

Argument structure

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Argument structure

Three lexical prefabs are especially frequent:

- Whole sentences (e.g. *How are you*)
- Complex NPs/PPs (e.g. *a waste of time*)
- Verb-plus-NP/PP combinations:

- (1) ride the train
- (2) talk about something
- (3) take something into account
- (4) be in charge of something
- (5) drive someone crazy

Argument structure

What does the term argument structure mean?

In linguistics, an **argument** is an expression that helps complete the meaning of a predicate, Most predicates take one, two, or three arguments. A predicate and its arguments form a *predicate-argument structure*. The discussion of predicates and arguments is associated most with (content) verbs and noun phrases (NPs), although other syntactic categories can also be construed as predicates and as arguments. Arguments must be distinguished from **adjuncts**.

[Wikipedia]

Syntax of argument structure

Syntax of argument structure:

- Intransitive: NP-V
- Transitive: NP-V-NP
- Ditransitive: NP-V-NP-NP/PP

- (1) Peter **is sleeping**.
- (2) Peter **kicked the ball**.
- (3) Peter **sent Mary a present**.

Argument vs. adjunct

- (1) Peter kicked the ball for fun.
- (2) Peter was running in the park.
- (3) Peter gave me the present after dinner.

Adjuncts are distinguished from prepositional objects:

- (4) Peter talked about his vacation.
- (5) Peter thought of Mary.
- (6) Peter began to cry.

Argument or adjunct?

- (7) Peter played **with the ball**.
- (8) Peter went **into the room**.
- (9) Peter put the book **on the table**.
- (10) Peter convinced me **of his plan**.

Argument vs. adjunct

Are sentences/verbs with prepositional objects transitive?

- (1) Peter was waiting **for Mary**.
- (2) Peter looked **after the dog**.
- (3) The book consists **of two chapters**.
- (4) This reminds me **of our trip to India**.

Can they be passivized?

- (5) ? Mary was waited for (by Peter).
- (6) ? The dog was looked after (by Peter).
- (7) *Two chapters were consisted of (by the book).
- (8) *Our trip to India was reminded of (by me).

Can NP objects always be passivized?

- (9) Peter has two cars.
- (10) Peter likes bananas.
- (11) *Two cars are had (by Peter).
- (12) *Bananas are liked (by Peter).

Argument vs. adjunct

- (1) The police officer noticed that Mary left.
- (2) The president announced that there will be no tax increase.
- (3) Bill claimed that this is a mistake.
- (4) We suspect that John will win the game.

Are sentences/verbs with sentential objects transitive?

Can they be passivized?

- (5) That Mary left was noticed (by the police officer).
- (6) That there will be no tax increase was announced by the President.
- (7) That this is a mistake was claimed by Bill.
- (8) ?That John will win the game was suspected by us.

Thematic roles

The meaning of subject and object (and adjuncts) is verb-specific.
Different verbs take different 'thematic roles':

Intransitive verbs:

| | |
|--|-------------|
| (1) Jane was running in the park. | agent |
| (2) The pen fell down on the floor. | patient |
| (3) My father is working in the garden. | agent |
| (4) She has been sleeping the whole night. | experiencer |
| (5) John died last year. | patient |
| (6) The bomb exploded at noon. | patient |

- **Unergative:** Intransitive verbs with agentive subjects (e.g. run)
- **Unaccusative:** Intransitive verbs with patient-like subject (e.g. fall down)

Thematic roles

Transitive verbs:

| | | |
|----------------------------------|-------------|----------|
| (1) Peter hit the ball. | agent | patient |
| (2) John wrote a poem. | agent | patient? |
| (3) I like bananas. | experiencer | theme |
| (4) Bill owns a red sports car. | owner? | theme |
| (5) I didn't see him. | experiencer | theme |
| (6) This key will open the door. | instrument | Patient? |

- Transitive verbs occur with a wide range of thematic roles

Thematic roles

Ditransitive verbs:

| | | | |
|-----|--------------------------------|-------------|-------|
| (1) | She sent me a letter. | recipient | theme |
| (2) | I gave her my keys. | recipient | theme |
| (3) | She baked me a cake. | beneficiary | theme |
| (4) | I consider him a jerk. | theme | theme |
| (5) | Jane interprets this as irony. | theme | theme |
| (6) | They provided us with food. | beneficiary | theme |

