

Dynamics of Focus in Dialogue

1. Puzzles
2. Dynamic Syntax
3. Focus re-uses Context
4. Three Forms of Focus
5. Focus and Contrastive Topic: Korean
6. Conclusion

Preliminary Questions

- What is focus? Is it a syntactic term or a phonological term?
- Why do we use focus?
- How do we *generate* focus?
- How do we *parse* focus?

Alternative Semantics

(1)

[[John introduced Bill to [Sue]_F]^f

= the SET of propositions of the form
“John introduced Bill to x.”

(Rooth 1996)

Problem of Multiple Focus Specifications

(2)A: What did you eat at breakfast?

B1: I ate CEREAL.

I ate {cereal, bread} *alternative set*

B2: I ate CEREAL, CRUNCHY NUT.

{???

multiple alternatives hard to define

Multiple Focus cont.

(3)

A: What did you eat at breakfast?

B1: Bagel, coffee and yogurt.

B2: BAGEL, coffee and yogurt.

B3: Bagel, COFFEE and YOGURT. *2 foci*

B4: Bagel, coffee and YOGURT.

B5: BAGEL, COFFEE and YOGURT. *3 foci*

Problem of GIVENness

(4) A: Did you eat cereal?

B1: YES, crunchy nut.

B2: Yes, CRUNCHY NUT.

- Schwarzchild's GIVENness constraint:
un-F marked constituents to be given.

Shifting of Focus

Focus is changed from speaker to hearer.

(5) A: **Who** hit John?

B: (no) **JOHN** hit **BILL**.

Focus as given

(6) A: Yesterday John saw TOSCA.

B: TOSCA?

A: Yeah, TOSCA.

B: TOSCA?

A: Yeah, TOSCA!

Focus as a revision

(7)

- A: John gave an opera ticket to MARY.
B1: (No) MARY to JOHN. *correction*
B2: (In fact) TOSCA. *updating*
B3: (and) BILL to SUE. *Re-use of structure*

Our Tasks

- To explain “unexpected” focus structure
- To show how focus re-uses partial structure and how speaker and hearer interacts in this process

Dynamic Syntax (Kempson et al. 2001)

- GOAL-directed grammar formalism
- Tree growth PROCESS from left-to right
- Structural underspecification

