LING 696G
Computational Linguistics Seminar

Lecture 3
2/15/04
Administrivia

• New location for class
  – Douglass 102 (Conference Room)
Case Theory

• Examples taken from (Lasnik & Uriagereka, 1988)

• 1.4.1 Configurations of Case Assignment
  – (17) John is likely [ t to be here ]
  – (18) It is likely [ that John is here ]
  – (19) *It is likely [John to be here ]
Case Filter

- Configurations of Case Assignment:
  - Subjects of finite clauses: nominative Case
  - Direct objects of verbs: accusative Case
  - Objects of prepositions: oblique Case

- Case Filter:
  - (20) At S-structure, every lexical NP needs Case
PAPPI Implementation

• Case Filter:

  - caseFilter in_all_configurations X where lexicalNP(X) then assignedCase(X).

  - assignedCase(X) :- X has_feature case(C), assigned(C).

  - lexicalNP(X) :- cat(X,np), \+ ec(X).
Case Theory

• 1.4.2 Exceptional Case Marking
  – (21) I am eager for John to be here
  – (22) *I am eager John to be here
  – (23) I am eager e to be here
  – Complementizer for is an Exceptional Case Marker (ECM)
Case Theory

• Another configuration of ECM:
  – (24) a. I believe John to be here
  – (24) b. I believe John is here
  – (25) *I believe sincerely John to be here
  – (27) a. I sincerely believe John
  – (27) b. *I believe sincerely John
  – Verb believe is an Exceptional Case Marker
  – S-bar deletion takes place for (24a)
Theta Criterion

• 1.5.1 Classes of Clausal Complements
  – (30) a. I wanted it to rain
  – (30) b. *I persuaded it to rain
  – (30) c. I wanted the bus to arrive on time
  – (30) d. *I persuaded the bus to arrive on time
  – Lexical difference:
    • Verb want selects for state of affairs/event
    • Verb persuade selects for target and event
  – Expletive it cannot take a theta role
  – (31) I persuaded John that he should leave
Theta Criterion

1.5.1 *Classes of Clausal Complements*

- (33) a. I tried to leave
- (33) b. *I tried John to leave
- (33) c. *I tried it to rain
- (33) d. *I tried the bus to leave
- Verb *try* takes a sentential complement only

- Compare with *believe*, which also takes a sentential complement only:
  - (34) a. I believe John to be here
  - (34) b. I believe that John is here
  - (34) c. I believe John to be a pathological liar

- Difference is that *believe* is an Exceptional Case Marker (ECM) and *try* isn’t
Case Theory

• Verb *want* is an optional Exceptional Case Marker:
  – (35) a. I want *e* to be clever
  – (35) b. *I believe *e* to be clever
  – Verb believe is an obligatory Case marker
Passivization

• 1.5.2 Exceptional Passivization
  – (36) a. John was persuaded to leave
  – (36) b. John was believed to be clever
  – (36) c. *John was wanted to leave
  – (36a) is an example of “core” passivization, involving the direct object
  – (36b) is an example of exceptional passivization, involving the embedded subject
Raising and ECM

– (37) a. John is likely to park here
– (37) b. *John is illegal to park here
– (38) a. *It is likely for John to park here
– (38) b. It is illegal for John to park here

• PAPPI lexicon:
  – lex(likely,a,[grid([],[proposition]),ecm(oblig),no Casemark(+)]).
  – lex(illegal,a,[grid([],[proposition]),noCasemark(+)]).
Exceptional Passivization

– (39) a. *I believe for John to be here
– (39) b. John is believed to be here
– (39) c. ?I want for John to be here
– (39) d. John is wanted to be here
– (40)*John was tried [t to win the race]
Interaction of Theta and Case Theory

– (41) a. John is likely to win
– (41) b. *e is likely John to win
  • (D-structure)
– (41) c. It is likely that John will win
– (41) d. *It is likely John to win
  • (Raising forced by Case)
Simple Passivization

1.5.3 Passive

- (42) John was arrested
- (43) *They arrested
- (44) a. e was arrested (D-structure)
- (44) b. John was arrested \( t \)
- (45) *It was arrested John
- (46) They arrested John
- (47) *It arrested John
- (48) John was arrested by the police
Simple Passivization

• Differences between active and passive verbs:
  – Passive verbs lose their ability to assign Case to their direct objects
  – The subject theta-role may be omitted for passives
Exceptional Passivization

• Passive verbs lose the ability to exceptionally Case mark as well:
  – (49) a. I believe John to be intelligent
  – (49) b. *It was believed John to be intelligent
  – (49) c. John was believed to be intelligent