- The ,indirect object' is recipient or goal
- The ,direct object' is theme

Thematic roles

- | | | |
|-----|--|-------------|
| (1) | ' David cooked the soup.' | Agent |
| (2) | 'The sun melted the ice .' | Patient |
| (3) | a. 'Peter gave Mary the ball .' b. 'Peter likes bananas ' | Theme |
| (4) | a. ' Kevin is ill.' b. ' Mary saw the smoke.' | Experiencer |
| (5) | a. 'They cleaned the wound with a sponge .' b. 'They signed the treaty with the same pen .' | Instrument |
| (6) | a. 'Robert filled in the form for his mother .' b. 'They baked me a cake.' | Beneficiary |

Thematic roles

- | | | |
|------|--|-----------|
| (7) | a. 'He sold me this wreck.' | Recipient |
| | b. 'He left his fortune to the church .' | |
| (8) | a. 'The monster was hiding under the bed .' | Location |
| | b. ' London is in England.' | |
| (9) | a. 'Sheila handed her license to the policeman .' | Goal |
| | b. 'Pat told her a joke.' | |
| (10) | a. 'The plane came back from London .' | Source |
| | b. 'We got the idea from a French magazine .' | |

Linking

The theta-hierarchy

- | | | |
|-----|--|------------|
| (1) | ' Ursula broke the ice with a pickaxe.' | Agent |
| (2) | ' The pickaxe broke the ice.' | Instrument |
| (3) | ' The ice broke.' | Patient |

agent > instrument/experiencer > theme > source/goal/location > patient

- | | | |
|-----|--------------------------|---------------------|
| (1) | Peter hit the ball. | AG – PA |
| (2) | The key opened the door. | INST – LOC |
| (3) | Peter saw Mary. | EXPERIENCER – THEME |

Linking

Passive

- (1) 'Peter threw the ball.
- (2) The ball was thrown by Peter.

Prototypical transitivity

A prototypical transitive scene is a scene in which an actor performs a goal-directed activity involving an object or another person that is affected by the actor's activity, e.g. *hitting, kicking, punching*.



Hypothesis: The prototypical transitive scene is of central significance to language and cognition: It plays a key role in the organization of grammar and in language acquisition (cf. Slobin 1996)

Hopper and Thompson 1980

Hopper and Thompson 1980

Hypotheses:

- Transitivity is a property of clauses (or constructions, rather than of verbs).
- The notion of transitivity can be decomposed into a set of more specific semantic features.
- Transitivity is a gradient concept.

Hopper and Thompson 1980

| | Highly transitivity | Low transitivity |
|-----------------------|-----------------------|--------------------|
| A. Participants | 2 | 1 |
| B. Kinesis | action | non-action |
| C. Aspect | telic | atelic |
| D. Punctuality | punctual | non-punctual |
| E. Volitionality | volitional | non-volitional |
| F. Agency | A high in potency | A low in potency |
| G. Affectedness of O | O highly affected | O not affected |
| H. Individuation of O | O highly individuated | O not individuated |

Hopper and Thompson 1980

Participants

- (1) Peter kicked the ball.
- (2) Peter is running in the park.

Transitive events involve two participants by definition.

Hopper and Thompson 1980

Kinesis

- (1) Peter kicked the ball.
- (2) Peter sat on the bench.

The amount of physical movement involved in the activity described by the verb.

Hopper and Thompson 1980

Aspect

- (1) The company manufactured this machine.
- (2) The company is manufacturing machines.

Transitive activities can be telic or ongoing/durative.

Hopper and Thompson 1980

Punctuality

- (1) Peter kicked the ball.
- (2) Peter was growing tomatoes on his farm.

Transitive activities can be punctual or non-punctual.

Hopper and Thompson 1980

Volitionality

- (1) Peter kicked the ball.
- (2) Peter forgot the ball (at home).

Transitive activities can be intentional/volitional or non-intentional/non-volitional.

Hopper and Thompson 1980

Agency

- (1) Peter kicked the ball.
- (2) Peter bumped into Paul.

A car can be a metaphorical agent (*the car hit the truck*), but cars are not volitional.

Hopper and Thompson 1980

Affectedness of O

- (1) Peter kicked the ball.
- (2) Peter saw the ball.

Affected objects are patients, non-affected objects are themes.

Hopper and Thompson 1980

Individuation of O

- (1) On Friday I cleaned this car.
- (2) When I was younger I cleaned cars for a living.

Transitive activities can be directed towards a single object or towards a group of objects.

Hopper and Thompson 1980

Hopper and Thompson: The marking of transitivity varies across languages.

