Where am I?

➢ HUL242: **Fundamentals of Language Sciences**

➢ **Semantics (Lecture-4)**

➢ Thursday, April 24th

Quantifier movement

Ambiguity with quantifiers

o   We can think of (1)'s ambiguity in terms of situations

1. **A linguist** saw **every philosopher**.

Two situations. The left dots are linguists, the right dots are philosophers, and the arrows show you who sees who.
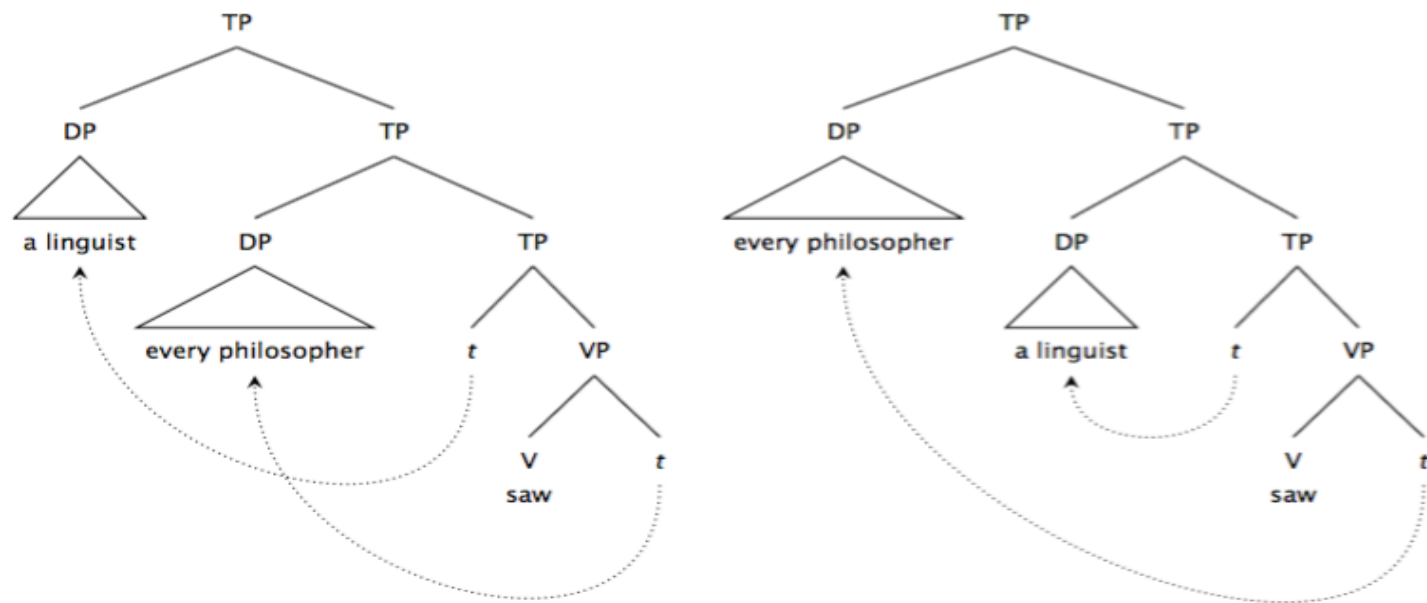➤   On the left, there's a linguist who sees every philosopher.
➤ On the right, every philosopher is seen by some linguist.

What kind of ambiguity is quantifier ambiguity?

o *Does* not seem structural (a type we have seen so far)

(Mary *saw the elk from France*)!

o And does not seem lexical ($bank_1$, $bank_2$).

