Verbs and theta roles
Roadmap for today

- Valence – number of arguments in a clause
- Semantic roles & argument structure
- Verb subclasses
D: An argument is a participant in an action and is not optional.

- The verb determines the number of arguments in the sentence.
- The verb determines the phrase type (DP, PP, CP) of its arguments.
- Each argument plays a role in the sentence. This is often called a theta or semantic role.
There are different types of verbs

Intransitive/1 place predicate
1. Spock rarely smiles.
2. Spock smiles rarely.
3. Kirk is thinking.
4. Kirk is thinking in his chair.

- Valency
There are different types of verbs

Transitive/2 place predicate

5. The crew is wearing [DP spacesuits].
6. Kirk decided [CP that the crew should wear spacesuits].

7. The hero heard [CP that the villain laughed maniacally].
8. The hero heard [DP the villain’s maniacal laughter].

• Valency
There are different types of verbs

• Di-transitive/3 place predicate

Kirk put \([_{DP} \text{ the phaser}] \ [_{PP} \text{ on the table}]\). Kirk gave \([_{DP} \text{ Spock}] \ [_{DP} \text{ a phaser}]\).

• Valency
Theta roles

Agent – an argument that is conscious, active with volition, and performs an action that has a physical, visible effect.

Force – entity that instigates an action, but not consciously or voluntarily.

Experiencer – entity that receives a sensory impression. Neither controls nor is visibly affected by an action.

Theme – a participant that moves, or is the locus of an action or property that does not undergo a change.

Instrument – something that causes an action indirectly

Recipient – the typically animate destination of some moving object.

Goal – the end point of physical movement

Proposition – theta role assigned to phrases (CPs) that express something true or false.

Patient – the argument that undergoes a visible, physical change in state.

Beneficiary – someone for whose benefit an event took place.

Location – place where the action occurs.
  • Semantic roles
Argument structure

Kirk gave [a phaser] [to Spock].
- DP subject: Kirk
- DP object: a phaser
- PP indirect object: to Spock

Kirk saw [Spock] [in the shuttle bay].
- DP subject: Kirk
- DP object: Spock
- PP indirect object: in the shuttle bay

Semantic roles
- agent
- theme
- recipient
Subclasses of verbs

- States
- Processes
- Motion
- Position
- Actions
- Action-processes
- Factivies
- Cognition
- Sensation
- Emotion
- Utterance
- Manipulation

Verbs in the subclasses behave differently syntactically and take different theta roles