Ling 566 Nov 18, 2021 Raising, Control

Overview

- Intro to topic
- Infinitival *to*
- (Subject) raising verbs
- (Subject) control verbs
- Raising/control in TG
- Object raising and object control
- Reading questions

Where We Are & Where We're Going

- In the last two lectures, we have seen a kind of subject sharing -- that is, cases where one NP served as the SPR for two different verbs. Examples?
- Last time, we looked at "dummy" NPs -- that is, non-referential NPs. Examples?
- Today, we're going to look at the kind of subject sharing we saw with *be* in more detail.
- Then we'll look at another kind of subject sharing, using dummy NPs in differentiating the two kinds.

What Makes This Topic Different

- The phenomena we have looked at so far (agreement, binding, imperatives, passives, existentials, extraposition) are easy to pick out on the basis of their form alone.
- In this chapter, we look at constructions with the general form NP-V-(NP)-*to*-VP. It turns out that they divide into two kinds, differing in both syntactic and semantic properties.

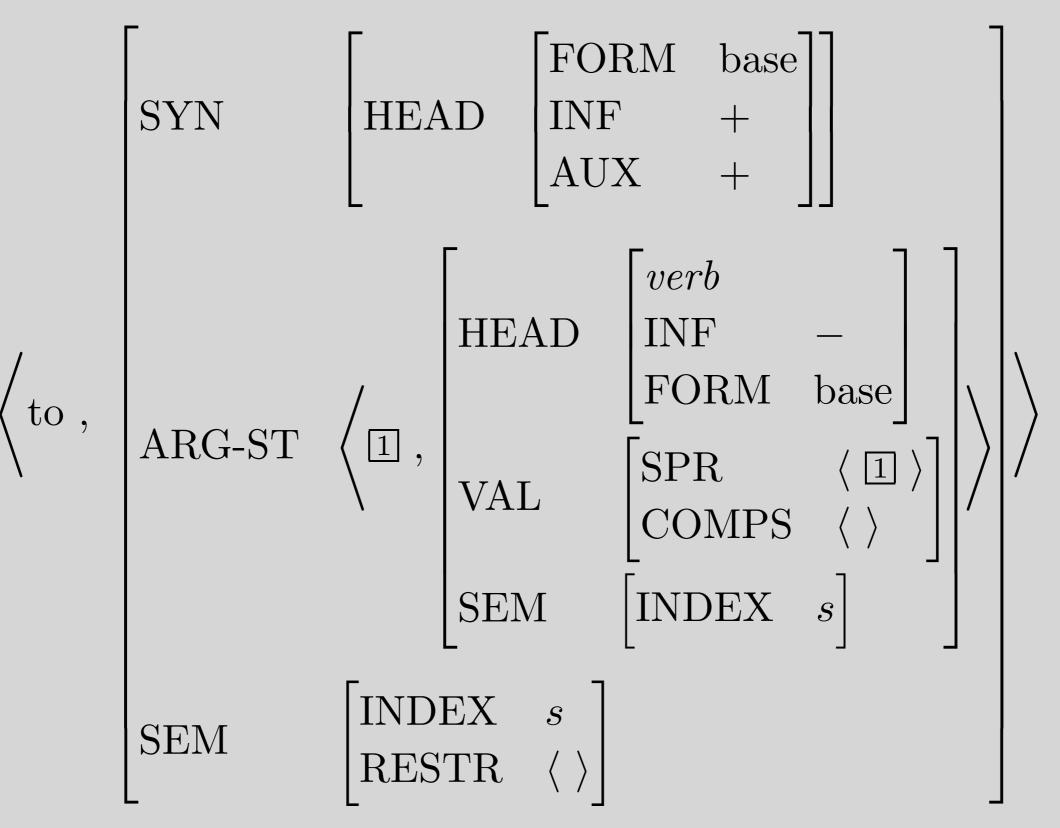
The Central Idea

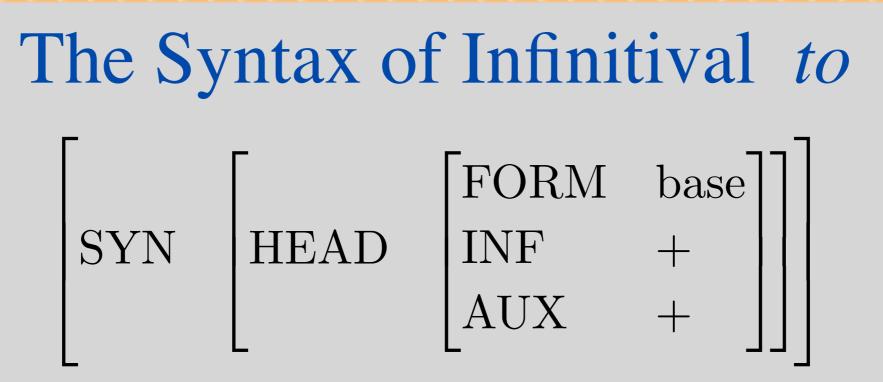
- Pat continues to avoid conflict and Pat tries to avoid conflict both have the form NP-V-to-VP
- But *continues* is semantically a one-place predicate, expressing a property of a situation (namely, that it continues to be the case)
- Whereas *tries* is semantically a two-place predicate, expressing a relation between someone who tries and a situation s/he tries to bring about.
- This semantic difference has syntactic effects.

The Status of Infinitival to

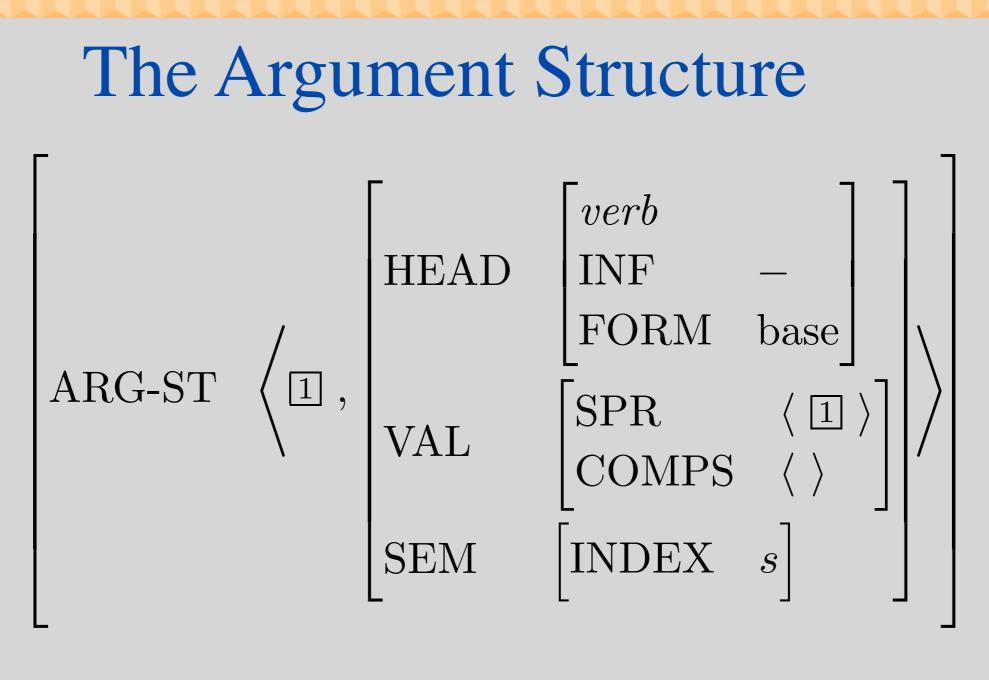
- It's not obvious what part of speech to assign to *to*.
- It's not the same as the preposition to:
 Pat aspires to stardom
 Pat aspires to be a good actor
 *Pat aspires to stardom and to be a good actor
- We call it an auxiliary verb, because this will make our analysis of auxiliaries a little simpler.