o So, what could it be?
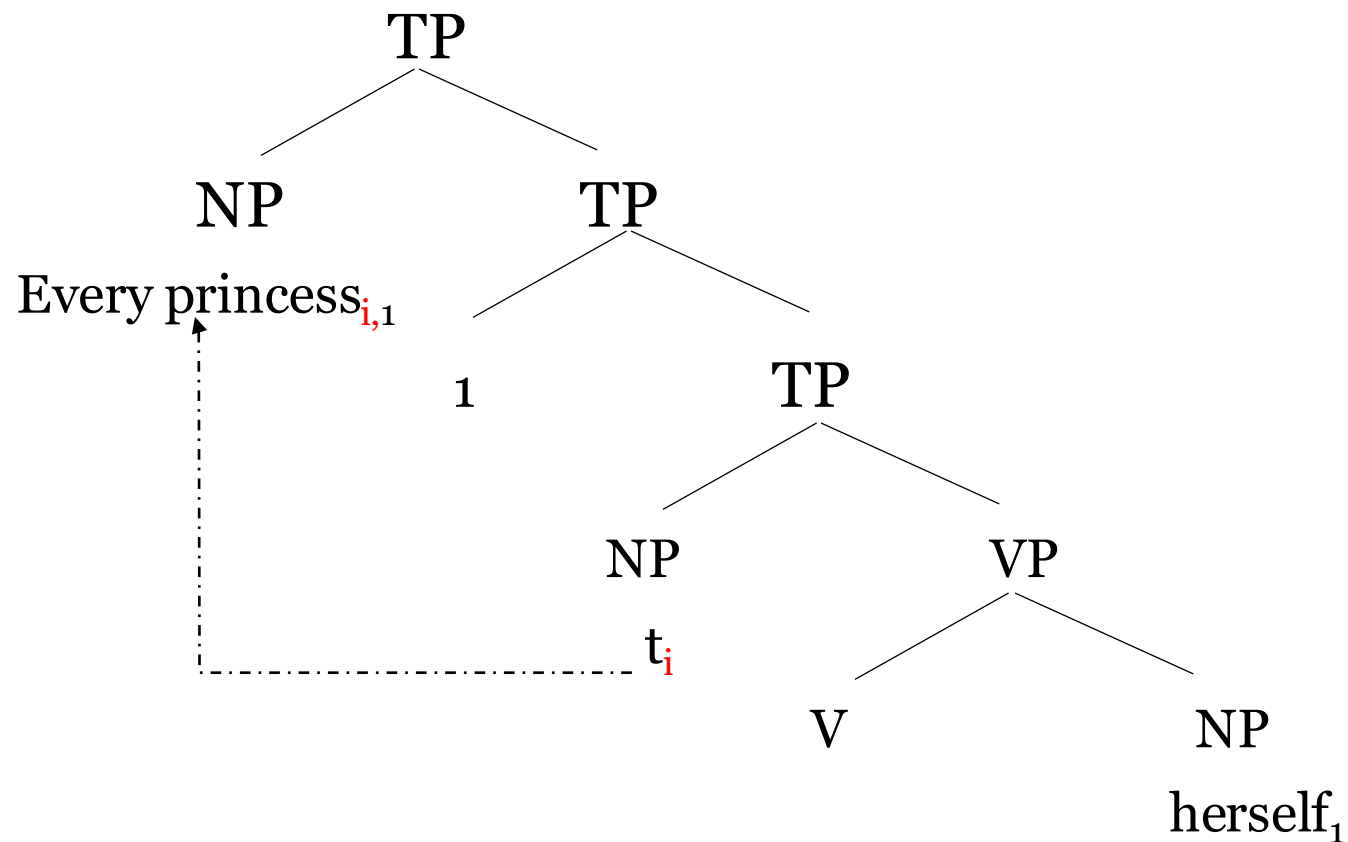
Ambiguity with quantifiers

o The standard answer: (a new kind of) structural ambiguity.

