Final Review: Syntax Fall 2007

Jean Mark Gawron
San Diego State University

December 12, 2007

1 Control and Raising

Key:

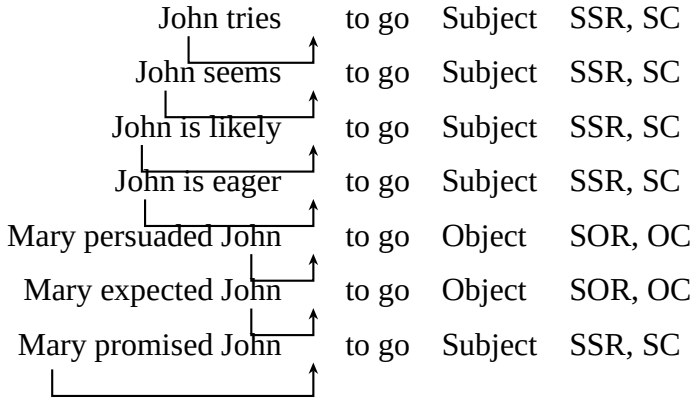
S	Subject
O	Object
C	Control
R	Raising

For example, SOR = Subject(to)-Object Raising.

Example answers:

1.1 seem

a. Identify the control type [subject/object]. *What NP is understood as controller of the infinitive* (does or is expected to do or tries to do or ... the action described by the verb in infinitival form)



The control type of *seem* is subject!

b. Produce relevant examples:

(1) a. It seems to be raining
b. There seems to be a problem

c. The chips seems to be down.
d. It seems to be obvious that John is a fool.
e. The police seem to have caught the burglar.
f. The burglar seems to have been caught by the police.

c. Example construction

i. Construct embedded clause:

(a)	it rains.	Simple example; dummy subject
	* John rains	Testing dummy subjecthood
	it to rain	Put into infinitival form

ii. Embed

(a)	Δ seem [$_{\text{CP}}$ it to rain]	Embed under *seem*
[ctd.]	it seem [$_{\text{CP}}$ t to rain]	Move it—
	it seems [$_{\text{CP}}$ t to rain]	Add tense, agreement (to main verb)

d. Other examples

(b)	it is raining.	Alternative example; dummy subject
	* John is raining	Testing dummy subjecthood
	it to be raining	Put into infinitival form
	Δ seem [$_{\text{CP}}$ it to be raining]	Embed under *seem*
	it seem [$_{\text{CP}}$ t to be raining]	Move it—
	it seems [$_{\text{CP}}$ t to be raining]	Add tense, agreement (to main verb)
(c)	The chips are down.	Idiom
	the chips to be down	Put into infinitival form
	Δ seem [$_{\text{CP}}$ the chips to be down]	Embed under *seem*
	the chips seem [$_{\text{CP}}$ t to be down]	Move it—
	the chips seem [$_{\text{CP}}$ t to be down]	Add tense, agreement (to main verb)
(d)	it is obvious that John is a fool.	Alternative example; dummy subject
	* Mary is obvious that John is a fool	Testing dummy subjecthood
	it to be obvious that John is a fool	Put into infinitival form
	Δ seem [$_{\text{CP}}$ it to be obvious that John is a fool]	Embed under *seem*
	it seem [$_{\text{CP}}$ t to be obvious that John is a fool]	Move it—
	it seems [$_{\text{CP}}$ t to be obvious that John is a fool]	Add tense, agreement (to main verb)
(d)	There is a problem.	Alternative example; dummy subject
	* In the kitchen is a problem.	Testing dummy subjecthood
	There to be a problem	put into infinitival form
	Δ seem [$_{\text{CP}}$ there to be a problem]	Embed under *seem*
	there seem [$_{\text{CP}}$ t to be a problem]	Move it—
	there seems [$_{\text{CP}}$ t to be a problem]	Add tense, agreement (to main verb)

e. Summarize results:

seem:

Control type: Subject

Test	Result	Indicates
weather-it	Good	SSR
extraposition-it	Good	SSR
idiom chunk	Good (idiomatic reading)	SSR
There	Good	SSR

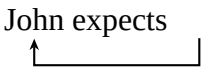
f. Write it up:

The control type of *seem* is subject; therefore it is either an SC or an SSR verb. The following tests all uniformly indicate that it is an SSR verb with one θ-role for a proposition.

(2) a. It seems to be raining.
b. The chips seem to be down.
c. It seems to be obvious that John is a fool.
d. There seems to be a problem.