The Lexical Entry for Infinitival to



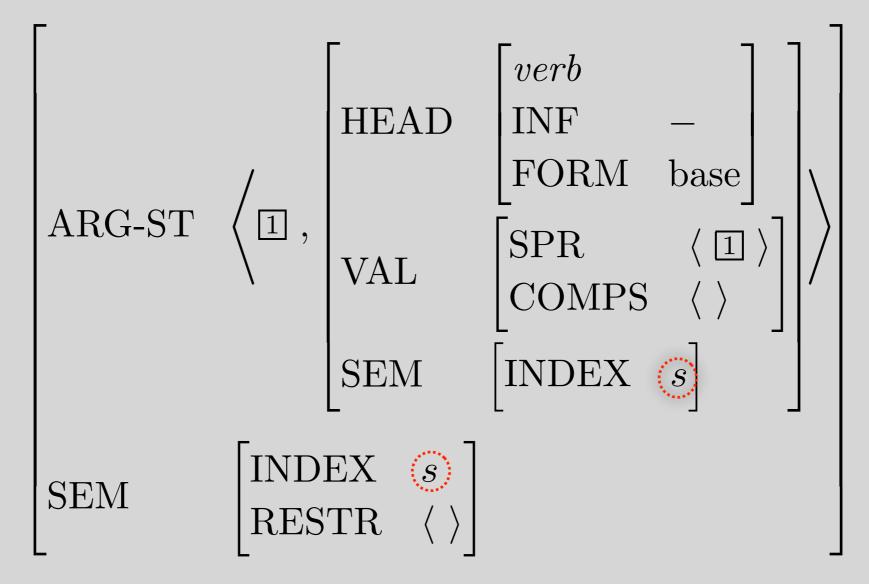


- This makes it a verb, because AUX is declared on *verb*
- [INF +] uniquely identifies the infinitival *to*
- Verbs select complements with different combinations of FORM and INF values, e.g.
 - complements of *condescend* are [FORM base] and [INF +]
 - complements of *should* are [FORM base] and [INF –]
 - complements of *help* are [FORM base]
- The meaning of [AUX +] becomes clear in Chapter 13.



- What kind of constituent is the second argument?
- The tagging of the first argument and the SPR of the second argument is exactly like be.

The Semantics of Infinitival to



- The INDEX value is taken from the SEM of the second argument.
- So what is the semantic contribution of *to*?

When poll is active, respond at pollev.com/emb Text EMB to 22333 once to join

W 'to' as an auxiliary verb

Unexpected, but clever

Dodgy (I'm skeptical)

Don't categories mean anything??

None of the above

Start the presentation to see live content. For screen share software, share the entire screen. Get help at pollev.com/app

Dummies and continue

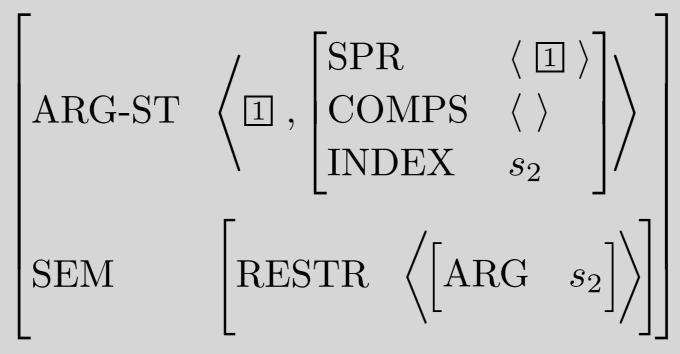
• Some examples:

There continue to be seats available. It continues to matter that we lost. Advantage continues to be taken of the innocent. *It continues to be seats available. *There continues to matter that we lost. *Advantage continues to be kept of the innocent.

• Generalization: Non-referential NPs can appear as the subject of *continue* just in case they could be the subject of the complement of *continue*.

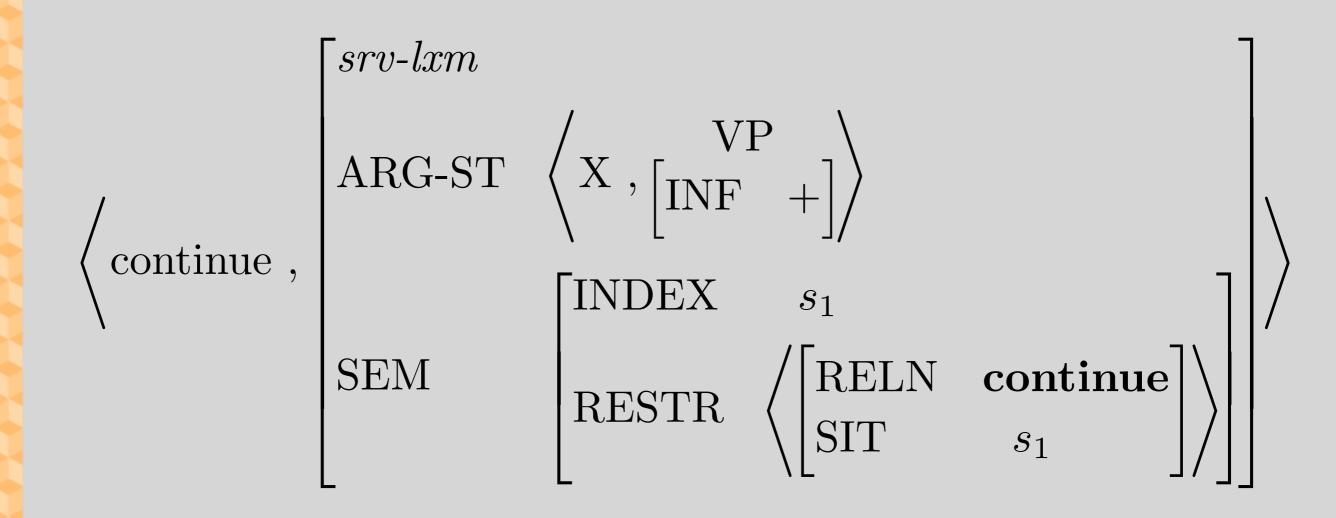
A New Type, for Verbs like continue

Subject-Raising Verb Lexeme (srv-lxm):

