LING2005 Syntax I
Tutorial: Constituency I

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September 21, 2023

- This is the tutorial session of **LING2005 Syntax I, Group 2**
- You are now at **Lee Shau Kee Building 201**
- Make sure you are in the right tutorial session (we've got 3)

- Yige Chen
- Second-year PhD student in Linguistics at CUHK
- Research interests: Natural language processing
  - Information extraction in economics, finance and business
  - Incorporating linguistic knowledge into NLP models and tasks
  - Effects of languages and NLP on economic decision-making

- Education
  - M.S., Computational Linguistics, University of Washington
  - M.Phil., Theoretical and Applied Linguistics, University of Cambridge
  - B.S., Economics, Linguistics, Mathematics, Asian Studies & Cert., Computer Sciences, University of Wisconsin–Madison
- Languages: Wu Chinese, English, Mandarin Chinese, Korean
  - My Cantonese is very poor. If you have to talk to me in the language, please speak as slowly as possible. Thanks for your understanding.

Contact

- Email: `yigechen@link.cuhk.edu.hk`
- Office hours
  - Time: Tuesday & Wednesday 13:00 – 14:00
  - Location: G19, Leung Kau Kui Bldg. or via Zoom
    - Meeting on Zoom is feasible if you let me know beforehand, i.e., send me an email and I'll set up the Zoom meeting
  - If you visit G19 and do not find me there during my office hours, please shoot me an email, and I'll be back in 5 minutes
  - If the time slot above does not fit in your schedule...
    1. You may want to attend the office hours of the other two TAs or Prof. Cheung
    2. Send me an email and (hopefully) we can schedule a meeting then
- Website: `https://yigechen.com`

- Blackboard: `https://blackboard.cuhk.edu.hk/`
- I may prepare additional slides for tutorials, if needed, at `https://yigechen.com/teaching/ling2005/fa23`
- Textbook: Sportiche, D., H. Koopman & E. Stabler. 2014. *An Introduction to Syntactic Analysis and Theory*. Wiley.

- Any kind of plagiarism is prohibited
- Please refer to
  https://www.cuhk.edu.hk/policy/academichonesty/ or ask us
  if you are unsure

Academic Accommodations

- Please contact Special Educational Needs (SEN) Service if you need special accommodations, facilities or arrangements due to physical or mental illnesses
- Please refer to `https://www2.osa.cuhk.edu.hk/sens/en-GB/`

- I know it's not a good idea to have tutorials during dinnertime
- For those who have courses before or after the tutorial and therefore don't have time to have your dinner, I hope the snacks help
- I'd recommend that you take them only if you need those – apparently they are limited
- Allergen: I think it contains milk, wheat, and soybean

Interpreting Constituency Tests

- Passing the test (grammatical) indicates that the segment tested is a constituent
- Failure to pass the test (ungrammatical and usually with an asterisk) **derives no conclusion**
  - We don't know whether the segment is a constituent or not
  - i.e., you cannot say that it is not a constituent - we simply don't know
  - Analogy: statistical insignificance
  - If needed, we can apply more tests to further investigate
- Failure to pass too many tests may indicate that probably it is not a constituent (very weak support)

- Consider the sentence "**John will order the drinks before the meal.**" Suppose we want to investigate whether the strings in (i)–(iv) are constituents. Construct test sentences using (a) substitution, (b) topicalization and (c) clefting test. [You don't need to provide the grammaticality judgment of the test sentences.]

  i. the drinks
  ii. order the drinks
  iii. order the drinks before the meal
  iv. drinks before

1. the drinks
   - Substitution test: John will order <u>them</u> before the meal.
   - Topicalization test: <u>The drinks</u>, John will order before the meal, but the desserts, John will not order before the meal.
   - Clefting test: It is <u>the drinks</u> that John will order before the meal.
   - [Note: No grammatical judgment is given because you are invited to ONLY provide the test sentences.]