John upset Mary

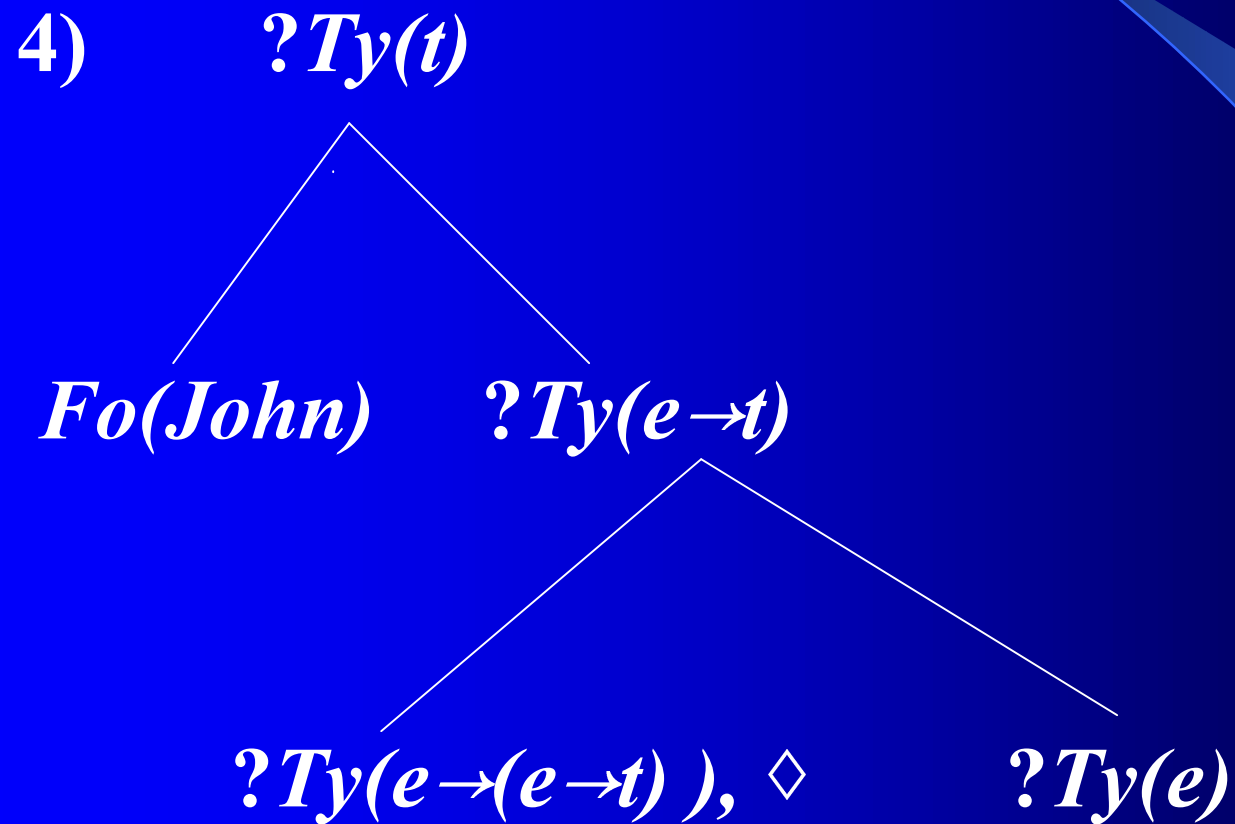
1) $?Ty(t), \diamond$ 2) $?Ty(t)$

$?Ty(e), \diamond$ $?Ty(e \rightarrow t)$

3) $?Ty(t)$

$Fo(John)$ $?Ty(e \rightarrow t) \diamond$

John upset Mary



John upset Mary

5) *PAST*: ?*Ty*(*t*)

Fo(*John*)

?*Ty*(*e*→*t*)

Fo(*Upset*)

?*Ty*(*e*), ◻

John upset Mary

6) *PAST*: ?*Ty*(*t*)

Fo(*John*)

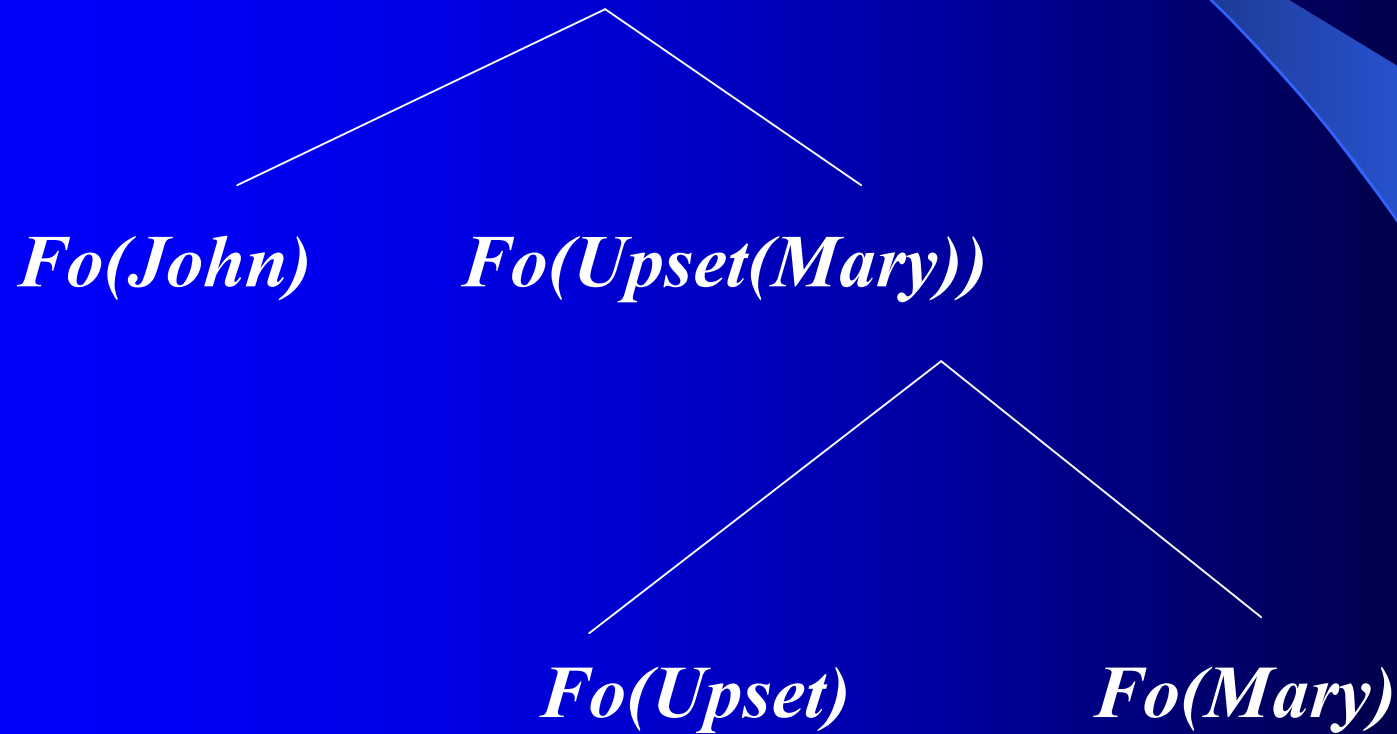
?*Ty*(*e*→*t*), ◊

Fo(*Upset*)

Fo(*Mary*)

John upset Mary

7) $Fo(PAST: Upset(Mary)(John))$, \diamond



Focus re-uses context

(8) A: What did John eat?

