Homework 4. Due Monday, July 30, at 10am. Part of the homework will be handwritten and turned in to me in class; the other part will be emailed to me before class. See below for exact instructions.

Part I. As we noted in class, there are still some vestiges of V2 in modern English. We talked about V2 in sentences that begin with negative elements like never, not in a million years, etc.; but V2 is also found in a much more common context – mentioned earlier in your handout – namely, wh-questions.

When we ask a direct question with a wh-phrase (who, what, where, which x, how many x, etc.), we

(i) move the wh-phrase to the beginning of the sentence; and
(ii) move the auxiliary verb to the beginning of the sentence (the V2 position).

These two movements are shown with arrows in the following tree (the italicized t stands for ‘trace’; it’s just used to indicate where each moved constituent started out):

Which ship will Vader fly?

Now consider the following sentence:

1) Which ship will Vader need to fly?

This sentence is structurally ambiguous. You may not see the ambiguity right away. If you’re having trouble, insert the words in order before the infinitive to fly; this will give you the so-called ‘purpose infinitive reading,’ where the infinitive is modifying the verb phrase containing need. (On the other reading, the infinitive is interpreted as the object (or complement) of the verb need; we’ll call this the complement infinitive reading.)

- Draw two trees for the sentence in (1), referring to your class handout if necessary. Indicate which tree has the purpose-infinitive reading and which has the complement-infinitive reading, and write an unambiguous paraphrase for each tree. Include arrows showing the movement of the noun phrase which ship and the auxiliary will in both trees, as illustrated in the example above.

Part II. Infinitives marked with to go all the way back to Old English. In Middle English, it was fairly common for infinitives to be marked with for as well (so-called for-marked infinitives). Here are some examples:

2) [he] went...into Naples for to conqwere it (Capgrave’s Chronicle, 1420-1500, 112.2473)
3) the beastlich mon...secheth for to fallen in this put
the beastly man tries for to fall in this pit
‘The beastly man tries to fall into this pit.’ (Ancrene Riwle, 1225-1230, 1.II.48.447)

- On the paper you drew your trees on, answer the following questions:

  a) Which of the sentences above, (2) or (3), (probably) contains a complement infinitive?
  b) Which contains a purpose infinitive?

  Bring your answers to Parts I-II to class on Monday to hand in to me directly.

Part III. *For to* infinitives survive in some dialects of present-day English, including Irish English, Scottish English, Ozark English, Ottawa Valley English, and Tyneside English. You may recognize them from folksongs as well (I’m going to Louisiana / my Susanna *for to* see; Swing low sweet chariot / coming *for to* carry me home; etc.).

I used the Penn-Helsinki Parsed Corpora of Middle English and Early Modern English (www.ling.upenn.edu/hist-corpora) to investigate two questions:

(i) What was the frequency of *for*-marking in infinitives throughout Middle English (1150-1500) and Early Modern English (1500-1710)?
(ii) What portion of *for*-marked infinitives were purpose infinitives in each period?

Here are my raw results:

<table>
<thead>
<tr>
<th>Period</th>
<th>Total infinitives</th>
<th><em>For</em>-marked infinitives</th>
<th><em>For</em>-marked purpose infinitives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1150-1250</td>
<td>2353</td>
<td>384</td>
<td>272</td>
</tr>
<tr>
<td>1250-1350</td>
<td>1200</td>
<td>317</td>
<td>133</td>
</tr>
<tr>
<td>1350-1420</td>
<td>5250</td>
<td>1312</td>
<td>553</td>
</tr>
<tr>
<td>1420-1500</td>
<td>2234</td>
<td>357</td>
<td>164</td>
</tr>
<tr>
<td>1500-1570</td>
<td>7671</td>
<td>255</td>
<td>49</td>
</tr>
<tr>
<td>1570-1640</td>
<td>9780</td>
<td>172</td>
<td>21</td>
</tr>
<tr>
<td>1640-1710</td>
<td>9296</td>
<td>176</td>
<td>7</td>
</tr>
</tbody>
</table>

- Use spreadsheet software to draw a graph that answers questions (i)-(ii) above. Remember that the table here shows raw data only, so you’ll need to start by calculating frequencies. Experiment with different types of graphs, axis arrangements, etc., until you’ve settled on a format that you think does the best job of showing what happened with *for-to* infinitives in the history of English. Perhaps you’ll decide that the information is best presented in two separate graphs. Make sure your final version is clearly labeled and easy to interpret.

- Write a short paragraph that provides an answer to questions (i)-(ii) above based on the evidence we have here. Also answer the question: Do you think there’s evidence that *for* has undergone grammaticalization in the sense in which the term is used in your Aitchison reading? Insert your graph above or below your text.

- Now consider the following additional data from the first time period (Early Middle English, 1150-1250). When I compared texts from the East and West Midlands, I found the following distribution:
Write a sentence or two summarizing the difference(s) between these two dialects of Early Modern English. Use $\chi^2$ test(s) where appropriate to establish whether the difference between the two dialects is statistically significant. Include the $\chi^2$ value and the $p$ value in your written summary.

Email me your answer to Part III in pdf, Word, or Word-compatible format, by 10am on Monday, July 30. Attach your spreadsheet as well in case I need to double-check what you did.