❶ order the drinks

- Substitution test: Peter will <u>order the drinks</u> before the meal. John will <u>do so</u> before the meal (too).
- Topicalization test: John will order the drinks before the meal, and <u>order the drinks</u>, John (definitely) will before the meal.
- Clefting test: It is <u>order the drinks</u> that John will before the meal.

ⅲ order the drinks before the meal

- Substitution test: Peter will <u>order the drinks before the meal</u>. John will <u>do so</u> (too).
- Topicalization test: John will order the drinks before the meal, and <u>order the drinks before the meal</u>, John (definitely) will.
- Clefting test: It is <u>order the drinks before the meal</u> that John will.

- **iv** drinks before
  - Substitution test: [There is no appropriate proform in English that can replace "drinks before".]
  - Topicalization test: John will order the drinks before the meal, and <u>drinks before</u>, John will order the   the meal.
  - Clefting test: It is <u>drinks before</u> that John will order the   the meal.
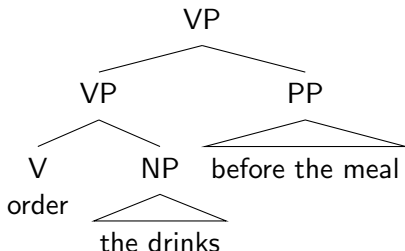
- Suppose the strings (i), (ii), (iii) in Part A and "before the meal" are constituents but (iv) is not. Which of the following tree structure(s) is/are compatible with the results? Why?
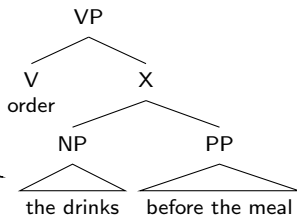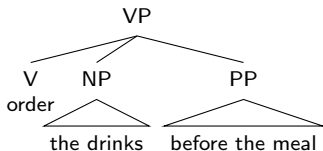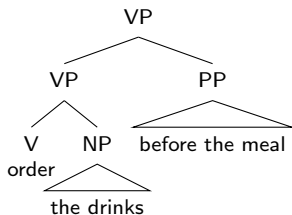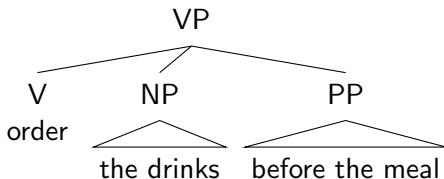
- Structure (A) is compatible with the given findings that the strings in (i), (ii) and (iii) are constituents.

```
                          VP
              ┌───────────┴───────────┐
             VP                       PP
        ┌─────┴─────┐          ┌───────┴───────┐
        V           NP         before the meal
      order      ┌──┴──┐
              the drinks
```

- [Note: The labels of the constituents (e.g. VP, PP, etc.) are not important for now. That's why "X" is used in some of these nodes. But we still put the labels there just for consistency. Also, in syntax, we use triangles for constituents whose structural details are not the focus of the discussion. They are used to simplify the diagrams. Triangles should be used with caution.]
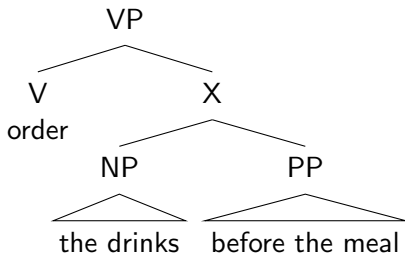
- Structure (B) is incompatible with the given findings that "order the drinks" is a constituent. The tree diagram only shows that (i) and (iii) (but not (ii)) are constituents.

```
                        VP
           _____/____|_____
          V        NP            PP
        order    /    \        /    \
              the drinks   before the meal
```

- Structure (C) is incompatible with the given findings as "order the drinks" is not a constituent in the diagram. It only supports the constituency of (i) and (iii) (but not (ii)).

```
                    VP
              _____|_____
             V             X
           order        ___|___
                      NP       PP
                     _|_      __|__
                 the drinks  before the meal
```