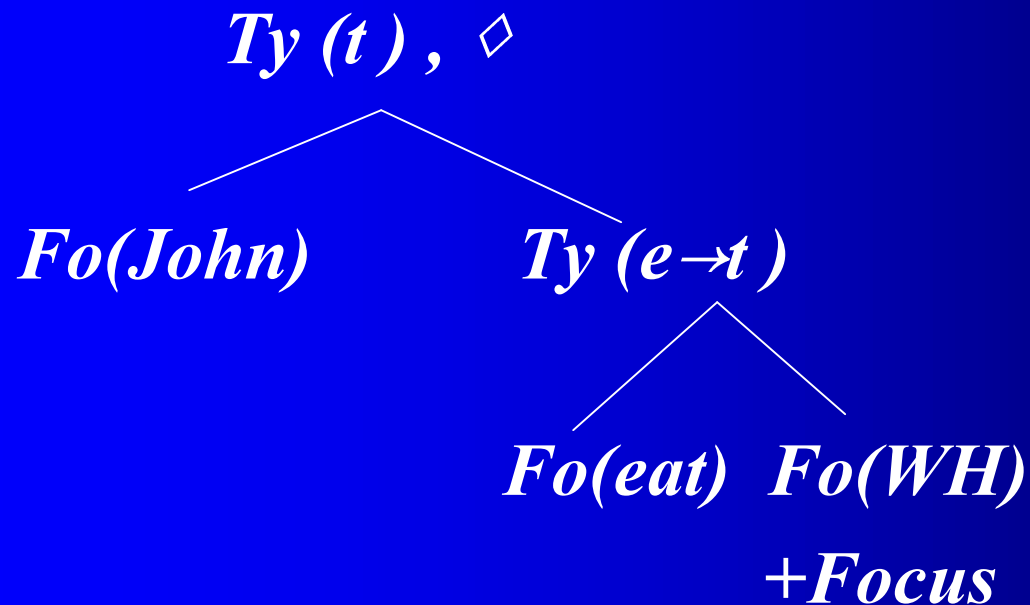
B: Bagel, coffee and yogurt.

A: And apple?

(9) A: Who hit John?

B: JOHN hit BILL.

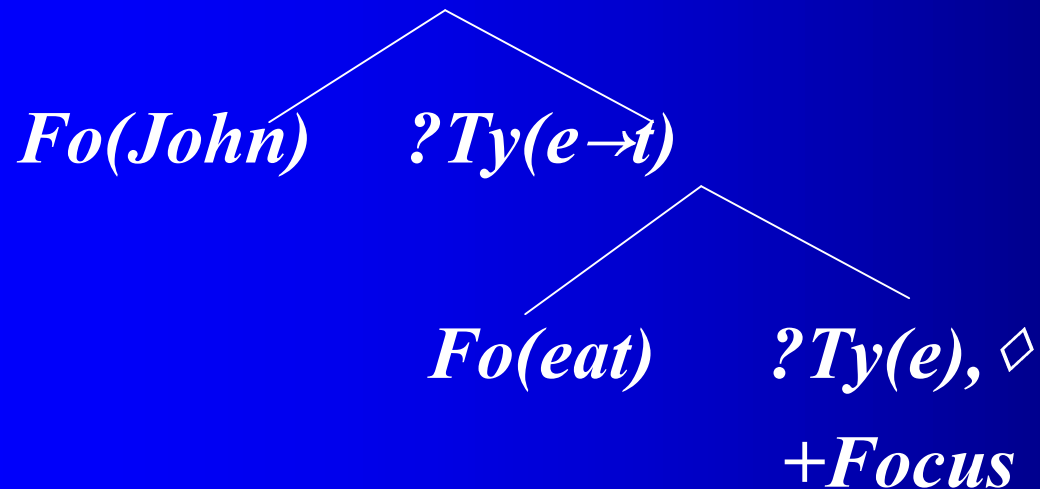
What did John eat?