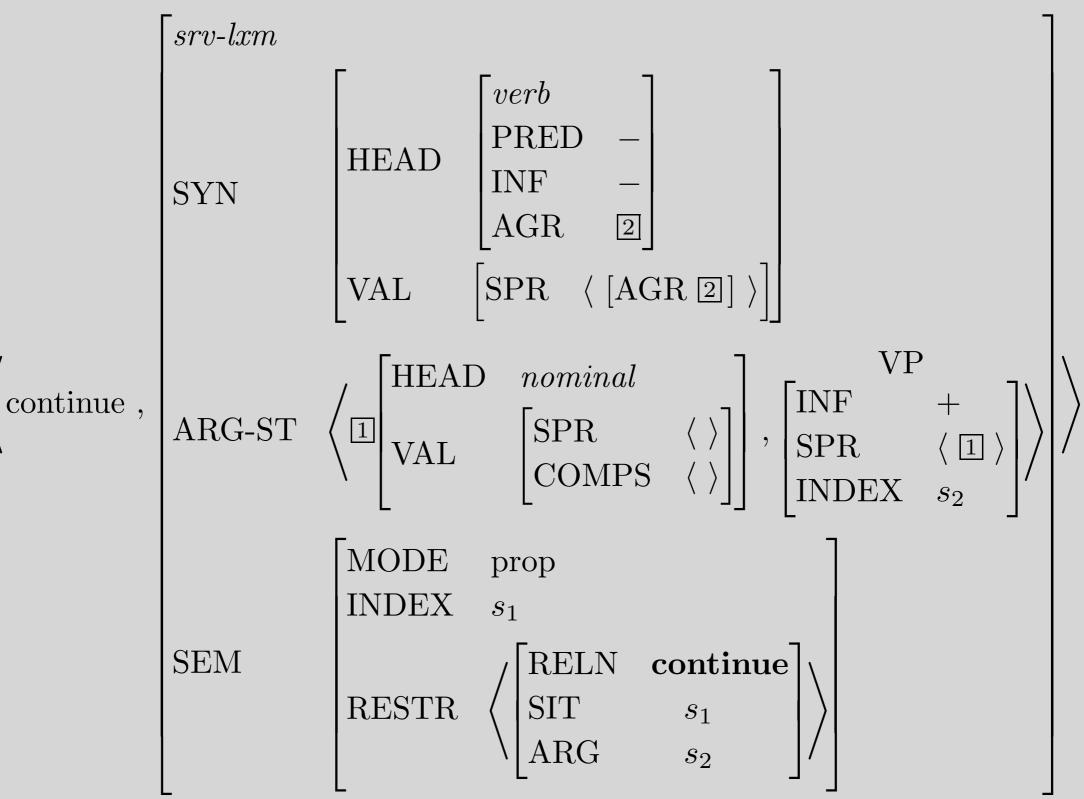


- Notes on the ARG-ST constraints
 - The subject sharing is just like for *be* and *to*: the subject of *continue* is also the subject of its complement
 - *continue* imposes no other constraints on its subject
- Note on the SEM constraint
 - The index of the complement must be an argument of the predication introduced by the verb

