This paper seeks to explain a previously unnoticed semantic phenomenon illustrated by the contrast between (1) *I am the oldest of my enemies*, which presupposes that the speaker is one of his or her own enemies, versus (2) *I am the oldest of my siblings*, which for most speakers does not presuppose that the speaker is his or her own sibling. I argue that the behavior of (2) is the result of temporarily enlarging the extension of the predicate (*sibling*) in order to meet an otherwise unsatisfiable presupposition. I propose that this temporary accommodation occurs only with lexical and complex predicates whose denotations are of a certain mathematical class that I call quasi-equivalence relations. I also briefly discuss a number of closely related construction types, and draw out the functional motivation for this unusual type of grammaticized accommodation.

9. Introduction

Interpretation clearly depends on context. Typically, context restricts the range of interpretation: thanks to context, ambiguity is resolved, reference is determined, and vagueness is constrained. This paper suggests that under certain very specific conditions, context can enlarge rather than restrict the extension of a predicate. The phenomenon in question is illustrated by the semantic contrast in (1):

(1) a. I am the oldest of my enemies.
   b. I am the oldest of my children.
   c. I am the oldest of my siblings.

(1a) entails (presupposes, actually — see the discussion below in section 2) that I am one of my own enemies. Similarly, (1b) presupposes that I am one of my own children, and therefore is infelicitous, or at best a contradiction (ignoring the possibility of time travel paradoxes). (1c) ought to be just like (1b): since I am no more my own sibling than I am my own child, we should naturally expect (1c) to also be infelicitous or contradictory. However, native speakers robustly judge (1c) to be significantly more acceptable than (1b), and capable of being true.¹

(1c) only makes sense if the speaker is considered to be one of the speaker’s siblings, so that the truth conditions of (1c) are equivalent to the truth conditions of the sentence *I am the oldest of my parents’ children*. However, unlike the entailment that I am my own enemy in (1a), uttering (1c) does not commit me to the claim that I am my own sibling. Somehow, the speaker of (1c) is exceptionally
allowed to temporarily count as their own sibling, just for the purposes of comparing ages, immediately after which the normal irreflexive meaning of siblinghood is restored. For the purposes of this paper, let’s call this a PRO TEMPORE reading, or less fancily, a temporary reading: something about the linguistic context provided by (1c) allows sibling to temporarily mean something different than it normally does.

Many authors have suggested that specific constructions can affect the interpretation of a predicate in context. For instance, Kadmon (1990:312) argues that some definite descriptions behave as if they contained descriptive content beyond what is overtly expressed. Building on Lewis’ 1979 notion of accommodation (discussed below in section 2), Kadmon allows for the semantic interpolation of additional restrictive material in order to satisfy the uniqueness presupposition associated with the use of a definite description. Thus in an appropriate context, a definite description like the man can give rise to truth conditions equivalent to the man I was talking to.

Like Kadmon, I will suggest that the pro tem reading of (1c) is a kind of accommodation triggered by a presupposition. The main difference that I would like to draw attention to between the pro tem accommodation discussed in this paper and the type of accommodation proposed by Kadmon and others is that here the pro tem reading results in an enlargement of the property rather than a restriction.

Thus the potential interest of the phenomenon illustrated in (1) is that it seems to be a highly unusual combination of a construction-specific, presupposition-triggered accommodation that results in enlargement of the extension of a predicate rather than restriction. Furthermore, as if in recognition of the unnaturality of predicate enlargement, unlike traditional accommodation, the effect of this type of accommodation is rescinded immediately after the superlative has been evaluated (i.e., the effect is temporary).

1. Reciprocal interpretations of relational nouns

Clearly, something about (1c) is different, and gives special dispensation for (1c) to mean what it means. The obvious starting point is to investigate semantic differences between the meanings of the predicates involved. For instance, sibling, but not children or enemies, is one of the relational nouns that Eschenbach (1993) classifies as capable of a reciprocal interpretation.

   (2)   a. The sister walked in.
         b. The sisters walked in.
         c. The daughters walked in.

Eschenbach observes that (2a) is felicitous only in a context in which we feel that we know exactly whose sister is involved. Not surprisingly, the plural use in (2b) can have a similar interpretation: let’s say that we are talking about Warren Beaty’s sister and Rosanna Arquette’s sister. Then we can use (2b) to describe a situation in which Shirley MacLean and Patricia Arquette (who are not related to each other) enter the room.
But (2b) also has a reading that does not require any special context, provided that the reading is reciprocal, that is, provided that the sisters are all sisters of each other. In this case, each woman satisfies the has-a-sister presupposition with respect to her siblings. It is not clear whether this way of construing relational predicates constitutes a bone fide ambiguity, or whether the reciprocal interpretation is merely an especially common, convenient, and tidy way for a situation to satisfy the presuppositions of sentences like (2b); fortunately, we do not need to resolve this question for our purposes here.

Other predicates, of course, may not be consistent with the possibility of a reciprocal reading. For instance, consider the denotation of daughter. It is not possible to find a finite set of daughters such that each member of the set is the daughter of some other woman in the group. This makes a reciprocal interpretation impossible, and indeed (2c) has only a discourse-controlled interpretation.