Speaker(questioner) provides a source tree

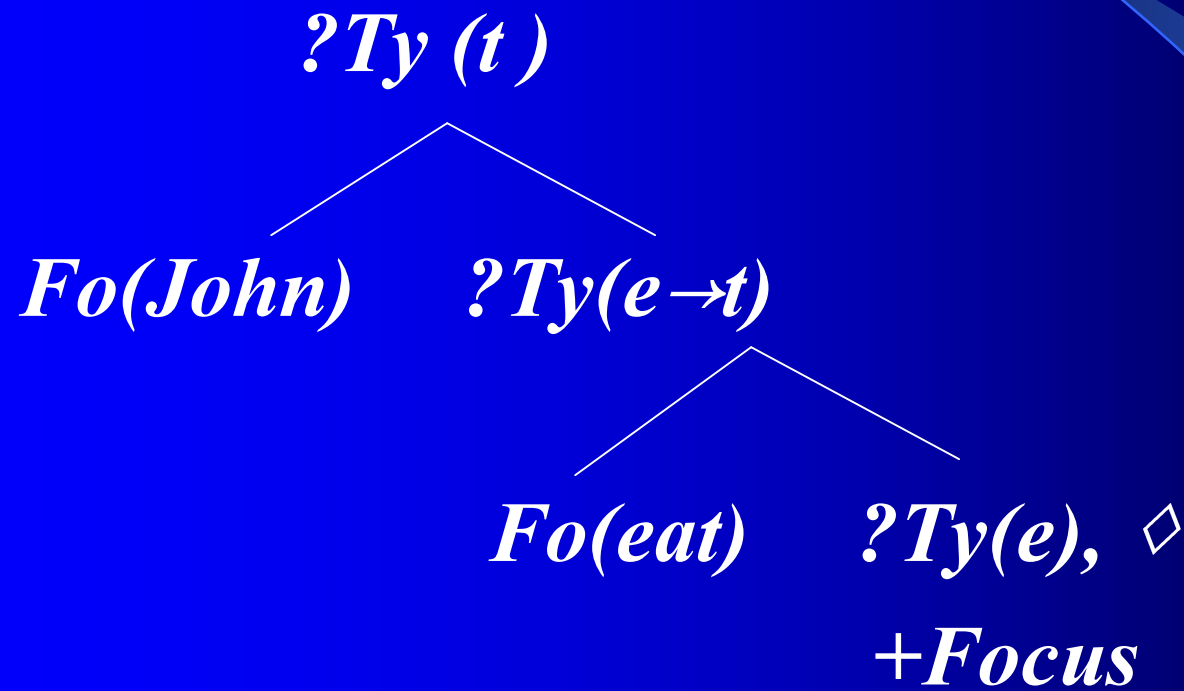
What did John eat?
Bagel, coffee and yogurt.

?Ty (t)



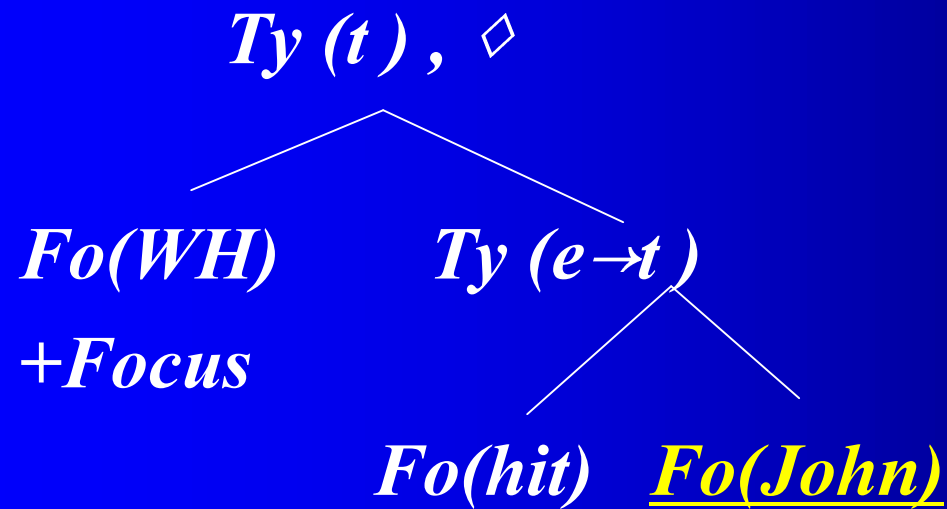
Hearer(replier) abstracts from speaker's tree

What did John eat?
Bagel, coffee and yogurt.
And apple?



