The event structure of ‘symmetric predicates’

Florian Haas
Freie Universität Berlin
Institut für Englische Philologie
florian.haas@fu-berlin.de

1. Symmetry as a logical notion (e.g. Partee et al. 1993: 40-41)
   (1) “If (aRb) then (bRa)”
   (2) Given a set A and a binary relation R in A, R is symmetric if and only if
       for every ordered pair <x,y> in R, the pair <y,x> is also in R.

2. Classifying verbs as ‘symmetric’
   The definition in (1) has been taken over to the classification of verbs, taking
   the interchangeability of arguments in the transitive realization of
   meet, for instance, as criterial (cf. e.g. Dimitriadis 2008):
   (3) a. John and Mary met.
       b. John met Mary.
       c. Mary met John.
   (4) a. “There can be no event of John meeting Mary without Mary meeting
       John at the same time.” (Dimitriadis 2008: 329)
       b. “A predicate is [...] symmetric if (a) it expresses a binary relationship,
          but (b) its two arguments have necessarily identical participation
          in any event described by the predicate.” (Dimitriadis 2008: 329)

3. Problems with the traditional definition
   (i) Exchanging arguments in those clauses involving symmetric predicates
       where the participants are realized by separate arguments is rarely
       meaning-preserving.
   (ii) The intransitive realization of symmetric predicates often involves a
        meaning shift that is not compatible with the bidirectional construal
        of symmetry in (4).

3.1 Exchanging arguments does not preserve sentence meaning.
   (5) a. The truck collided with the lamppost.
       b. *The lamppost collided with the truck.
       c. *The truck and the lamppost collided.
   (6) a. I gave the four of them a lift back from the party. Mary fought
       with Paul all the way home in the back of the car; it was awful.
       b. I gave the four of them a lift back from the party. Paul fought
       with Mary all the way home in the back of the car; it was awful.
   (7) a. John willingly agrees with Fred.
       b. Fred willingly agrees with John.
a. My sister resembles Madonna.
b. Madonna resembles my sister.

a. John is resembling Harry (more and more every week).
b. Harry is resembling John (more and more every week).

a. I met my father in the kitchen.
b. My father met me in the kitchen.

a. [...] the excitement that children show when they meet books [...] 
b. [...] the excitement that children show when books meet them [...] 

3.2 Meaning shifts between transitive and intransitive realization

- It is well-known that intransitive realizations, including verbs interacting with detransitivizing reflexive clitics, tend to differ in meaning from the non-intransitive realizations of these verbs (cf. the references above):
  
  **Turkish**
      one.one-ACC see -PAST-3PL
      ‘They saw each other’
b. Gör -üş -tü -ler.
      see -MM -PAST-3PL
      ‘They met.’ (Kemmer 1993: 110)

  **Swedish**
  (13) a. Göran och Pernilla ska se varandra.
      G. andP. will see each other
      ‘Göran and Pernilla will see each other.’
b. Göran och Pernilla ska se-s.
      G. andP. will see-MM
      ‘Göran and Pernilla will meet.’

  **German**
  (14) a. Sie haben einander gesehen.
      they have.PL one.another seen
      ‘They have seen one another.’
b. Sie haben sich gesehen.
      they have.PL MM seen
      ‘They have met.’

- The alternation at issue is also associated with meaning shifts in the case of ‘symmetric’ verbs, although in a more subtle way:

  (15) a. Madonna and Prince Charles kissed each other.
      b. Madonna and Britney Spears kissed.

- The truck and the lamppost collided.

- The excitement that can be seen when children and books meet.
2nd UK Postgraduate Conference in Cognitive Linguistics  
University of Brighton, Friday 8th August 2008

(20) a. I met John at the station. First, he didn’t see me.  

b. John and I met at the station. #First, he didn’t see me.

Interim conclusion: the exchange test (cf. §2) is an approximation to a satisfactory characterization of symmetric verbs, but it relies on a too coarse-grained view of meaning. The intransitive realization has a (collective) meaning component that is not accounted for in (1).