The Lexical Entry for continue

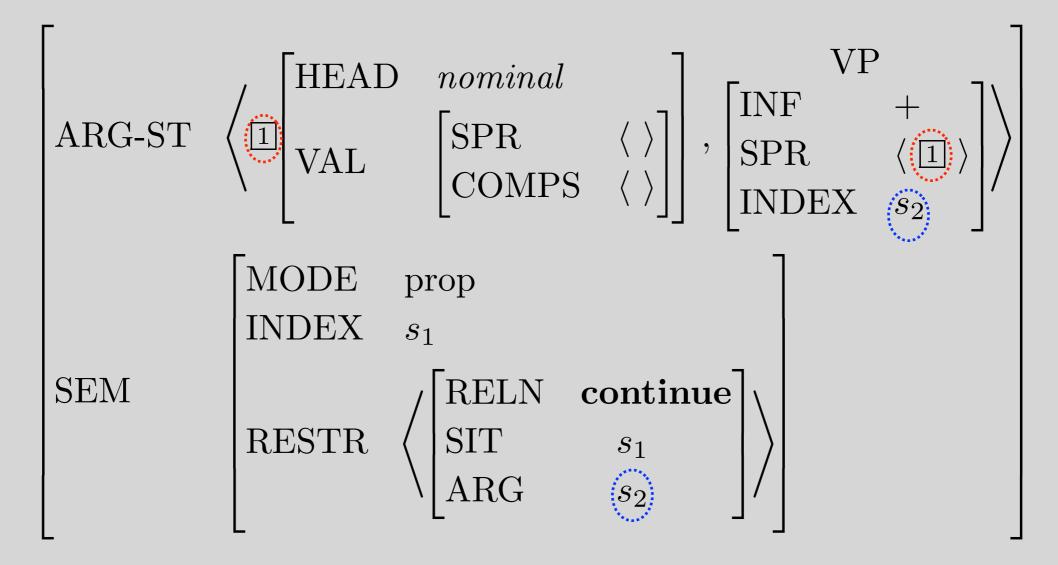


Entry for continue, with Inherited Information



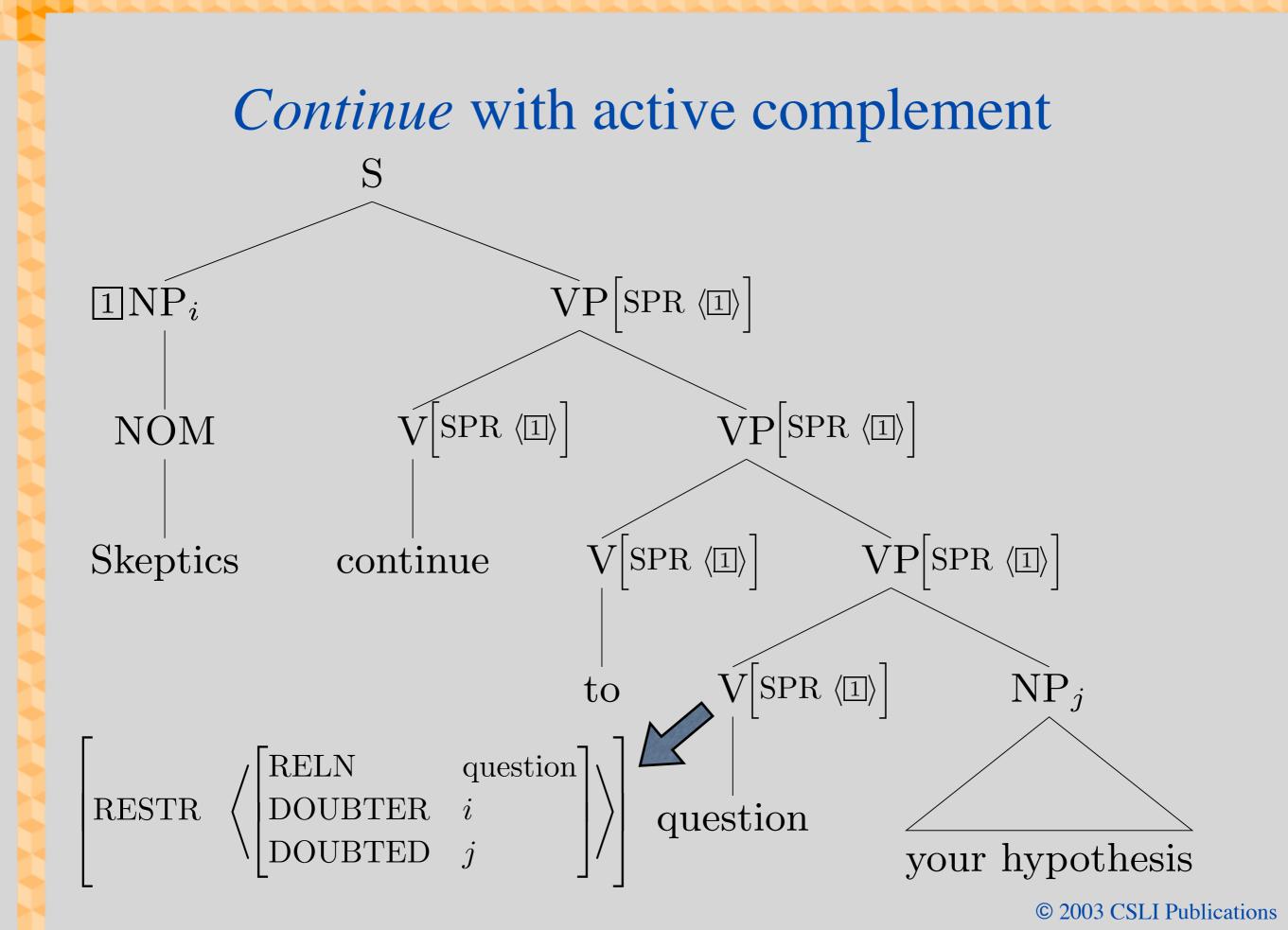
Key Property of Subject-Raising Verbs

The subject plays no semantic role in the predication introduced by the SRV itself. Its semantic role (if any) is only in the predication introduced in the complement.

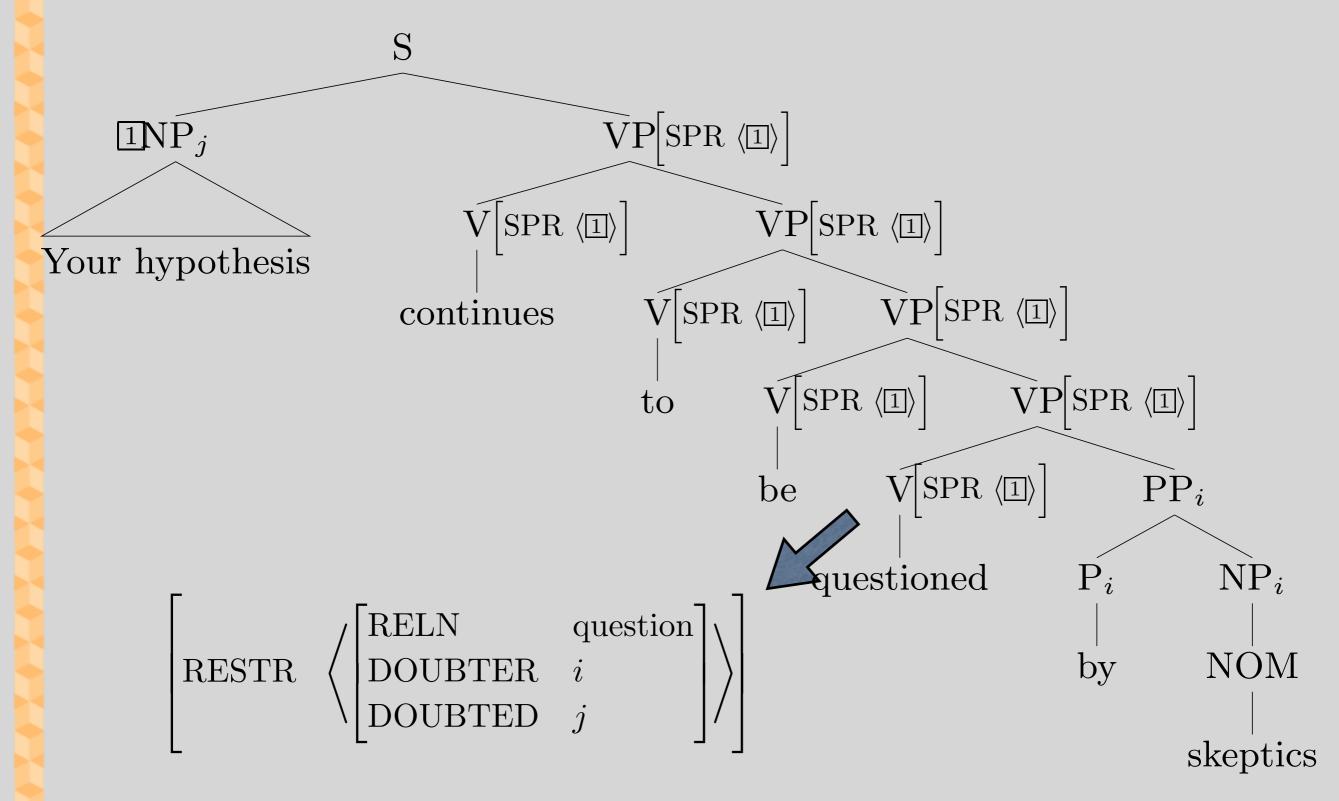


Hence, constraints on the subjects of SRVs are imposed by their complements

- SRVs take dummy subjects when and only when their complements do.
- SRVs take idiom chunk subjects when and only when their complements do.
- Passivizing the verb in the VP complement of an SRV doesn't change the truth conditions of the whole sentence:
 Skeptics continue to question your hypothesis ~
 Your hypothesis continues to be questioned by skeptics



Continue with passive complement



Control Verbs

- Control verbs, like *try*, appear in contexts that look just like the contexts for raising verbs:
 Pat tried to stay calm looks superficially like
 Pat continued to stay calm
- Control verbs also share their subjects with their complements, but in a different way.
- A control verb expresses a relation between the referent of its subject and the situation denoted by its complement.

Control Verbs Are Not Transparent

• They never take dummies or idiom chunks as subjects.

*There try to be bugs in my program *It tries to upset me that the Giants lost *Advantage tries to be taken of tourists

• Passivizing the complement's verb changes the truth conditions.