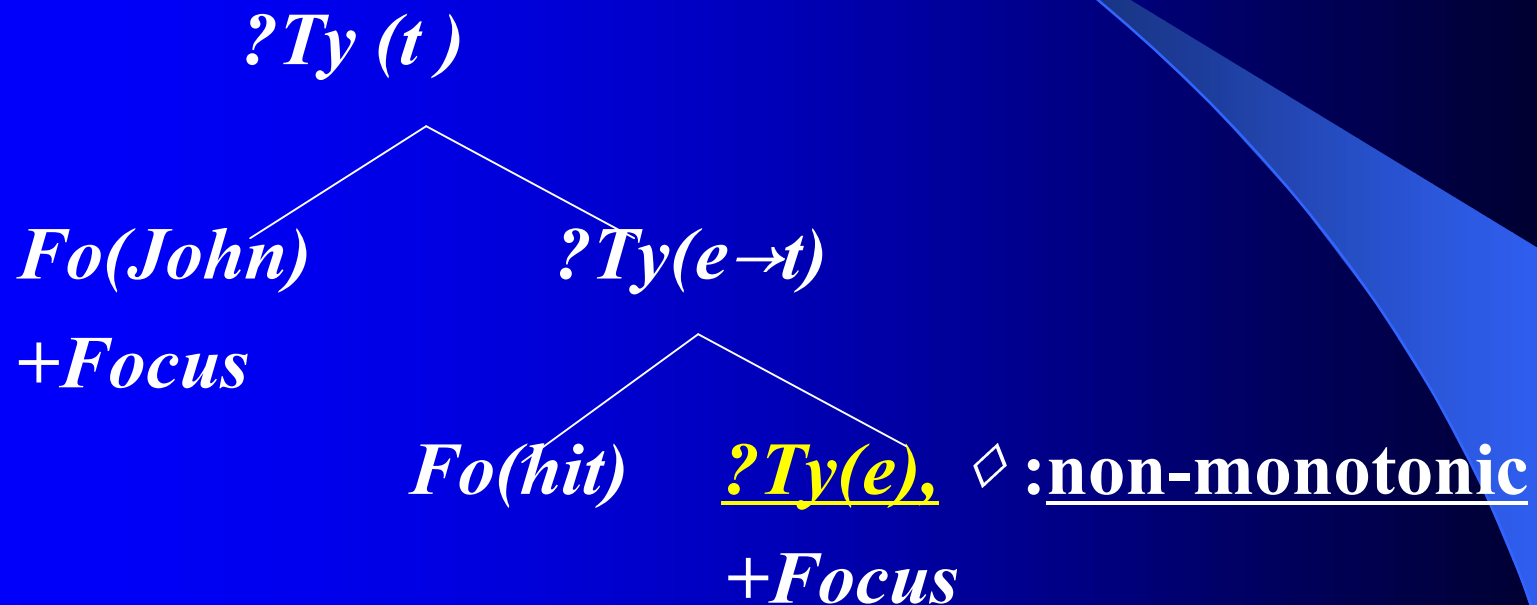
Questioner re-uses replier's tree.

Who hit John?



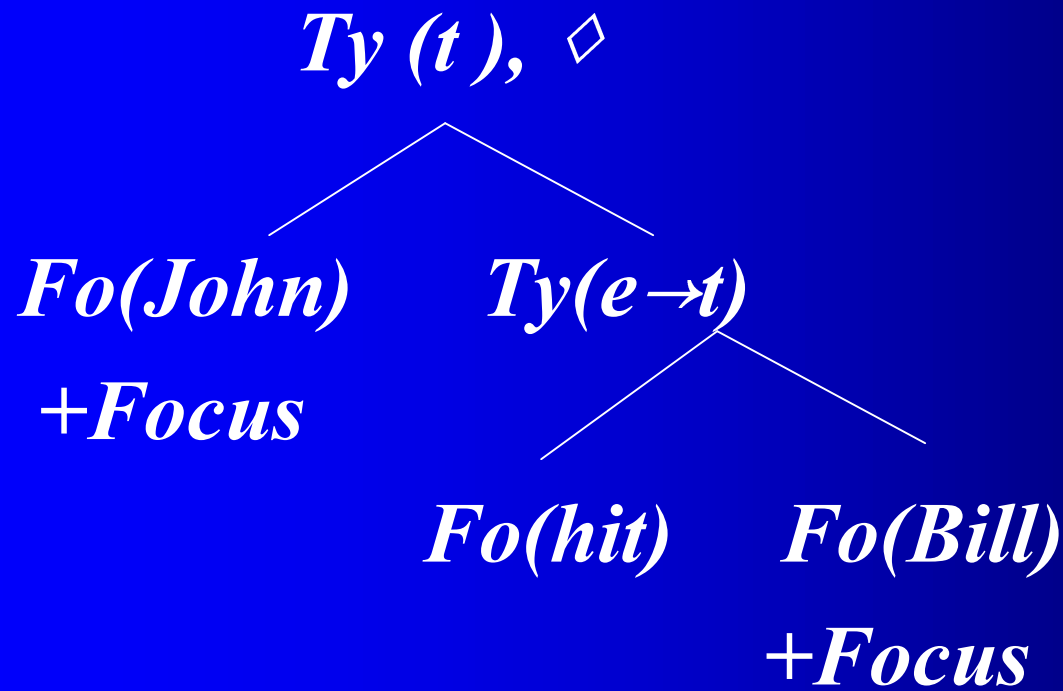
Question provides a source tree

Who hit John? JOHN hit BILL.



Replier plans reply to questioner's tree by abstraction.

Who hit John?
JOHN hit BILL.



Interpreting the reply

Completion of focus

(10) Ruth: What shall I give...