o An *unpronounced* level of syntax is called **LF** (for 'logical form').
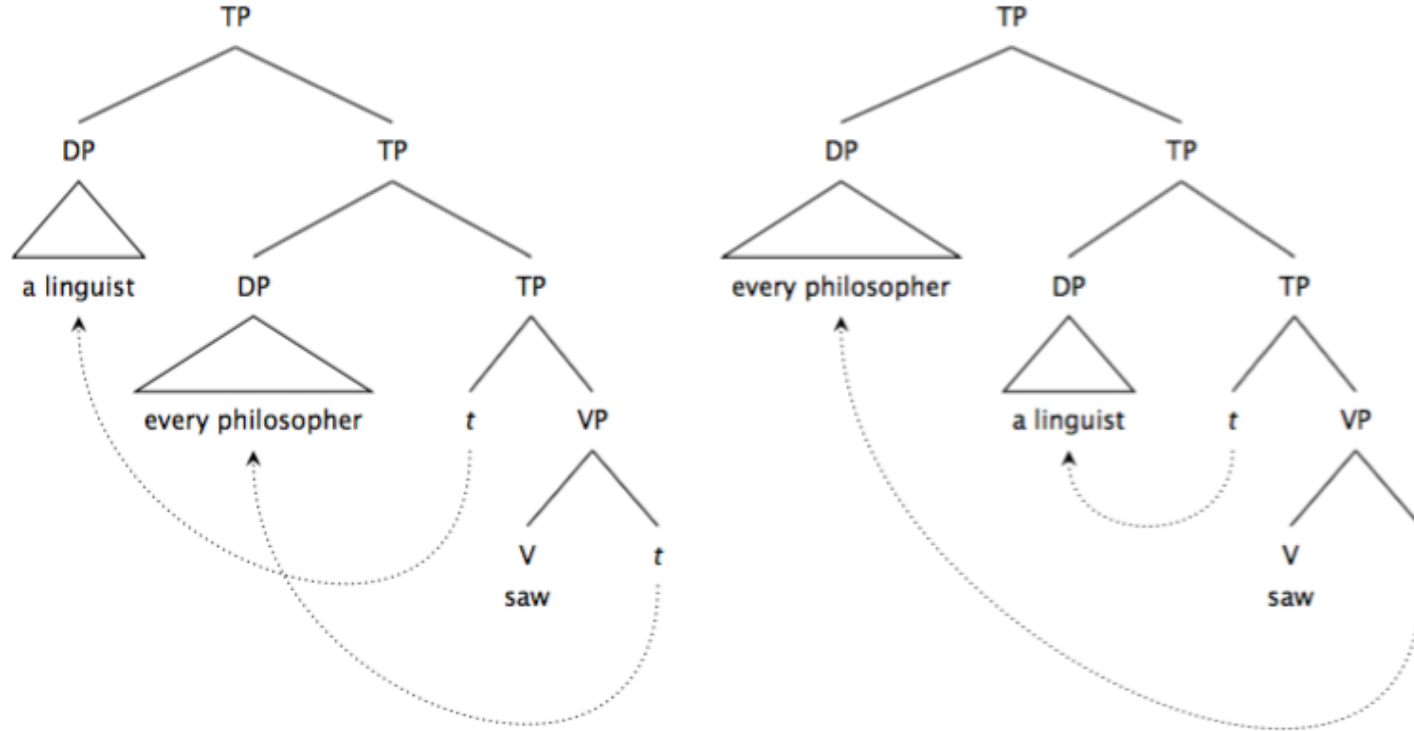
o Quantifier phrases must move for interpretation.

o The tree on the left: 'There's a linguist who saw every philosopher'.

o The tree on the right: 'Every philosopher was seen by a linguist'.

Quantifiers and bound reading

1. Mary amuses herself
2. Every princess$_i$ amuses herself$_i$

Terminology

o When quantifiers in LF have the same order they have in the spoken sentence, we call that reading **surface scope**. (the left tree)

o When quantifiers in LF have the opposite order they have in the spoken sentence, we call that reading **inverse scope**. (the right tree)

Ambiguity with quantifiers

Hungarian

1. a. Sok ember mindenkit felhívott.
   many man-nom everyone-acc up-called
   'Many men phoned everyone =
   There are many men who each phoned everyone.'
   b. Mindenkit sok ember felhívott.
   everyone-acc many man-nom up-called
   'Many men phoned everyone =
   For everyone, there are many men who phoned him
   (a potentially different set of callers for each case).'

English

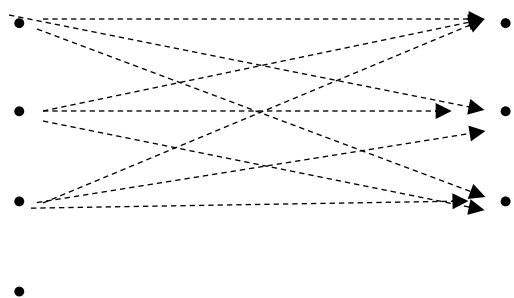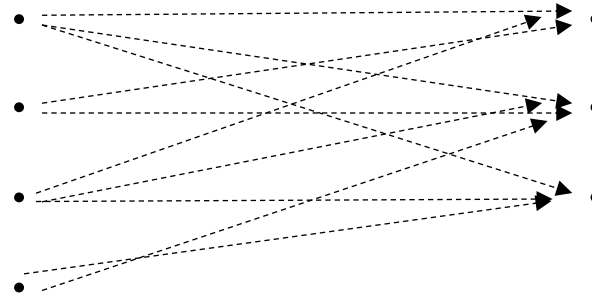2. **Many volunteers** called up **everyone**.