- Consider the sentence "**John will order the drinks.**" There are two proposals for the structure of the modal, the verb and the object. Traditionally, the modal is often considered to be a modifier of the verb. One possibility is somewhat like Structure I. On the other hand, Structure II looks not unreasonable.
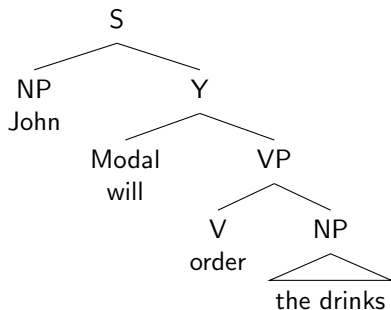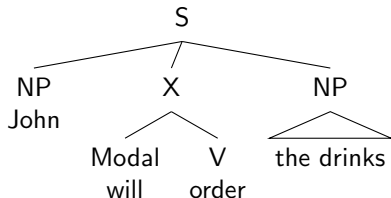
- How would you use constituency tests to differentiate between the two proposals? In particular, which string should one apply the constituency tests to in order to justify Structure I and II? [You don't need to construct the test sentences. Just state your strategy.]
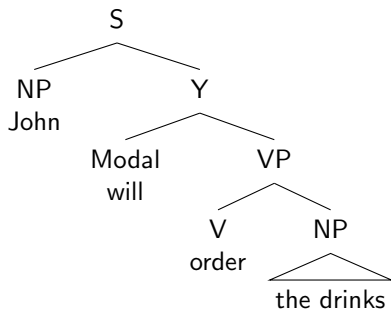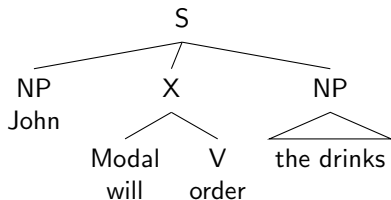
- One can differentiate between the two proposed structures by applying constituency tests to the following strings: (i) "will order", (ii) "order the drinks" and (iii) "will order the drinks".
    - If "will order" is shown to be a constituent, Structure I is preferred because "will order" is a constituent in Structure I but not Structure II.
    - If "order the drinks" is shown to be a constituent, Structure II is preferred because "order the drinks" is a constituent in Structure II but not Structure I.
    - If "will order the drinks" is shown to be a constituent, Structure II is preferred because "will order the drinks" is a constituent in Structure II but not Structure I.

- If you are asked to apply the following constituency tests to "order the drinks", how would you construct the test sentences? [You don't need to provide the grammaticality judgment of the test sentences.]
- Constituency Tests: substitution, topicalization, clefting, pseudo-cleft
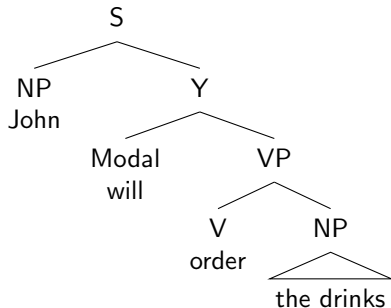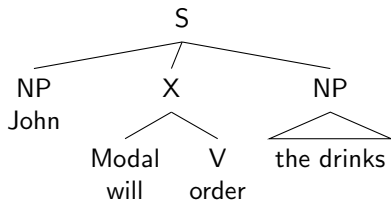
- Substitution: Mary will order the drinks; John will do so (too).
- Topicalization:
  A: Many are wondering whether John will order the drinks.
  B: Yes, order the drinks, John (definitely) will.
- Clefting: It is order the drinks that John will.
- Pseudo-cleft: What John will do is order the drinks.
- [Note: The researcher should let native speakers of English judge the grammaticality of the test sentences.]

- Final Exam: December 4, 2:30 – 4:15 pm, please check your schedule
- Please do not hesitate to ask questions
- We enjoy feedback from you, so please let us know if you feel there's anything we could have done better