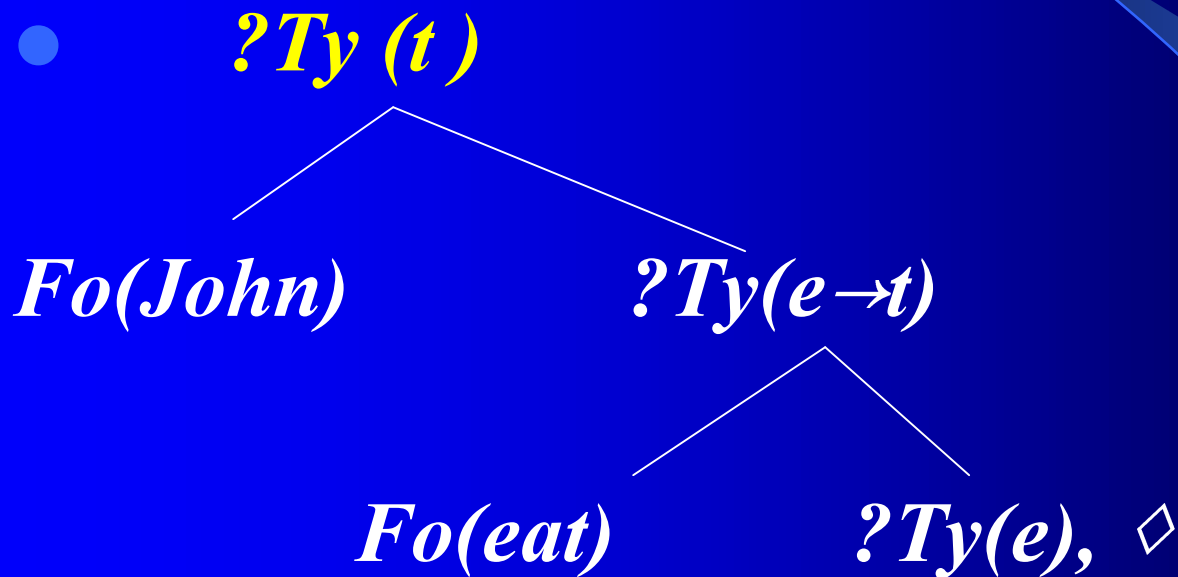
Alex: Eliot? You? A music box.

(Kempson 2002 *FFL*)

(11) Jieun: This morning John ate ...

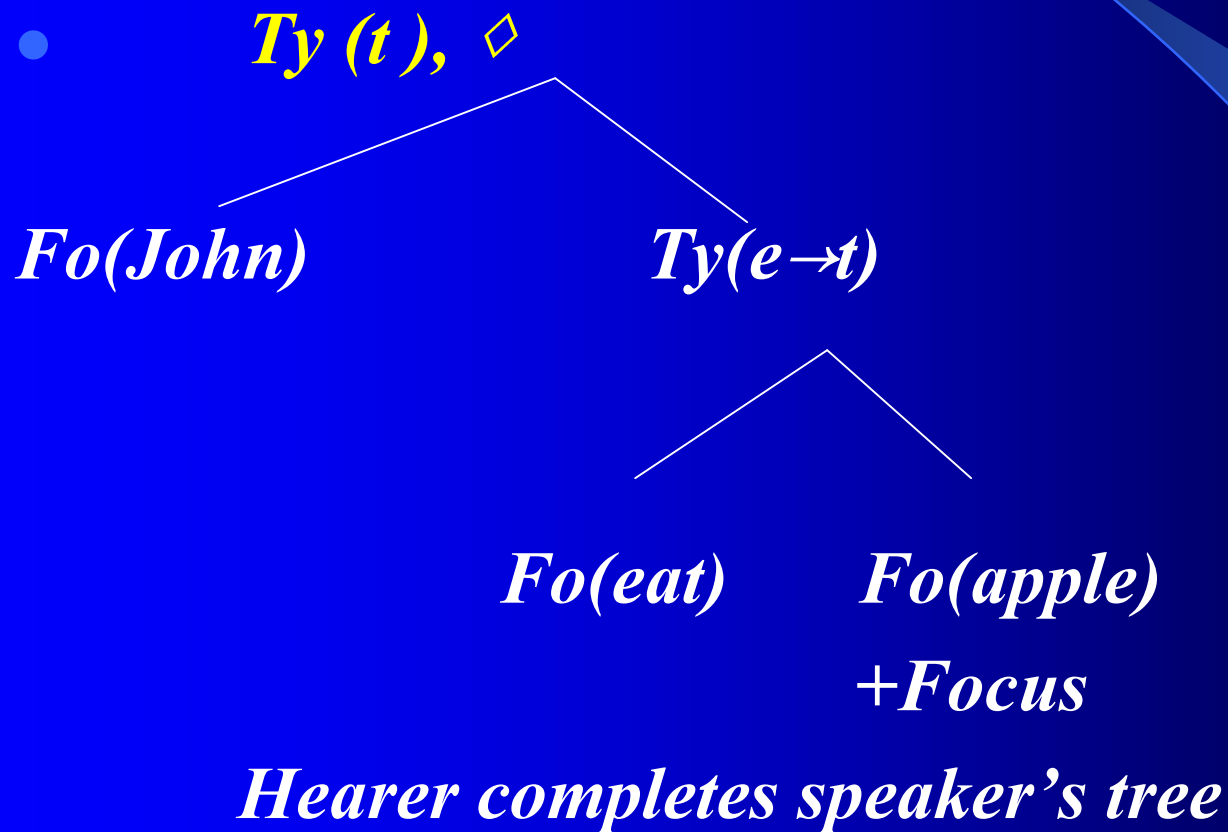
Ian: an APPLE.

