

Event Semantics

e – event

$\exists e$ – there exists and event

$(\exists e)$ [verb-ing(e) & subject(e, X) & object(e, Y) & culminate (e, before now)]

↑ ↑ ↑ ↑ ↑

Default Verb Subject Object Tense

There exists and event, e, such that e is a verb-ing and the subject of e is X and the object of e is Y and the culmination of e is before now.

Note: tense will be omitted from our discussion for now.

Example: Brutus stabbed Caesar.

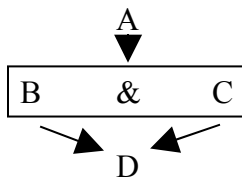
$(\exists e)$ [stabbing(e) & subject(e, Brutus) & object(e, Caesar)]

There exists and event, e, such that e is a stabbing and the subject of e is Brutus and the object of e is Caesar.

Evidence in support of Event Theory

1. Entailments

- A. Brutus stabbed Caesar in the back with a knife.
- B. Brutus stabbed Caesar in the back.
- C. Brutus stabbed Caesar with a knife.
- D. Brutus stabbed Caesar.



- A'. $(\exists e)$ [stabbing(e) & subject(e, Brutus) & object(e, Caesar) & in(e, the back) & with(e, a knife)]
- B'. $(\exists e)$ [stabbing(e) & subject(e, Brutus) & object(e, Caesar) & in(e, the back)]
- C'. $(\exists e)$ [stabbing(e) & subject(e, Brutus) & object(e, Caesar) & with(e, a knife)]
- D'. $(\exists e)$ [stabbing(e) & subject(e, Brutus) & object(e, Caesar)]

2. That-clauses

- A. Sentence with a transitive verb
 - i. Jill ate a hotdog.

- 1. $(\exists e)$ [eating(e) & subject(e, Jill) & object(e, hotdog)]

B. Sentence with a that-clause

i. Mary saw that Jill ate a hotdog.

1. $(\exists e)$ [seeing(e) & subject(e, Mary) & $(\exists e')$ [eating(e') & subject(e', Jill) & object(e', hotdog) & object(e, e')]]
2. There exists an event, e, such that e is a seeing and the subject of e is Mary and there exists a second event, e', such that e' is an eating and the subject of e' is Jill and the object of e' is a hotdog and the object of e is e'.

C. Subtle distinction captured by event semantics (symbolized with that-clause structure)

i. John saw Mary run.

1. $(\exists e)$ [seeing(e) & subject(e, John) & $(\exists e')$ [running(e') & subject(e', Mary) & object(e, e')]]

ii. John felt Mary shuffle her feet.

1. $(\exists e)$ [feeling(e) & subject(e, John) & $(\exists e')$ [shuffling(e') & subject(e', Mary) & object(e', her feet) & object(e, e')]]

- iii. (i) can be described as “John saw Mary and Mary was running,” but (ii) cannot be described as “John felt Mary and Mary shuffled her feet.”

3. Implicit vs. Explicit

A. Explicit (nominal-gerund)

- i. After the winning of the game, the team cried.
- ii. $(\exists e)$ [crying(e) & subject(e, the team) & after(e, WG)]
 1. WG – the winning of the game

B. Implicit

- i. After the game was won, the team cried.
- ii. $(\exists e)$ [crying(e) & subject(e, the team) & $(\exists e')$ [winning(e') & object(e', the game) & after(e, e')]]

4. Quantifiers

A. Every time you exercise, you sweat.

- i. $(\forall e)$ [exercising(e) & subject(e, you) \rightarrow $(\exists e')$ [sweating(e') & subject(e', you) & in(e, e')]]