The police tried to arrest disruptive demonstrators \neq *Disruptive demonstrators tried to be arrested by the police*

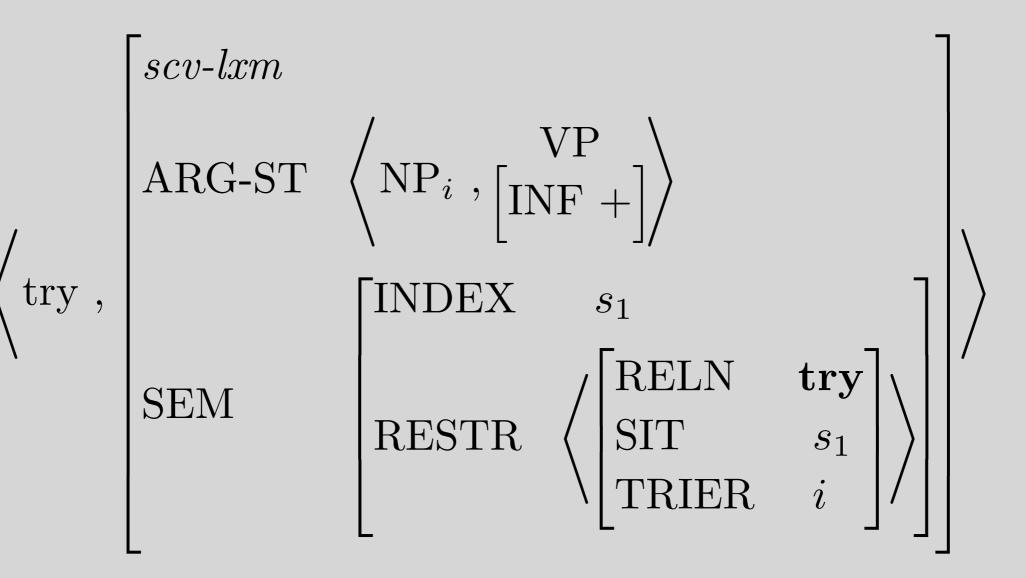
A New Type

Subject-Control Verb Lexeme (scv-lxm):

$$\begin{bmatrix} \text{ARG-ST} & \left\langle \text{NP}_i \right\rangle \\ \text{NP}_i \\ \text{INDEX} & \left\langle \right\rangle \\ \text{INDEX} & \left\langle \right\rangle \\ \end{bmatrix} \end{pmatrix}$$
$$\begin{bmatrix} \text{SEM} & \begin{bmatrix} \text{RESTR} & \left\langle \begin{bmatrix} \text{ARG} & s_2 \end{bmatrix} \right\rangle \end{bmatrix}$$

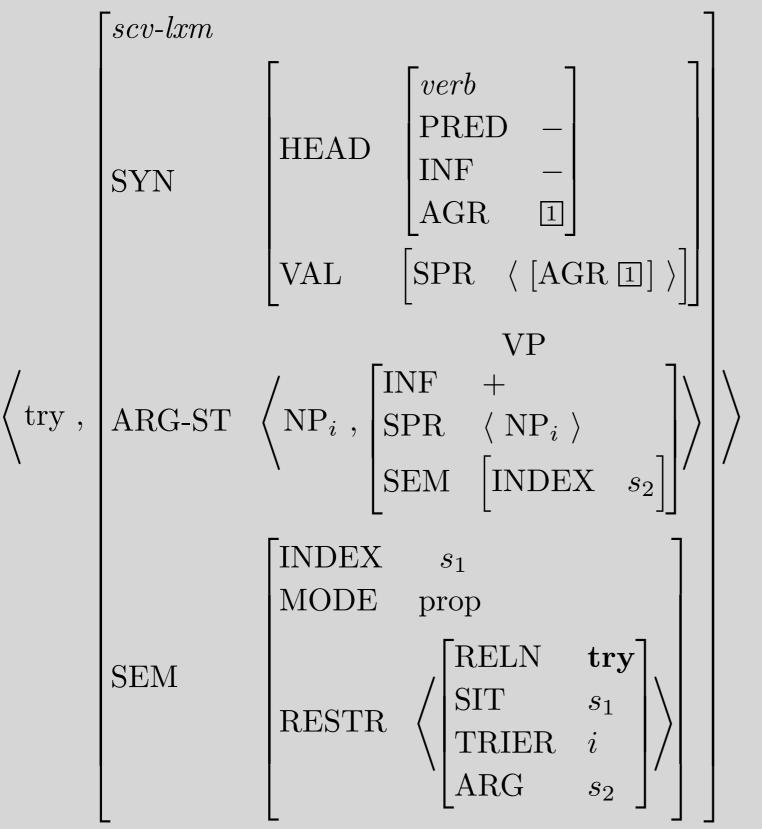
- This differs from *srv-lxm* in that the first argument and the SPR of the second argument are coindexed, not tagged.
 - This means that they only need to share INDEX values, but may differ on other features
 - And the first argument -- the subject -- must have an INDEX value, so it cannot be non-referential

The lexical entry for try



Note that the subject (NP_i) plays a semantic role with respect to the verb, namely the "TRIER"

Entry for try, with Inherited Information



Things to Note:

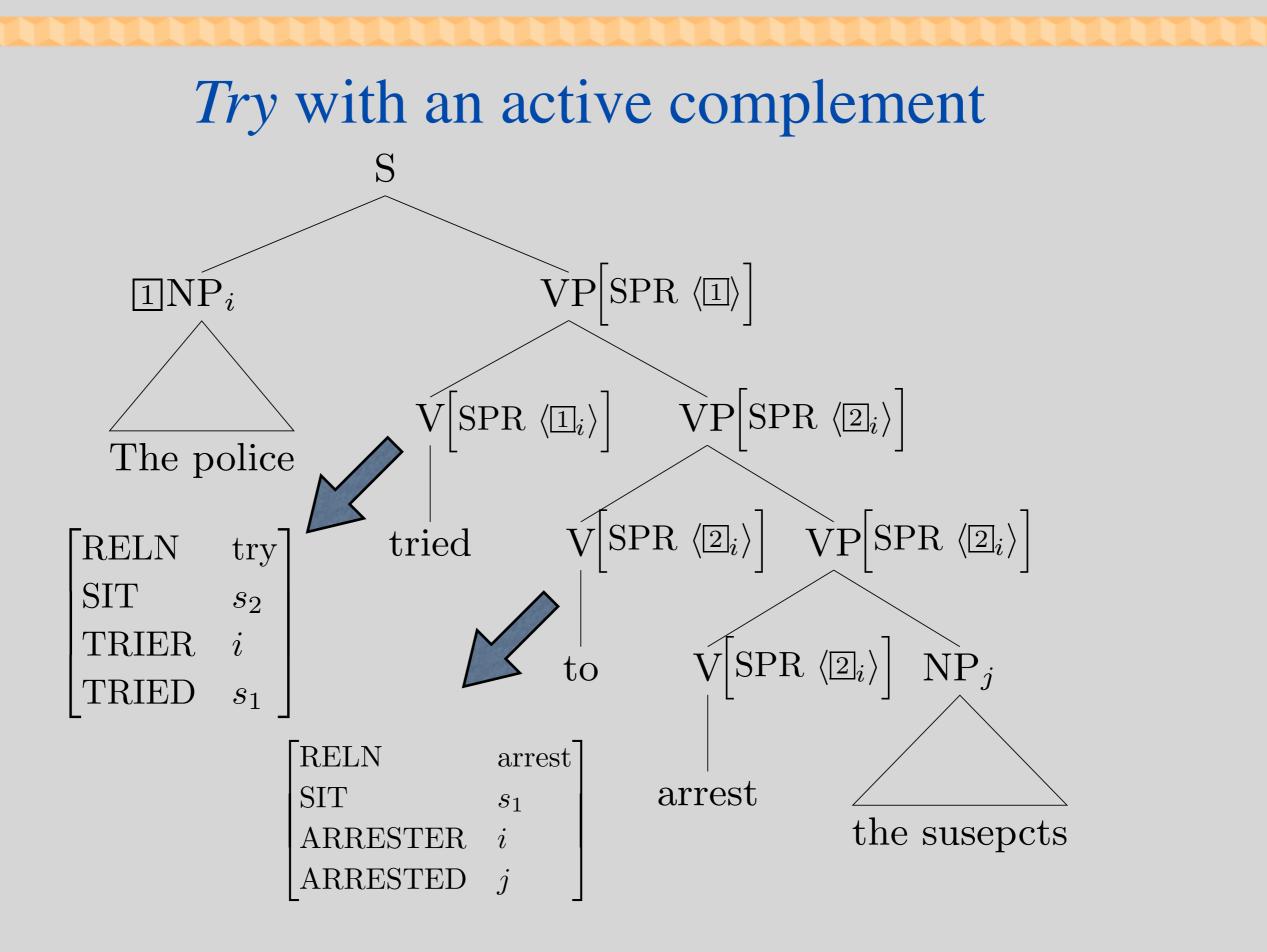
- The first argument has an index
- The first argument is coindexed with the SPR of the second argument
- Both the first and second arguments play semantic roles in the 'try' relation
- Very little had to be stipulated in the entry for *try*

