

9. Systematic Semantic Contrasts in Multiple Argument Configurations

The most interesting data for the proto-role argument selection hypothesis, whose implications may go well beyond argument selection itself, comes from three cases of verbs that have two different possible argument configurations, correlating with a systematic semantic contrast that can be related to the argument selection hypothesis which has just been presented.

4.1 Partially Symmetric Interactive Predicates.

In the early days of transformational grammar, people supposed that (39) and (40) were transformational variants of the same deep structure (Gleitman 1969, Lakoff & Peters 1969): note that they seem to be synonymous (i.e. truth-conditionally so, ignoring differences in discourse function):

- | | | |
|------|-----------------------|---------------|
| (39) | This one and that one | rhyme |
| | | intersect |
| | | are similar |
| | | are alike |
| | | are equal |
| | | are different |
| (40) | This rhymes with | that |
| | intersects with | |
| | is similar to | |
| | etc. | |
| | is different from | |

And this analysis was at first assumed to extend to cases like *John and Mary agreed* vs. *John agreed with Mary*, and, implicitly, *John and Mary kissed* vs. *John kissed Mary*.¹ These might not seem any less plausible than the cases above at first, but then Chomsky called attention to the example (41)²:

¹ I infer this from the absence of any mention of the agentivity problem in Gleitman (1965) or Lakoff and Peters (1969). Without comment, Gleitman mentions *collide* and *separate*, and Lakoff and Peters mention *agree*, verbs that, while not in the *kiss*-class, exhibit a similar asymmetry problem, as described below.

² The example is attributed to Chomsky (personal communication) by Quang (1970:33).

- (41) a. The drunk embraced the lamppost.
 b. #The drunk and the lamppost embraced.

The oddness in (41b) is of course that it implies that the lamppost somehow took part in the act of embracing. Once we see this, it suddenly becomes quite apparent that *John and Mary kissed* is not really synonymous with *John kissed Mary* either: the same asymmetry in who is responsible for the action appears there too (though I think it is interesting that, in my experience, people do not usually notice this fact until one points out (41) to them). It was soon discovered that this difference in agency was found with a whole set of verbs which Fillmore once called verbs of *partially symmetric human interaction* (Fillmore 1966, Quang 1970, Dowty 1972, 1979):

- (42) Kim and Sandy hugged
 embraced
 kissed
 made love
 fucked³
 talked
 disagreed (?)
 shook hands (?)

- (43) Kim hugged Sandy
 embraced
 kissed
 made love to
 fucked
 talked to
 disagreed with (?)
 shook hands with (?)

Now although the symmetrical examples in (39) and (40) are all stative, it should not be assumed that all agentive, NON-stative verbs do have the asymmetry: for example those in (44) are agentive, but there is no (truth-conditional) asymmetry in agency between the sentences in (44a) and their counterparts in (44b) above.

³ Special semantic properties of this verb and its synonyms have been examined in a celebrated study by Quang (1970).

- (44) a. Kim and Sandy married
 played chess
 debated
 discussed the matter
- b. Kim married⁴ Sandy
 played chess with
 debated
 discussed the matter with

The relationship among the three classes seems to be as follows. Marrying, playing chess, debating and other such activities (e.g. *fighting*) are actions that by their nature require the volitional involvement of two parties: one can't understand the essential nature of these actions without knowing that. By the same token, volition is irrelevant to whether the stative relations in (39)-(40) obtain. The relations in (42)-(43) denote actions that differ from both in that most of their criterial properties by which they are recognized are symmetrical with respect to the two participants (e.g. being in a certain kind of body position with respect to the other), yet the relation may involve volition on the part of either one or of both parties, without the language, as it were, feeling the need for "independent" (more neutrally, "unrelated") lexemes to distinguish such subcases.

As volition is a P-Agent entailment, all three of these patterns are syntactically consistent with the selection principle: if volition is entailed at all, it is entailed for the subject argument; there is no verb that entails volition for object but not subject, (nor, as far as I can tell, one that entails that at least one of the participants is volitionally involved but does not indicate which, either in the transitive or the collective intransitive form). And---though this claim is perhaps harder to verify---it seems that every verb describing a kind of relation that COULD sensibly be understood as volitional for either one or both participants but is otherwise symmetrical in meaning DOES exhibit this alternation.

A different situation is presented by (45):

- (45) a. The truck collided with the lamppost.
 b. (#) The truck and the lamppost collided.