Ambiguity with quantifiers

a. Sok ember mindenkit felhívott.
many man-nom everyone-acc up-called
'Many men phoned everyone =
There are many men who each phoned everyone.'

The left dots are men who made the calls, the right dots are people called, and the arrows show who called whom.
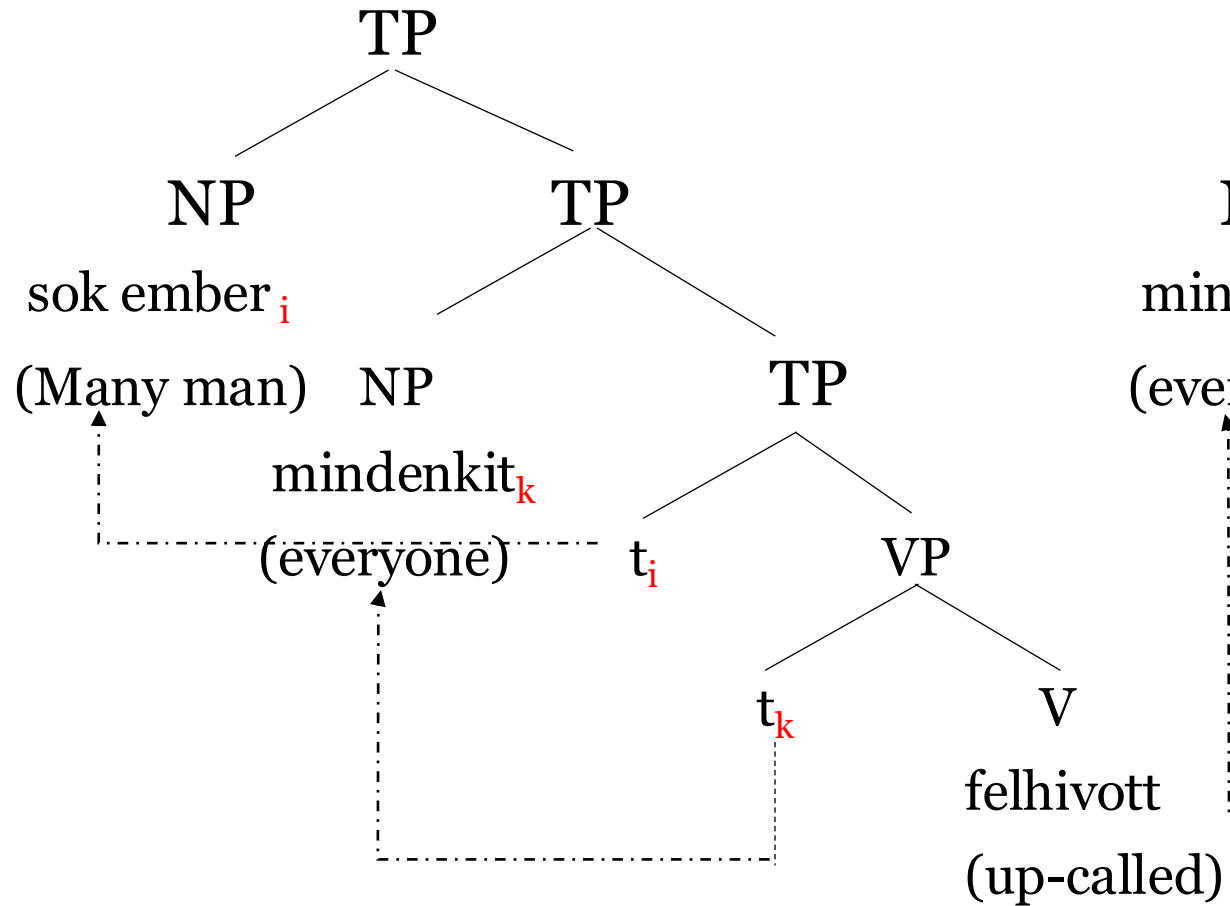
Ambiguity with quantifiers

b. Mindenkit   sok   ember   felhívott.
   everyone-acc many man-nom up-called
   'Many men phoned everyone =
   For everyone, there are many men who phoned him
   (a potentially different set of callers for each case).'