Jieun: This morning John ate...



Speaker provides an “incomplete” tree

Jieun: This morning John ate...
Ian: an APPLE.



The analysis

Alternative options for focus:

- 1) copy the given structure *eg* ellipsis
- 2) replace term by requirement *eg* unexpected focus; non-monotonic
- 3) build a new focus structure *eg* cleft, question

Three forms of focus: Korean

(12)

Paro MINA-ka po-n kess-un Jina ita
ADV Mina SUBJ see-REL thing TOP Jina DEC
'The one who Mina saw was JINA.'

"Jina" is syntactically focused by clefting,

"Mina" is lexically focused by *paro* and also phonologically stressed by stress.

Focus and Contrastive Topic

(13)

A: Who came to the party yesterday?

B1: John(focus) came.

B2: John(CT) came.

Multiple focus vs. multiple contrastive topics: Korean

(14)

a. HANKKUK-i WORLDCUP-eyse SPAIN-ul ikiesse

Korea SUBJ world cup at/in Spain OBJ beat
'KOREA beat SPAIN in the WORLD CUP.'

b. ?? HANKKUK-un WORLDCUP-eyse-nun SPAIN-un

Korea CT world cup at/in CT Spain CT
lki-ess-e

beat-PAST DEC

'KOREA beat SPAIN in the WORLD CUP.'

Focus in interpreting ellipsis

(15) Ruth: *MINA ka wasse*. [focus]

Mina SUBJ came

‘Mina came.’

Sue : *Jina to*.

Jina too

‘Jina came, too.’

Contrastive Topic in interpreting ellipsis

(16) Jieun: *Mina nun wasse.* [CT]

Mina CT came

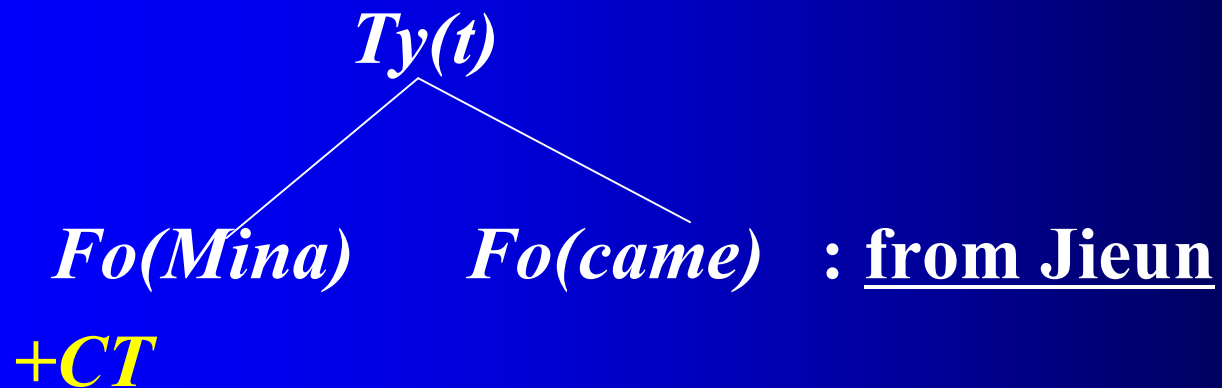
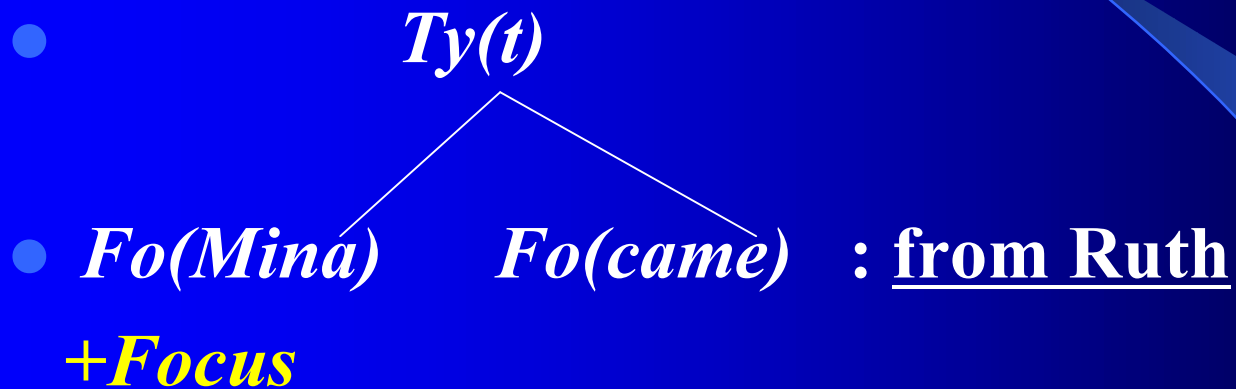
‘Mina came.’