4. The meaning component of collectivity/joint action
   - Joint action prototypically involves simultaneous and coordinated individual actions. It includes mutual awareness and care about the status of the group effort as a whole.

4.1 Collectivity as a meaning component of reciprocal sentences
   - The collective meaning component is present to different degrees in reciprocal sentences in general (see Evans, in press), and especially in sentences with ‘symmetric’ verbs (see 3.2 above).

(21) a. My father met me in the kitchen.  
b. My father and I met in the kitchen.

4.2 Collective predicates and the bidirectional/reciprocal event type
Def.: A collective predicate is one that requires a plural argument; or a predicate that with a plural argument has an interpretation that is different from the interpretation that comes from universally quantifying over the parts of the plural argument.
(Brisson 2003: 144; see also Lasersohn 1990)

(22) The girls gathered in the hallway.  
(23) The children are a big group.  
(24) George and Sandra are a happy couple.


Kemmer (1997): “In the prototypical reciprocal situation (e.g. ‘hit each other’, ‘touched each other’), the energy input directly affects each participant. As such the level of affectedness is relatively high. In the [‘indirect bilateral’] type, on the other hand, the affectedness is indirect rather than direct. [...] The focus of such constructions is not on affectedness of the participants by the verbal action, but on mutual interaction. [...] Each participant must adjust his/her actions to a considerable extent to those of the partner, or the mutual activity designated cannot be said to take place. The sense of accompaniment in carrying out some overarching event is therefore considerably strengthened compared to the reciprocal.” (237)

(25) BIDIRECTIONAL > INDIRECT BILATERAL > COLLECTIVE

(26) Hypothesis 1: Allegedly ‘symmetric’ predicates (see the list in Levin 1993: 62-63, for instance) are situated on different points on the scale in (25), depending both on their argument realization (intransitive, transitive, or the prepositional type).
5. What does ‘necessarily identical participation’ mean?
Dowty (1987) proposes that the lexical representations of (collective) predicates provide ‘distributive subentailments’.
“The [A]lthough collective predicates like gather obviously do not distribute down to the individual members of the groups of which they are predicated in a literal way (The students gather doesn’t entail *Every student individually gathered), this doesn’t really mean that such predicates completely lack entailments about the individual members of their group subjects. [...] Thus gather distributively entails some property of the members of its group subject (each undergoing a change of location), but gathering itself can only be true of the group qua group.” (1987: 101)

5.1 Symmetric subentailments
The idea is to use the concept of subentailment as a way of making explicit the different degrees to which allegedly symmetric predicates require that the participants involved exhibit identical participation in the event.

- Symmetric subentailment = identical participation of participants with respect to a particular component of the event

(27) NO SYMM. SUBENT. > ONE SYMM. SUBENT. > ... > ONLY SYMM. SUBENT.

or simply: DEGREE OF IDENTICAL PARTICIPATION

(28) Hypothesis 2: Allegedly ‘symmetric’ predicates are situated on different points on the scale in (27), also depending on their argument realization.

Bringing the two scales together:

![Diagram of symmetric subentailments]

6. Conclusion
The class of ‘symmetric verbs’ is more heterogeneous than is suggested by a definition based on logical relations. The bidirectionality (i.e. the idea of two conceptually distinct events going in opposite directions) implied by such a definition becomes marginal with the intransitive realization of the relevant verbs, given that the intransitive construction typically construes the event as a collective activity. The transitive realization downplays bidirectionality in a different way, because it reduces the degree of identical participation. An attempt was made at capturing the heterogeneous meanings of ‘symmetric predicates’ with the help of a two-dimensional representation.
References


Polinsky, Maria (1996). Situation perspective: on the relations of thematic roles, discourse categories, and grammatical relations to Figure and Ground. In *Conceptual structure, discourse and language*, ed. Adele Goldberg, 401–419. CLSI Publications.