1.2 expect: [John expects to leave]

a. Control type



The control type of *expect* in this example is subject.

b. Example Generation

(a)	it rains.	Simple example; dummy subject
	* John rains	Testing dummy subjecthood
	it to rain	Put into infinitival form
	Δ expect [$_{\text{CP}}$ it to rain]	Embed under *seem*
	it expect [$_{\text{CP}}$ t to rain]	Move it—
	* it expects [$_{\text{CP}}$ t to rain]	Add tense, agreement (to main verb)
(b)	it is raining.	Alternative example; dummy subject
	* John is raining	Testing dummy subjecthood
	it to be raining	Put into infinitival form
	Δ expect [$_{\text{CP}}$ it to be raining]	Embed under *expect*
	it expect [$_{\text{CP}}$ t to be raining]	Move it—
	* it expects [$_{\text{CP}}$ t to be raining]	Add tense, agreement (to main verb)
(c)	The chips are down.	Idiom
	the chips to be down	Put into infinitival form
	Δ expect [$_{\text{CP}}$ the chips to be down]	Embed under *expect*
	the chips expect [$_{\text{CP}}$ t to be down]	Move it—
	* the chips expect [$_{\text{CP}}$ t to be down]	Add tense, agreement (to main verb)
(d)	it is obvious that John is a fool.	Alternative example; dummy subject
	* Mary is obvious that John is a fool	Testing dummy subjecthood
	it to be obvious that John is a fool	Put into infinitival form
	Δ expect [$_{\text{CP}}$ it to be obvious that John is a fool]	Embed under *expect*
	it expect [$_{\text{CP}}$ t to be obvious that John is a fool]	Move it—
	* it expects [$_{\text{CP}}$ t to be obvious that John is a fool]	Add tense, agreement (to main verb)
(d)	There is a problem.	Alternative example; dummy subject
	* In the kitchen is a problem.	Testing dummy subjecthood
	There to be a problem	put into infinitival form
	Δ expect [$_{\text{CP}}$ there to be a problem]	Embed under *expect*
	there expect [$_{\text{CP}}$ t to be a problem]	Move it—
	* there expects [$_{\text{CP}}$ t to be a problem]	Add tense, agreement (to main verb)

c. Summarize results:

expect:

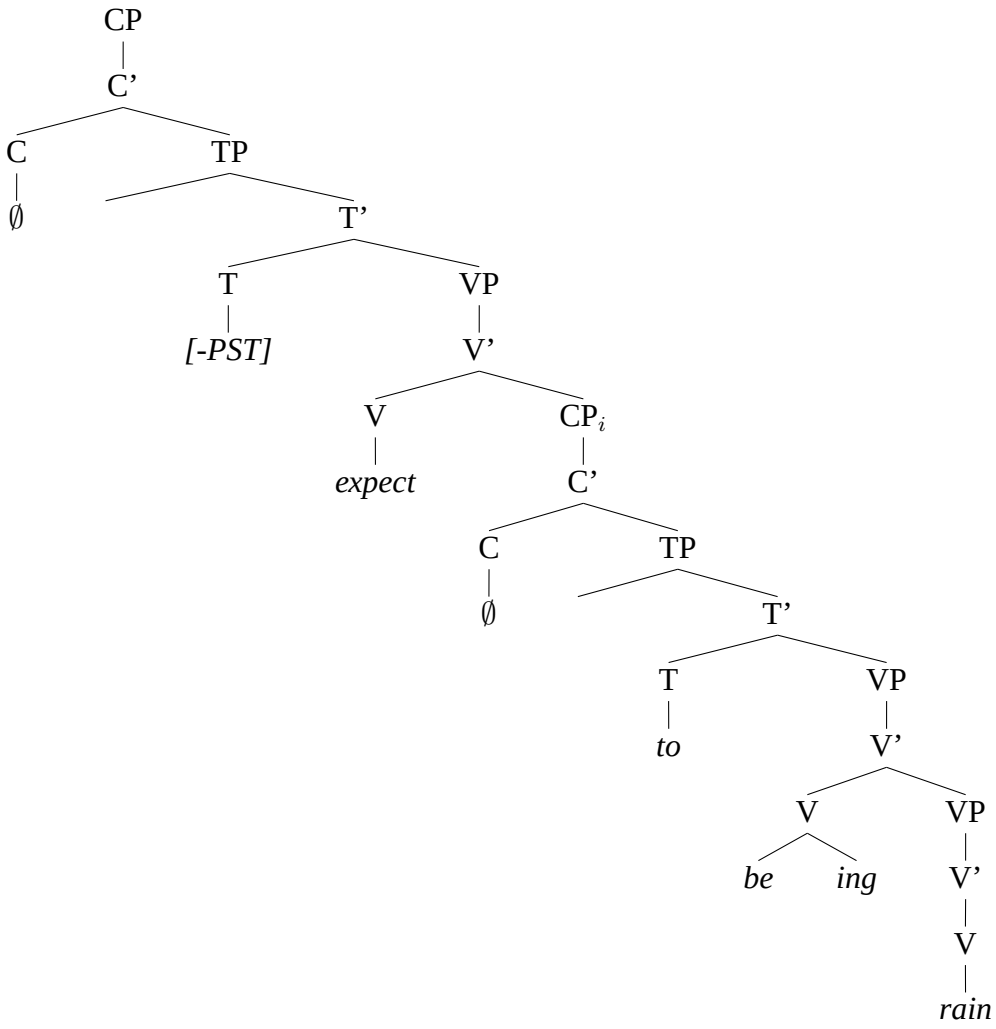
Control type: Subject

Test	Result	Indicates
weather-it	Bad	SC
extraposition-it	Bad	SC
idiom chunk	Bad (idiomatic reading)	SC
There	Bad	SC

