
Thanks to Michael Mulyar

Context: Thematic Roles

- Thematic relations (Gruber 1965, Jackendoff 1972)
- Traditional thematic roles types include: Agent, Patient, Goal, Source, Theme, Experiencer, Instrument (p. 548).
- "Argument-Indexing View": thematic roles objects at syntax-semantics interface, determining a syntactic derivation or the linking relations.

Problems with Thematic Role Types

- Thematic role types used in many syntactic generalizations, e.g. involving empirical thematic role hierarchies. Are thematic roles syntactic universals (or e.g. constructionally defined)?
- Relevance of role types to syntactic description needs motivation, e.g. in describing transitivity.
- Thematic roles lack independent semantic motivation.
- Apparent counter-examples to θ-criterion (Jackendoff 1987).
- Encoding semantic features (Cruse 1973) may not be relevant to syntax.

Problems with Thematic Role Types

- Fragmentation: Cruse (1973) subdivides Agent into four types.
- Ambiguity: Andrews (1985) is Extent, an adjunct or a core argument?
- Symmetric stative predicates: e.g. “This is similar to that”. Distinct roles or not?
- Searching for a Generalization: What is a Thematic Role?
Proto-Roles

- Event-dependent Proto-roles introduced
- Prototypes based on shared entailments
- Grammatical relations such as subject related to observed (empirical) classification of participants
- Typology of grammatical relations
- Proto-Agent
- Proto-Patient

Proto-Agent

- Properties
  - Volitional involvement in event or state
  - Sentience (and/or perception)
  - Causing an event or change of state in another participant
  - Movement (relative to position of another participant)
  - (exists independently of event named) *may be discourse pragmatic

Proto-Patient

- Properties:
  - Undergoes change of state
  - Incremental theme
  - Causally affected by another participant
  - Stationary relative to movement of another participant
  - (does not exist independently of the event, or at all) *may be discourse pragmatic

Argument Selection Principle

- For 2 or 3 place predicates
- Based on empirical count (total of entailments for each role).
- Greatest number of Proto-Agent entailments \( \rightarrow \) Subject; greatest number of Proto-Patient entailments \( \rightarrow \) Direct Object.
- Alternation predicted if number of entailments for each role similar (nondiscreteness).
Worked Example: Psychological Predicates

Examples:
- Experiencer Subject: x likes y
- Stimulus Subject: y pleases x
- x fears y
- y frightens x

Describes “almost the same” relation
- Experiencer: sentient (P-Agent)
- Stimulus: causes emotional reaction (P-Agent)

Number of proto-entailments same; but for stimulus subject verbs, experiencer also undergoes change of state (P-Patient) and is therefore lexicalized as the patient.

Symmetric Stative Predicates

Examples:
- This one and that one rhyme / intersect / are similar.
- This rhymes with / intersects with / is similar to that.

(cf. The drunk embraced the lamppost. / *The drunk and the lamppost embraced.)

Symmetric Predicates: Generalizing via Proto-Roles

- Conjoined predicate subject has Proto-Agent entailments which two-place predicate relation lacks (i.e. for object of two-place predicate).
- Generalization entirely reducible to proto-roles.
- Strong cognitive evidence for proto-roles: would be difficult to deduce lexically, but easy via knowledge of proto-roles.

Diathesis Alternations

Alternations:
- Spray / Load
- Hit / Break

Non-alternating:
- Swat / Dash
- Fill / Cover
Spray / Load Alternation

Example:
Mary loaded the hay onto the truck.
Mary loaded the truck with hay.

Mary sprayed the paint onto the wall.
Mary sprayed the wall with paint.

- Analyzed via proto-roles, not e.g. as a theme / location alternation.
- Direct object analyzed as an Incremental Theme, i.e. either of two non-subject arguments qualifies as incremental theme. This accounts for alternating behavior.

Hit / Break Alternation

John hit the fence with a stick.
John hit the stick against a fence.

John broke the fence with a stick.
John broke the stick against the fence.

- Radical change in meaning associated with break but not hit.
- Explained via proto-roles (change of state for direct object with break class).

Swat doesn’t alternate…

swat the boy with a stick
*swat the stick at / against the boy

- Dowty suggests subtle semantic reasons for why these verbs do not alternate in terms of type of effect on patient.
- Hit alternation explained via relative significance of movement to participants.
- Are there semantic differences between types of direct objects, e.g. between effector and affected type arguments in diathesis alternations, necessitating a different syntactic analysis?

Fill / Cover

Fill / Cover are non-alternating:
Bill filled the tank (with water).
*Bill filled water (into the tank).

Bill covered the ground (with a tarpaulin).
*Bill covered a tarpaulin (over the ground).

- Only goal lexicalizes as incremental theme (direct object).
Unaccusativity

- Proto-roles give an elegant non-derivational description of unaccusativity.
- Unaccusatives select a P-Patient.
- Cognitive reasons for the Proto-Role Hypothesis.

Conclusion

- Dowty argues for Proto-Roles based on linguistic and cognitive observations.
- Three main areas of analysis: symmetric predicates, diathesis alternations, unaccusativity
- Objections: Are P-roles empirical (hit class)? Are P-roles event dependent (possibly in need of revision, e.g. something like p-patients named by event vs. p-patients defined by event)?