(45b) might seem like a bizarre sentence but in fact would be perfectly natural to describe a situation where a new lamppost was being carried to the top of a hill, came loose from its moorings, rolled down the hill, and intersected the path of a

⁴ The relevant reading here is the one in which Kim is a marriage partner, not the official who performs the ceremony.

moving truck at the bottom. Thus the difference here is that (45a) entails only that the truck was in motion in the event of collision, while (45b) entails that both the truck and the lamppost were, though the nature of the event is otherwise similar, e.g. entailing forceful impact between the two and suggesting damage to one or both. The pattern is like (42)-(43), but the entailment that distinguishes subject from object of an otherwise symmetric predicate is not volition, or any standard concomitant of traditional Agency, but rather motion. (Note that neither truck nor lamppost is being "personified" here, as would be the case, for contrast, in the agency-imputing "active *be*" that occurs with adjectives, as in #*The truck is being dangerous*, #*The lamppost is being collision-prone*.) Further examples are:

- (46) a. The ship passed the lighthouse in the night.
 The snake separated from its skin.
 The ivy gradually intertwined with the trellis.
- b. (#) The ship and the lighthouse passed in the night.
 (#) The snake and its skin separated.
 (#) The ivy and the trellis gradually intertwined.

Therefore, one cannot try to analyze this relationship in (45)-(46), as did Quang (1970) and Dowty (1972, 1979 ch. 2) for examples in (43), by postulating an abstract operator DO of "Agency" that takes scope over both NPs in the (a) sentence of only one in the (b) sentence: this would get the semantics of (46) wrong. Nor does any one traditional thematic role unite these two cases, as the subjects of the second group are presumably Themes, not Agents.

If there IS a single linguistic generalization that covers both examples like (43) and ones like (45)-(46), then it seems that only something like a Proto-role hypothesis can provide: though there are not necessarily any differences between the entailments of a collective-subject predicate (i.e. with conjoined NP or plural NP as subject) and the two-place lexically identical version of the same predicate (cf. (41), (44)), if there is a difference it will apparently be that the collective subject version has some Proto-Agent entailment for both (all) the subject-denotations that the two-place version lacks for its object-denotation.⁵

⁵ Note incidentally that it is not necessarily the case that a collective-subject predicate must always entail exactly the same thing about all the members of its subject-denotation. For example, *The students in my class voted to adopt the proposal* (an example due to William Ladusaw, cf. Dowty 1986) entails that at least 51% of the individual students cast votes for the proposal but does not say how the other 49% might have voted or indicate which were the affirmative voters. Thus it seems conceivable that *John and Mary kissed* might have meant only that at least one of the two was volitionally responsible for the kissing event. But no verb of this class has such a meaning, as far as I know. Similarly, it is not the case that literally every collective-subject verb entailing motion entails that all members of the subject denotation must move: *All the students gathered in the*

The systematicity of these patterns, combined with their subtlety, raises the question whether the etiology of this phenomenon is slightly deeper than a range of diverse lexical items conforming to a universal lexicalization tendency. To put it in terms of the learning of lexical meanings, do speakers of English really learn the semantic difference between the (a) versus (b) patterns of a dozen or more verbs like (39)-(40) individually, by observing the semantic difference between uses of the two forms for each of a dozen or so verbs, and similarly for a group of motion verbs like those in (45)-(46)? Or does the Proto-Role alignment principle play an active, causal role in this learning: that is, when confronted with a predicate denoting a kind of event that sensibly CAN be understood as either symmetrically or asymmetrically volitional (or motional), does the learner AUTOMATICALLY assume that the collective-subject version is symmetrically volitional (or motional), the two-place version asymmetrically volitional, without requiring any specific empirical data to that effect (and similarly for symmetrically and asymmetrically motional)? If so, then the Proto-roles and their alignment principle would be functioning as a kind of "semantic default" for the learning of lexical meaning. We will return to such this question in section §11.

hall after the class ended, for example, could be true if some of the students were already in the hall before class ended and simply stayed in place, while the rest came there, and *The crowd dispersed* is true when enough individuals have left that the people remaining no longer constitute a crowd. Therefore, to try to explain away the generalization by saying the child learns these cases by assuming there is a lexical rule deriving a collective intransitive verb V_2 from a homophonous transitive V_1 , such that *A and B V₂* means the same as *A V₁ B and B V₁ A*, and all collective intransitives of this class involve this rule, is to beg the deeper question why the child should not instead assume a rule giving *A and B V₂* the slightly weaker meaning *One of A and B V₁ the other*.