d. Write it up:

> The control type of *expect* is subject; therefore it is either an SC or an SSR verb. The following tests all uniformly indicate that it is an SC verb with two θ-roles, one for an experiencer, and one for a proposition.
>
> (3) a. * It expects to be raining.
> b. * The chips expect to be down.
> c. * It expects to be obvious that John is a fool.
> d. * There expects to be a problem.

1.3 What happened: There were two possible ways the grammar might have generated examples like (3a), with the kind of tree appropriate for an SSR verb or with the kind of tree appropriate for an SC verb. Consider the D-structure tree for the SSR derivation first:



Now consider the **correct** $\theta-$grids for this tree.

rain

expect

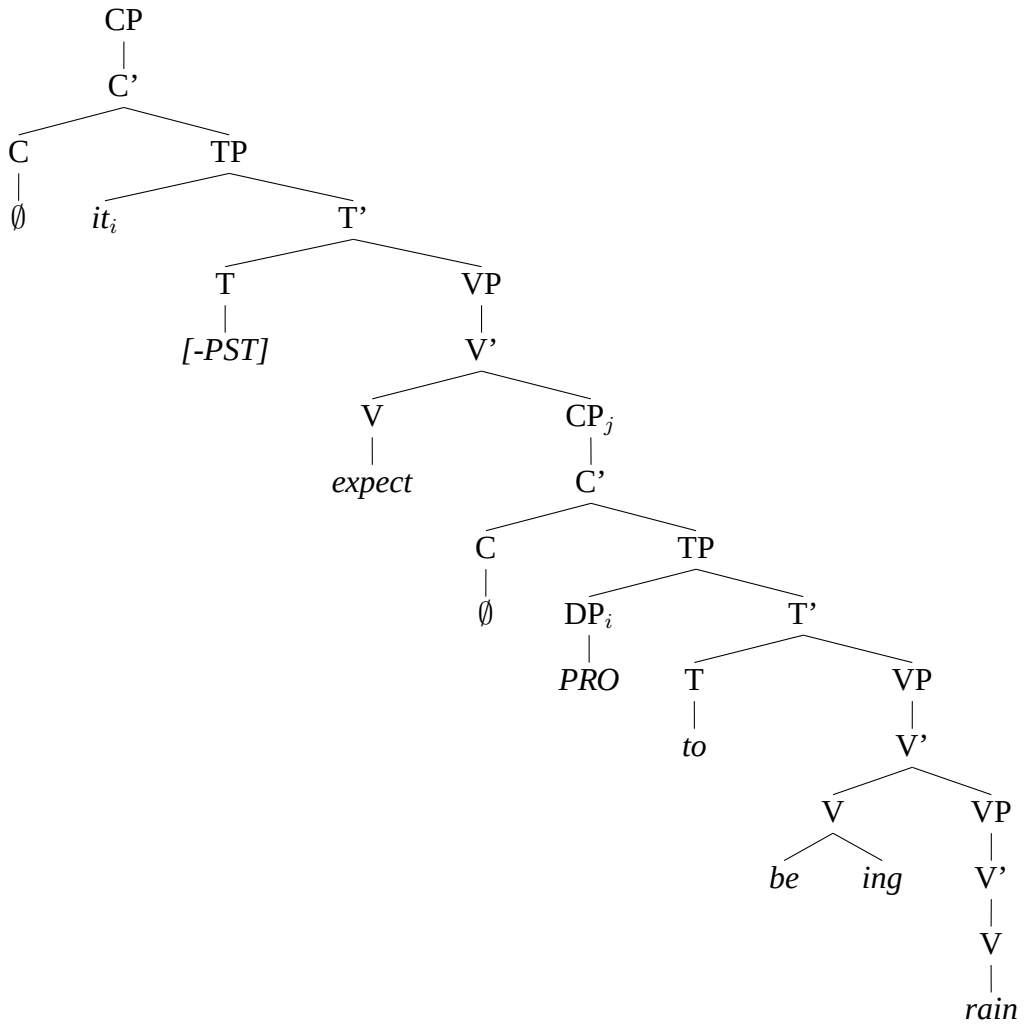
Experiencer	Proposition
	i

seem

Proposition
i

The grid for *rain* is fine. It wants no arguments and gets none. The grid for *expect* is a violation of the θ-criterion, however. There are two roles and only one argument. So this tree is eliminated at D-structure by the θ-criterion.