As we will see, compatibility with receiving a reciprocal interpretation seems to be a necessary condition for a pro tem reading to arise. Thus the fact that the predicate children in (1b) does not have a reciprocal interpretation allows us to correctly predict that (1b) does not have a pro tem reading. However, although having a reciprocal reading may be necessary for a pro tem reading to be possible, it is not sufficient:

(3) She’s the oldest of her brothers.

If (3) were ever felicitous, it certainly could never be true, even if we construe brother under a reciprocal interpretation. Thus it takes more than just a relational noun under a reciprocal interpretation to produce a pro tem reading, and we must look further for a more complete explanation.

2. Triggering a pro tem reading: Accommodating a presupposition

What else must be present in order for a pro tem reading to be possible or necessary? Note that a sentence like (1c) but formed with a comparative rather than a superlative does not have a pro tem reading: I am older than my siblings does not involve any suggestion that I am older than myself. Therefore I will assume that the presence of the superlative is essential.

Superlatives denote properties of individuals. Predicating a superlative property of an individual presupposes that that individual is a legitimate member of the set undergoing comparison.

(4) a. He is the stupidest criminal I’ve ever met.
   b. He isn’t the stupidest criminal I’ve ever met.
   c. Is he the stupidest criminal I’ve ever met?

In the sentences in (4), the set undergoing comparison is the set of criminals. The crucial thing to note is that whether or not the referent of the subject of these sentences happens to be stupid, a use of any of these three sentences presupposes that he is at least a criminal. This suggests the following hypothesis:
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(5) The superlative applicability presupposition: a use of a superlative [A-est N] (e.g., stupid-est criminal) presupposes that any entity of which the property denoted by the superlative is predicated must be in the extension of the nominal property N.

I'm not aware of any previous mention of such a presupposition associated with superlatives, but its existence is clear enough. As evidence that the implication is a presupposition rather than an at-issue entailment, recall that the hallmark of presuppositions is that they remain constant under negation and question-formation. Since (4a), its negation in (4b), and the associated yes/no question in (4c) all guarantee that the subject is a criminal, I conclude that we are indeed dealing with a presupposition.

If (5) is a valid assumption, then a use of (1c) presupposes that the speaker is a member of the relevant set of siblings. In addition, this is why (1a) entails that the speaker is their own enemy, and why (1b) is contradictory. It also explains why (3) is infelicitous: the presupposition that the subject is a brother (and therefore male) is inconsistent with the gender marking on the pronoun in subject position.

We can now recognize that the pro tem reading in (1c) serves as a way of satisfying the superlative applicability presupposition by extending the set of siblings to include the speaker. In other words, we can view the pro tem reading as a form of accommodation.

(6) Lewis 1979:340: Accommodation: If at time t something is said that requires presupposition P to be acceptable, and if P is not presupposed just before t, then--ceteris paribus and within certain limits--presupposition P comes into existence at t.

Accommodation often results in adding entities (or at least discourse referents) to a model. In the traditional example, definite descriptions presuppose the existence of the described entity. If a speaker asserts that the King of France is (or isn't) bald, and we have no specific knowledge to the contrary, a cooperative listener will accommodate the existence presupposition by behaving as if France does indeed have a king. In formal terms, this amounts to adding an entity to the domain of discourse having the requisite properties.

Unfortunately, the conditions under which accommodation occurs can be fluid and elusive.

(7) a. My uncle is visiting me this week. (Presupposition: I have an uncle.)

b. Sorry I'm late, my firetruck broke down. (Presupposition: I have a firetruck.)

As Prince 1979 observes, accommodation in (7a) is highly natural and effortless, even without any reason to believe that the speaker has an uncle; however, it is much less likely that even a cooperative listener will be willing to postulate that the speaker possesses a firetruck. The difference between (7a) and (7b), obvi-
ously, is plausibility: it is much more likely that the speaker has an uncle than a firetruck.

Even if accommodation is sometimes sensitive to pragmatic plausibility, there may be situations in which accommodation is automatic, that is, conventional or grammaticized. Kadmon’s proposed accommodation of uniqueness properties, mentioned above, is an example. As a second example, quantificational possessives arguably involve automatic accommodation: when we process a sentence like Most people’s dogs sleep indoors, thanks to the existence presupposition due to the possessive, we automatically accommodate the assumption that the only relevant people for the purposes of quantification are people who possess dogs (see Barker 1995, chapter 4 for discussion). My claim here is that pro-tem readings are another instance of automatic accommodation associated with a specific class of constructions.

3. Equivalence relations and quasi-equivalence relations

Let’s return to the main contrast between (1b) and (1c). What is the relevant difference between siblinghood and childhood? The first answer that a number of colleagues have suggested to me, and the one that I favor myself, is that the siblinghood but not childhood is tantamount to an equivalence relation—that is, sibling and similar predicates are what I will call a quasi-equivalence relation, as defined immediately below.