The left dots are men who made the calls, the right dots are people called, and the arrows show who called whom.
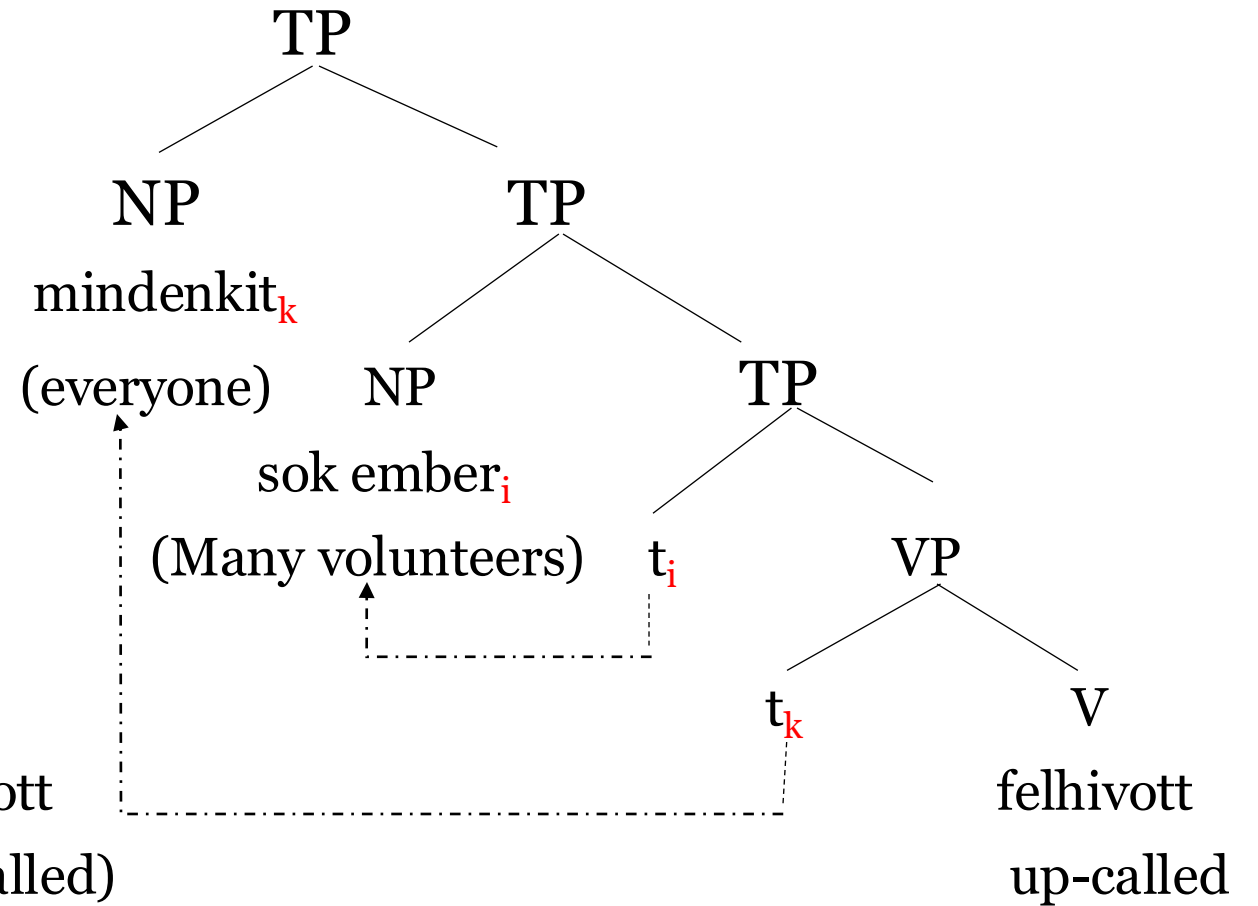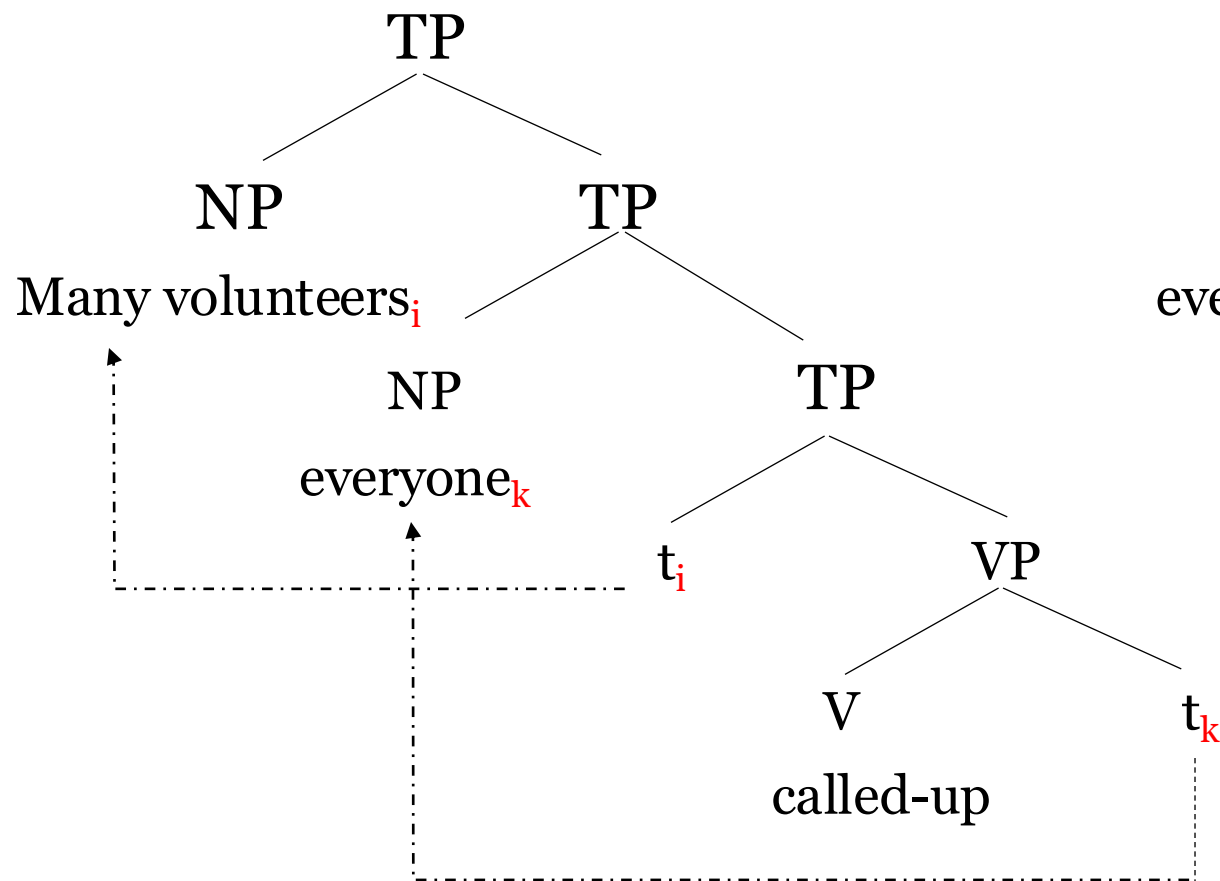
Hungarian