Many languages use a particular structural device to mark prototypical transitive activities, e.g.

- A particular case markers
- A particular word order: agent-verb-patient
- A particular affix on the verb

(1) Peter hilft dem Mann.

(2) Mir gefällt das Bild.

Two-participant clauses that are highly transitivity exhibit all the features that are characteristic of transitive clauses in a particular language, but two-participant clauses that are low on the transitivity scale often lack these features (e.g. dative subjects and dative objects in German)

Thompson and Hopper 2001

Thompson and Hopper 2001

Thompson and Hopper: Conversational discourse is low in transitivity.

Participants

| | Total | Percentage |
|------------------|-------|------------|
| Two participants | 121 | 27% |
| One participant | 325 | 73% |

Thompson and Hopper 2001

| | High | Low |
|---------|------|-----|
| Kinesis | 17 | 104 |

- (1) Peter kicked the ball.
- (2) Peter was the car.

Thompson and Hopper 2001

| | High | Low |
|-------------------|------|-----|
| Kinesis | 17 | 104 |
| Aspect (telicity) | 17 | 104 |

- (1) she brought that up
- (2) he needed something.

Thompson and Hopper 2001

| | High | Low |
|-------------------|------|-----|
| Kinesis | 17 | 104 |
| Aspect (telicity) | 17 | 104 |
| Punctuality | 3 | 118 |

- (1) shut your eyeballs
- (2) it sounds like that

Thompson and Hopper 2001

| | High | Low |
|-------------------|------|-----|
| Kinesis | 17 | 104 |
| Aspect (telicity) | 17 | 104 |
| Punctuality | 3 | 118 |
| Affectedness of O | 20 | 101 |

- (1) close the door
- (2) they know each other

Thompson and Hopper 2001

| | High | Low |
|--------------------|------|-----|
| Kinesis | 17 | 104 |
| Aspect (telicity) | 17 | 104 |
| Punctuality | 3 | 118 |
| Affectedness of O | 20 | 101 |
| Individuation of O | 55 | 66 |

Thompson and Hopper 2001

| | High | Low |
|--------------------|------|-----|
| Kinesis | 17 | 104 |
| Aspect (telicity) | 17 | 104 |
| Punctuality | 3 | 118 |
| Affectedness of O | 20 | 101 |
| Individuation of O | 55 | 66 |
| Volitionality of A | 60 | 60 |

Thompson and Hopper 2001

| | High | Low |
|--------------------|------|-----|
| Kinesis | 17 | 104 |
| Aspect (telicity) | 17 | 104 |
| Punctuality | 3 | 118 |
| Affectedness of O | 20 | 101 |
| Individuation of O | 55 | 66 |
| Volitionality of A | 60 | 60 |
| Agency of A | 117 | 4 |

Thompson and Hopper 2001

- (1) I'll **have fun**
- (2) they uh just **had a gig** at Starbucks
- (3) your clues **make no sense**
- (4) I need to **get sleep** over the weekend
- (5) Scott's **making some good bucks**
- (6) we gotta **get a picture**
- (7) which is all we **have time for**
- (8) **wait a minute**

Many two-participant clauses are „V-O compounds“:

Thompson and Hopper 2001

- (1) we all want to **play with** them
- (2) she has **fit into** the mold
- (3) **get on** it
- (4) it **sounds like** that
- (5) does it **look like** that

Many two-participant clauses include phrasal verbs:

Thompson and Hopper 2001

- (1) **I guess** we are.
- (2) **I think** this is right.
- (3) **Remember** I was talking to him.
- (4) **I dunno** if it's worked.
- (5) **I don't see** how French over the phone could be workable.
- (6) **I don't think** this is gonna work.

Many transitive clauses consist of a non-referential matrix clause and an object clause that is not really embedded in the matrix clause:

Thompson and Hopper 2001

Conclusion:

A very large portion of clauses that are formally transitive, i.e. that consist of two or more obligatory constituents (i.e. NP, PP, S), include fixed or semi-lexicalized expressions. These expressions tend to be low on the transitivity scale. This is not the reason why conversational discourse does not include more reference to prototypical transitive scenes—that's a matter of content—but the occurrence of prefabs is important to understand the mismatch between syntactic transitivity on the one hand and semantic transitivity on the other. It is true that two-participant clauses are quite frequent, but many of these clauses are fixed or semi-lexicalized expressions, which tend to be low in transitivity.