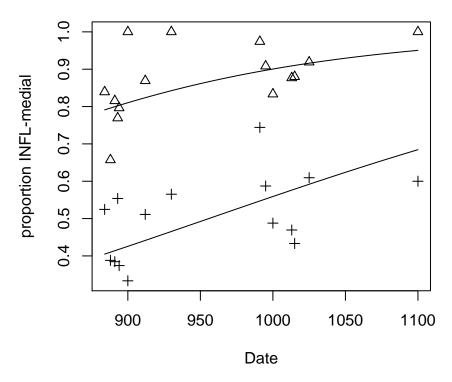> "that Libertinus might do this" (GD(C) 19.7-8)
>
> (examples cited from Pintzuk 1995)

Pintzuk (1995) corpus analysis

- 1024 matrix clauses and 1196 subordinate clauses
- Excluded many examples that are ambiguous between medial vs. final INFL
- Remaining ambiguous cases could be generated by rightwards movement of V or VP
  - Counted as INFL-medial based on arguments that these movements are rare.

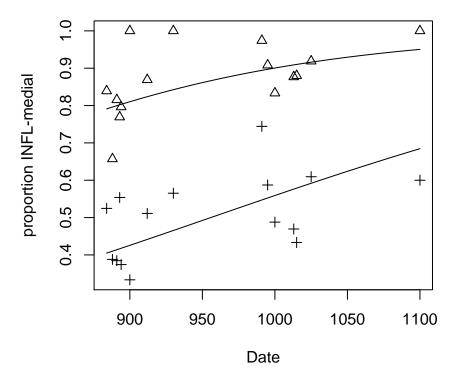# Pintzuk (1995) corpus analysis

- Results: triangles – main clauses, crosses – subordinate clauses

- All texts show variation - i.e. not variation between authors
- Greater use of INFL-medial in main clauses
- Gradual increase in INFL-medial in both
  – nearing 100% in subordinate clauses by 13th C (Kroch & Taylor 2000)

Pintzuk (1995) corpus analysis

- Results: triangles – main clauses, crosses – subordinate clauses

- Syntactic change is gradual in frequency terms – change in the relative frequency of variants.

- Fitted curves are logistic curves - changes in frequency of variants is hypothesized to follow a logistic 's-shaped' curve

Mechanisms of syntactic change

- We have characterized the change in grammar:
  - Initial stage: INFL is always final
  - Innovation of medial INFL
  - gradual increase in the frequency of medial INFL until it is the only option
- How and why did this change occur?
- Ambiguity in the input?
  - V2 in main clauses is ambiguous
  - VO with heavy O is ambiguous in subordinate clauses
    - Medial INFL vs. final INFL+object extraposition
  - But there is also unambiguous input
- Ambiguity + learning bias?