1a.

```
                    TP
            ┌───────┴───────┐
           NP              TP
       sok ember_i     ┌────┴────┐
       (Many man)     NP        TP
                   mindenkit_k ┌──┴──┐
                   (everyone)  t_i   VP
                                  ┌──┴──┐
                                  t_k   V
                                     felhivott
                                    (up-called)
```

Surface scope

1b.

```
                    TP
            ┌───────┴───────┐
           NP              TP
      mindenkit_k      ┌────┴────┐
      (everyone)      NP        TP
                  sok ember_i  ┌──┴──┐
               (Many volunteers) t_i  VP
                                    ┌──┴──┐
                                    t_k   V
                                       felhivott
                                       up-called
```
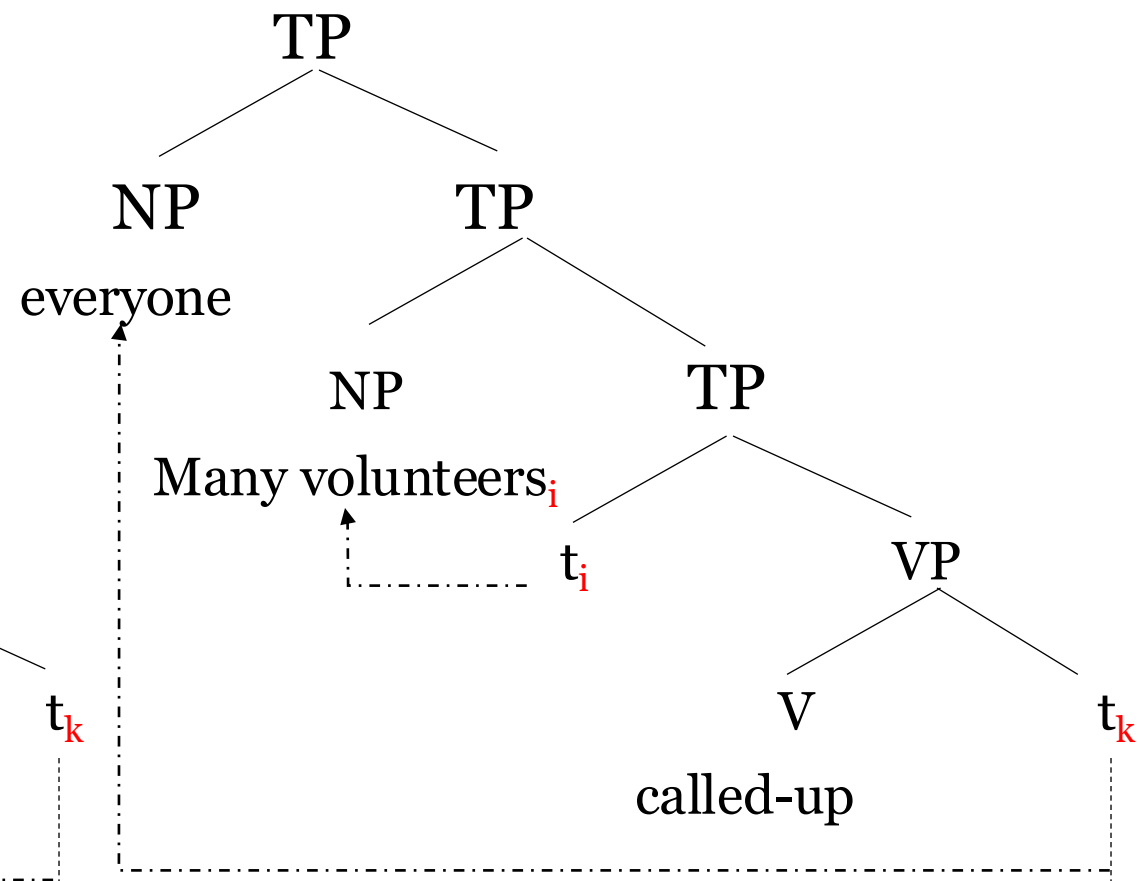
Surface scope

English

Surface scope   Inverse scope

The influence of syntax

o We treat quantifier ambiguity in terms of movement.

o We already know that movement is not always possible.

1. Who do you think that John will question ___t_ first?
2. Who do you think John will question _t___ first?
3. Who do you think ___t_ will question John first?
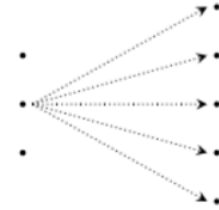4. *Who do you think that ___t_ will question John first?

The influence of syntax

o (1) is not ambiguous but (2) is

1. I saw **a guard** who was standing in front of **every building**.
2. **A guard** was standing in front of **every building**.

o You can't move a wh in (1), as shown in (3), but you can in (2), as shown in (4).

3. *What did you see a guard who was standing in front of _?
4. What was a guard standing in front of _?

Quantifier movement cross-linguistically

o Not all languages allow quantifiers to quietly move around!

o In Mandarin Chinese, only surface-scope readings are possible:

1. You   yitiao shayu gongji-le meige haidao.
   Have one   shark attacked every   pirate
   'A shark attacked every pirate.'

o Hindi is also like Chinese ?

2. ek   shaark-ne sabhii samudrii-daakuu   par   aakraman   kiyaa
   One   shark-NE   all   pirate   on   attack   done