Sue : *Jina to.*

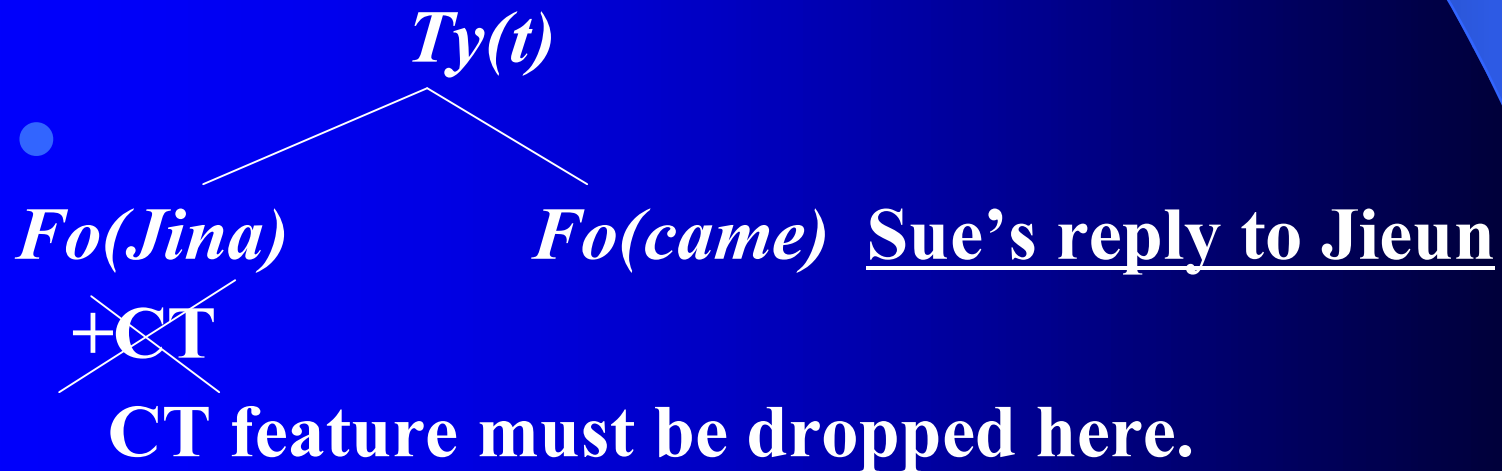
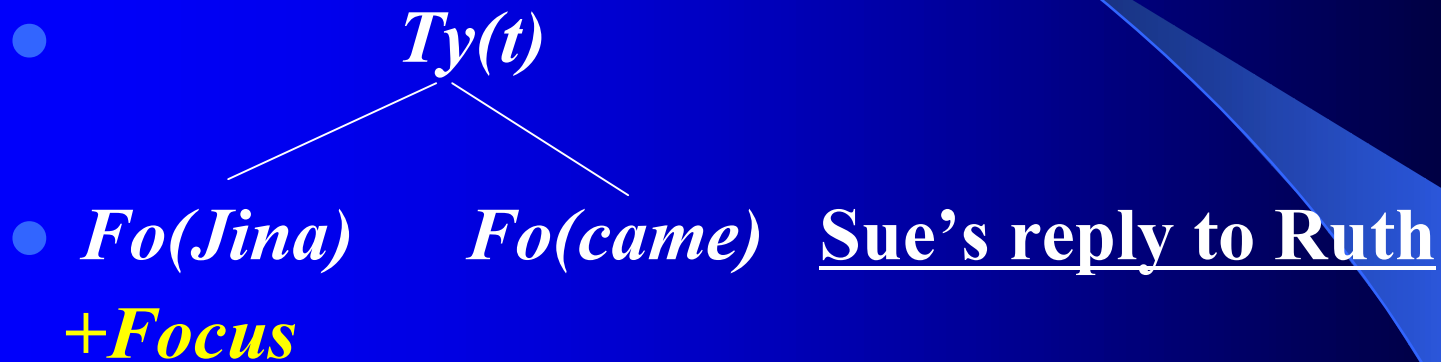
Jina too

‘Jina came, too.’

Source tree



Hearer's tree



Conclusion

- Focus structure reflects an on-going interaction between speaker and hearer.
- Focus is a device of revision and needs partial context at each step.
- Dynamic Syntax captures non-monotonic nature of focus, which was hard to explain in alternative semantics by reverse tree growth in abstraction.