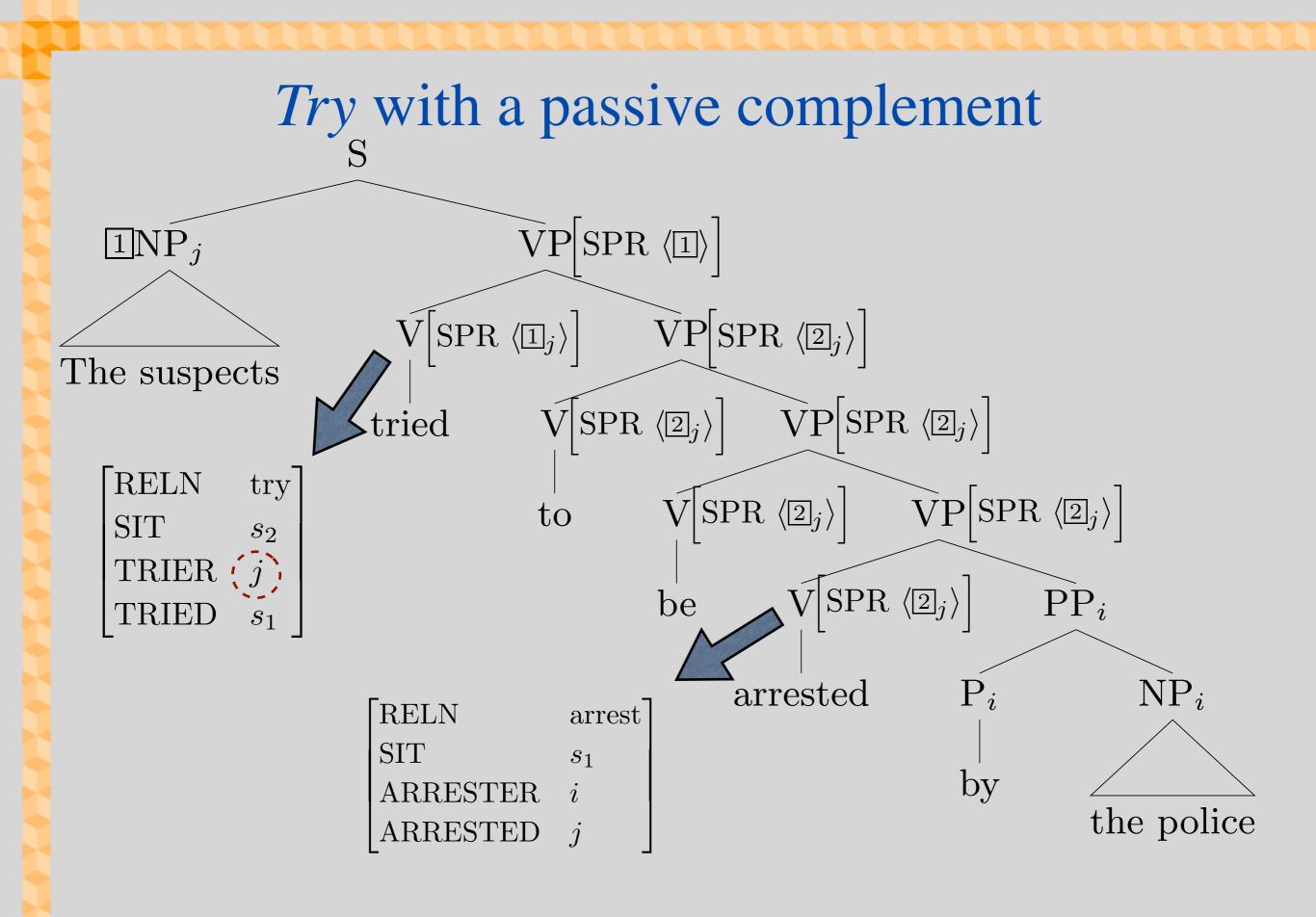
Questions

- What rules out dummies and idiom chunks as subjects of *try*?
- What accounts for the semantic non-equivalence of pairs like the following?

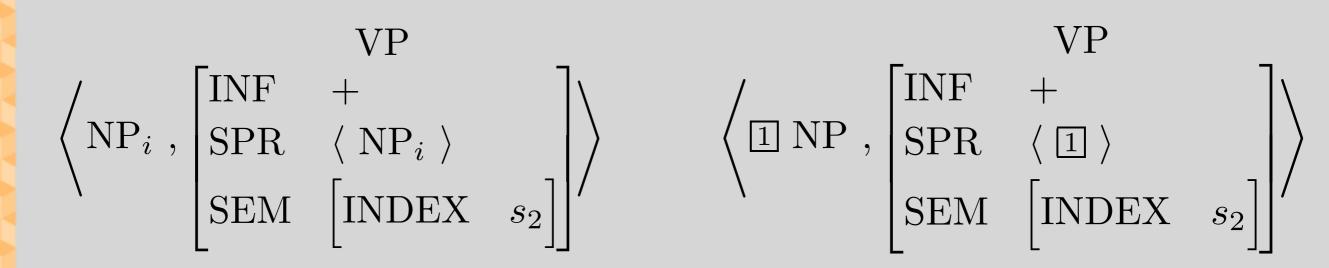
Reporters tried to interview the candidate The candidate tried to be interviewed by reporters

• Why does *continue* behave differently in these respects?





The main formal difference between raising and control verbs is in ARG-ST



CONTROL

RAISING

Which is which? Why?

Raising & Control in Transformational Grammar

• Raising

____ continue [the dogs to bark]

• Control

[the dogs]_i try [NP_i to bark]

- In early TG, the NP got deleted.
- In more recent TG, it's a silent pronoun.