What about the SC tree? That should be better since, after all, we have decided *expect* is an SC verb.



Now consider the θ grids.

rain $\boxed{i}$

expect

Experiencer	Proposition
i	j

This time it is *rain* that is unhappy. It takes no arguments but it is getting one.

Notice that what is behind the problem is the **control requirement** of *expect* which requires that the subject of the main clause be co-indexed with the subject of the embedded clause, PRO. PRO must therefore receive a θ role.

2 Theta Criterion

2.1 There are three ways the criterion can be violated:

a. Too many arguments

b. Too few arguments

c. The wrong kind of argument

   i. Syntactically

   ii. Semantically

Evaluate this claim: the following sentence under the indicated coindexing, is a theta-criterion violation.

(4) **??** John$_i$ believes that he$_i$ is a genius.

Justification: One guy, John, has 2 theta roles. True or False?
False. Read theta-criterion (p. 225)

(5) a. Each argument is assigned one and only one theta role.
b. Each theta role is assigned to one and only one argument.

Restating (more explicitly)

(6) a. Each argument position of a predicate is assigned one and only one theta role.by the predicate
b. Each theta role of a predicate is assigned to one and only one argument of the predicate.

Observations:

2.1 The Theta-criterion does not preclude coreference between NP arguments, even between arguments in the same clause. But each NP must receive its own theta role from the predicate that it is an argument of. Thus NPs in separate clauses must receive tehta roles from separate predicates.

2.2 The theta criterion does preclude a predicate from assigning theta roles to NPs other than its OWN subject and complements. For example, a verb may not assign roles to NPs in another clause.

2.3 The theta criterion is not only about verbs. It is about ANY head and its complements and/or subject.

(7) a. * The book of poetry of prose
b. * John is fond of Mary of Sue.

We have claimed that complements cannot in general be repeated. Our formal theoretical explanation for this is now the theta-criterion.

(8) a. The theta criterion is not only about NPs It is about ANY complements and/or subject.
b. John thinks [$_{CP}$ that Mary is a genius.]

$_{CP}$ That Mary is a genius is obvious.

Both the subject and object CPs in (1) and (2) require propositional roles from their respective predicates, according to the theta criterion.

(9) There is an exemption for subject position. Roleless expletives occur in subject position, inserted between D-structure, where the theta-criterion applies, and the surface, where the Extended Projection Principle applies.

(10) a. It is obvious that Mary is a genius.
b. * That Mary is a genius is obvious that John is a genius.
c. That he married Mary proves that John is a genius.

Because it is inserted late, the expletive *it* is exempted from the theta criterion. Neither CP *that Mary is a genius* in (2) can be inserted late, so the Theta-criterion still applies.

Thus CPs can occur with predicates that assign appropriate propositional roles. (10b) is a theta-criterion violation because there are two CPs, neither of which can function as roleless expletive, and *obvious* has only one proposition role to assign. In contrast (10c) incurs no violation because *prove* has two distinct propositional roles.

2.4 Prepositional phrase complements. Roles are assigned to directly to the "referents" of DP/NPs and CPs. In contrast, with PP complements, roles are assigned to the objects of the preposition:

(11) a. John gave the book to Mary.

2.5 Optionality. The theta criterion requires to posit separate lexical entries in those quite common cases where a complement is optional:

(12) a. John ate the apple.
b. John ate

2.6 Unless there is a second lexical entry for *eat* in which the theme role is missing, the second sentence would have to be a theta criterion vioation.

Contrast EPP (p. 229)

(13) Extended Projection Principle (EPP)
All clauses must have subjects (i.e., the specifier of TP must be filled by a DP or a CP)

3 Minimal Link Condition

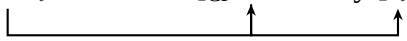
A moved constituent must move to the nearest site appropriate for its type.

Movement of some β can target some position α of type δ if and only if

(i) α C-commands β.
(ii) There is no γ, also of type δ, suhc that α c-commands γ and γ c-commands β.
(iii) $delta$ is defined as
(a) A head is β = a head
(b) The specifier of TP if β = a DP with an unchecked [NOM].
(c) The complement of V if V = a DP with an unchecked [ACC]

(d) The specifier of CP is β = a *wh*-phrase with an uncheked [+ WH] feature.

(14) [* Mark$_i$ seems that [$_{CP}$ it is likely [t_i to have left]



(15) [* Who$_i$ did you wonder [$_{CP}$ what$_j$ [t_i kissed t_j]