We make another raising/control distinction

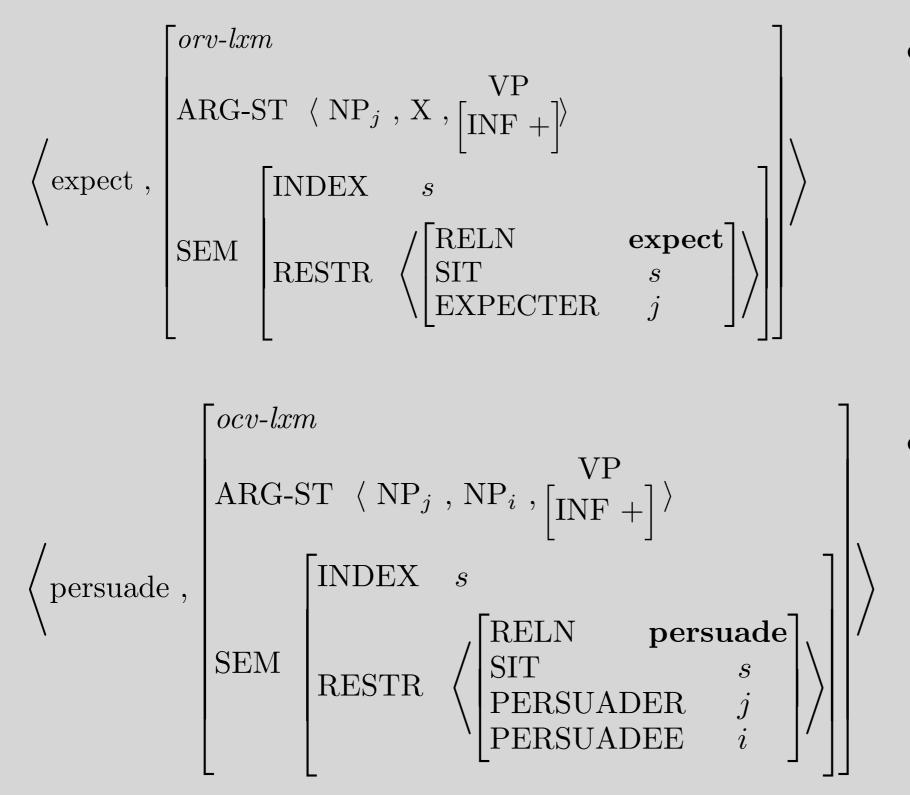
Object-Raising Verb Lexeme (orv-lxm)

ARG-ST $\left\langle NP, \square, \left[\begin{array}{c} SPR & \langle \square \rangle \\ COMPS & \langle \rangle \\ INDEX & s_2 \end{array} \right] \right\rangle$ • The formal
distinction is $\left| \text{RESTR} \left\langle \left[\text{ARG} \quad s_2 \right] \right\rangle \right|$ SEM

Object-Control Verb Lexeme (ocv-lxm) ARG-ST $\left\langle \text{NP}, \text{NP}_i, \begin{bmatrix} \text{SPR} & \langle \text{NP}_i \rangle \\ \text{COMPS} & \langle \rangle \\ \text{INDEX} & s_2 \end{bmatrix} \right\rangle$ $\left| \text{RESTR} \left\langle \begin{bmatrix} \text{ARG} & s_2 \end{bmatrix} \right\rangle \right|$ SEM

- distinction is again between tagging and coindexing
- This time it's the second argument and the SPR of the third argument.

Example orv-lxm and ocv-lxm Entries



- Note that the
 'persuade'
 relation has three
 arguments, but
 the 'expect'
 relation has only
 two
- And the object's INDEX plays a role in the 'persuade' relation, but not in the 'expect' relation

Ch 12 Prob 4

- Construct examples of each of the following four types which show a contrast between *expect* and *persuade*:
 - Ex with dummy *there*
 - Ex with dummy *it*

Breakout rooms!

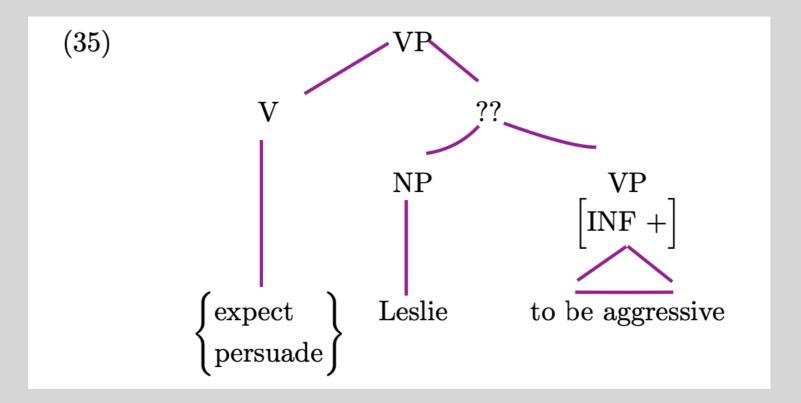
- Ex with idiom *chunks*
- Ex of relevant active/passive pairs

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Reading Questions

• In the section on object raising and object control verbs, two potential analyses are proposed for the types of complements they can take: (1) a single complement that is some type of phrase that contains an NP and VP, or (2) two separate NP and VP complements. Then there is an explanation of why only (2) works with our analysis of the passive construction, but I didn't quite follow this explanation. Why is only (2) compatible with how we analyze passive?

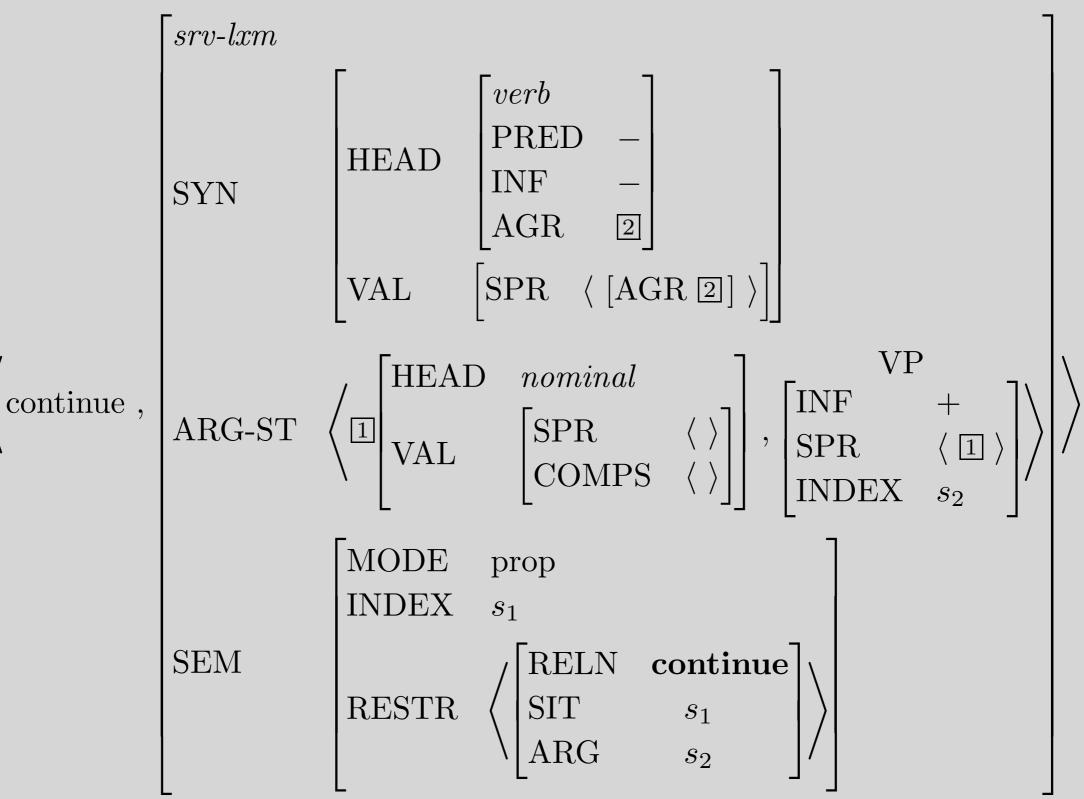


Reading Questions

• Wouldn't the verb *try* also work in isolation (e.g. *He tries*, *We tried*)? Would the RESTR eventually omit the ARG value?

• After seeing the lexical sequences for try and continue, I'm still a bit confused about difference between ARG and SIT. What is the motivation for saying that ARG takes a situation (as opposed to a situation taking a situation) and does this choice have implications?

Entry for continue, with Inherited Information



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• Do we have a list of verbs and adjectives which should be treated as object raising and object control? Do we have more words like *persuade* and *expect*?

```
accept_v3 := v_np-pp_oeq-as_le &
accommodate_v2 := v_np-pp_oeq-as_le & appear_v1 := v_pp-vp_ssr_le &
accustom_vl := v_np-vp_oeq_le &
ache_v2 := v_vp_seq_le &
acknowledge_v3 := v_np-pp_oeq-as_le &
act_seem_vl := v_ap-pp_seq_le &
adjudge_v4 := v_np-prd_oeq_le &
advertise_v2 := v_np-pp_oeq-as_le &
advise_v4 := v_np-vp_oeq_le &
advise_v5 := v_np-pp_oeq-as_le &
advocate_v3 := v_np-pp_oeq-as_le &
afford_v3 := v_vp_seq_le &
agree_v3 := v_vp_seq_le &
aim_v2 := v_vp_seq_le &
allege_v2 := v_np-vp_sor_le &
allow_vI := v_np-vp_oeq_le &
alter_v2 := v_np-vp_oeq_le &
amend_v2 := v_np-vp_oeq_le &
anticipate_prp_vl := v_vp_seq-prp_le &
```

appeal_vl := v_pp-vp_oeq_le & appear_v2 := v_prd_ssr-va_le & appear_v6 := v_prd_seq-va_le & apply_v6 := v_vp_seq_le & arrange_for_vl := v_it-pp-vp_seq_le arrange_with_vl := v_pp-vp_seq_le & arrange_with_v2 := v_it-pp-vp_seq_le arrest_v2 := v_vp_seq-prp_le & ask_v2 := v_np-vp_oeq_le & ask_v4 := v_vp_seq_le & aspire_vl := v_vp_seq_le & assay_vl := v_vp_seq_le & assess_v2 := v_np-pp_oeq-as_le & assess_v3 := v_np-vp_oeq_le & assign_v3 := v_np-vp_oeq_le & assume_v3 := v_np-vp_oeq_le & attempt_v2 := v_vp_seq_le & authorize_vl := v_np-vp_oeq_le & authorize_vl_br := v_np-vp_oeq_le & © 2003 CSLI Publications

- v_vp_seq_le v_vp_seq-from_le v_prd_seq_le v_prd_seq-idm_le v_prd_seq-va_le v_ap_seq_le v_pp_seq_le v_pp_seq-e_le v_vp_seq-prp_le v_vp_seq-bse_le v_vp_seq-go_le v_vp_seq-and_le v_vp_seq-and-bse_le v_vp_seq-but_le v_p-vp_seq_le
 - B intended to win.
 - B refrained from smoking.
 - B remained doubtful.
 - B made sure that C won.
 - B became impatient | admired.
 - B proved competent | ?admired.
 - B wanted into the game.
 - My battery shows as empty.
 - B loves playing chess.
 - B helped finish the paper.
 - B will go play chess | *goes play chess.
 - They try and find it | #tried and found it.
 - B will try and find it.
 - B couldn't help but continue.
 - B turned out to be wrong.

v_np-vp_oeq-ntr_le	
v_np-vp_oeq-bse_le	-
v_np-vp_oeq-psv_le	The teacher promised me to be allowed to play outside.
v_np-prd_oeq_le	B proved C wrong.
v_np-ap_oeq_le	B imagined C taller.
v_np-prd_oeq-ntr_le	B wanted C ready. *C was wanted ready (by B).
v_np-vpslnp_oeq_le	B had C to talk to.
v_np-vp_oeq-from_le	eB excused C from playing. B geared up C to go.

v_vp_ssr_le There failed to be a link.
v_vp_ssr-n3sg_le We needn't wait here.
v_vp_ssr-n3sg-r_le We need only wait here.
v_p-vp_ssr_le B has yet to win.
v_prd_ssr-va_le It became obvious that Kim arrived.
v_vp_ssr-prp_le It finished raining.
v_vp_ssr-nimp_le There tend to be problems.
v_pp-vp_ssr_le It seems to B to be windy.

```
v_np-vp_aeq-ntr_le B promised C to stay. | *C was
promised by B to stay.
v_np-vp_aeq_le B used C to reach D.
v_np-vp_aeq-psv_le B asked C to be allowed to leave. | #B asked
C to leave.
v_np-vp_aeq-noel_le B took an hour to finish.
v_np-vp_aeq-prp_le B had trouble sleeping.
```

aj_pp-vp_i-it_le It is easy for B to win. aj_pp-vp_i-it-nt_le It is urgent for B to win. | *B is urgent to win. aj_pp-vp_i-on-it_le It is incumbent on B to go. aj_pp-vp_i-of-it_le It is nice of B to go. aj_pp-vp_i-tgh_le This race is tough to win. aj_pp-vp-pp_i-cmp-it_le It is easier to solve this problem than that one aj_vp_i-it-prp_le It is worth reading that book. aj_vp_i-ssr_le There are destined to be unicorns in the garden. aj_vp_i-wrth_le The race is worth running. aj_vp_i-prty_le Paris is pretty to look at. aj_vp_i-seq-nmd_le B is supposed to win. aj_vp_i-seq-prp_le B is done running.

n_vp_c_le n_vp_m_le n_vp_mc_le n_vp_c-it_le n_vp_m-it_le n_vpslnp_c_le

B has the ability to win.

- B has permission to stay.
- B has clearance to stay.
- It is a pleasure for B to sleep.
- It is drudgery for B to do that.
- B is a pleasure for C to mmet.

• I'm curious how other theories of grammar approach the 'grammar building' vs 'expanding grammar'. Since we've started building out the use cases for the 'finished' grammar, do other theories flesh out way more or way less parts of the grammar before expanding? Obviously, since we're learning from the textbook, I imagine this point in the grammar makes sense to start branching out because other use cases are either far too nuanced or just too 'complicated' to implement, but I wonder if there were any omissions for more grammar expansion.

• I am wondering why we are dealing with fairly 'complex' phenomena such as raising/ control when the grammar is still unable to account for predicative NPs as in 'Pat is a scholar' (as discussed on p.335). Is there an advantage to building the grammar to explain 'complex' or edge phenomena first?