A true equivalence relation is transitive, symmetric, and reflexive. Because the sibling relation is anti-reflexive, it fails to qualify as an equivalence relation. That is, no one counts as their own sibling (hence I am my own sibling is a contradiction). However, when comparing the sibling relation to the smallest equivalence relation containing it, the reflexive pairs are all that are missing.

\[(8) \quad \text{a. quasi-equivalence relation (sibling):} \quad \{ <j, m>, <m, j>, <m, t>, <t, m>, <j, t>, <t, j> \} \]

\[\text{b. smallest equivalence relation containing (a):} \quad \{ <j, m>, <m, j>, <m, t>, <t, m>, <j, t>, \]

\[<t, j>, <j, t>, <m, m>, <t, t> \} \]

The extension of the sibling relation is a quasi-equivalence relation in the sense that it lacks only reflexive pairs in order to be a true equivalence relation. For instance, the possible extension for sibling given in (8a) lacks only the reflexive pairs \(<j, j>, <m, m>, \text{ and } <t, t>\) in order to be a complete equivalence relation like the one given in (8b). More precisely, for the purposes of this paper, a QUASI-EQUIVALENCE relation is any relation whose reflexive closure is an equivalence relation.

If sibling denoted a genuine equivalence relation, no accommodation would be necessary in order for (1c) to be felicitous: since the speaker would be a member of the set of the speaker’s siblings, the superlative presupposition mentioned above would be satisfied. Perhaps, then, a pro tem reading is available only
when the property in question is sufficiently close to being an equivalence relation. In some sense, quasi-equivalence relations are as close as you can come to an equivalence relations without being one.

Developing this thought further, it is interesting that, for whatever reason, natural languages seem to avoid expressing equivalence relations. Of course, it is possible to construct a somewhat awkward equivalence relation compositionally. For instance, the equivalence relation given in (8b) might be the extension of the relation corresponding to the string has the same number of legs as; but note that the words expressing this relation do not even form a constituent. In fact, there may not be any monomorphic predicates expressing an equivalence relation, except perhaps for the degenerate case of equational be (assuming that be has a sense that can adequately be expressed by the identity relation, which is trivially an equivalence relation).

Thus not only are predicates denoting quasi-equivalence relations, like sibling, close to equivalence relations---they may be as close to an equivalence relation as it's possible for a nominal predicate to get. If natural languages allowed non-trivial lexical equivalence relations, presumably sibling would be one of them. The hypothesis under consideration, then, is that it is this closeness to an equivalence relation that makes a pro-tem reading possible for (1c). For comparison, adding reflexive pairs to the child relation (i.e., assuming that people count pro tempore as their own children) does much more violence to the content of the childhood concept, which gives a hint as to why (1b) does not have a pro-tem reading.

What about other types of near-equivalence relation?

(9) a. I am the oldest of my correspondents.
   b. I am the oldest of my partners.

If Alice corresponds with Bob (in the sense of exchanging email), then Bob corresponds with Alice; thus the relation is symmetric. But if Alice corresponds with Bob and Bob corresponds with Carol, there is no guarantee that Alice corresponds with Carol. This means that the correspondent relation does not guarantee any degree of transitivity. (9a) shows that symmetry without a sufficient degree of transitivity does not give rise to a pro-tem reading, since (9a) sounds contradictory.

(9b), on the other hand, can have a pro-tem reading, but only if the speaker has more than one partner at the time of evaluation. That is, (9b) can mean only that the speaker is the oldest of her current co-partners in a specific venture, and the other partners must be partners of each other. It cannot be used to express the thought that over the years the speaker has always been older than her various partners.

(10) a. Quasi-equivalence relations: siblings, colleagues, brothers, roommates, classmates, lovers, partners, etc.
   b. symmetric relations that are not quasi-equivalence relations: correspondents, friends, spouses, etc.
The relational nouns in (10a) are both symmetric and near-transitive (relative to any specific situation), and give rise to pro tem readings; the relational nouns in (10a) are symmetric but not sufficiently transitive to count as quasi-equivalence relations, and do not give rise to pro tem readings.

To summarize, we have the following hypothesis for explaining when pro-tem readings are available.

(11) A superlative applicability presupposition (as defined in (5) in section 2 above) will be automatically but only temporarily accommodated just in case the predicate describing the comparison set denotes a quasi-equivalence relation \( R \) and the entity to which the superlative is applied is in the smallest equivalence relation containing \( R \).

Thus in (1c) (= I am the oldest of my siblings), the predicate describing the comparison set is siblings, which clearly denotes a quasi-equivalence relation \( R \). Furthermore, the reflexive closure of \( R \) contains the speaker. Therefore (11) correctly predicts that (1c) is capable of giving rise to a pro tem reading.

4. Other constructions

Does this pro tem effect generalize to other constructions? That is, if we find a construction in which predicating something presupposes the applicability of the predicate, will we detect pro tem effects?

Some other comparative constructions presuppose the applicability of their component properties. For instance, if I claim that I am a richer chess player than you are, I presuppose that both you and I play chess. Interestingly, these constructions also seem to give rise to pro tem readings:

(12) a. You won’t find a happier one of my colleagues than me.
    b. You won’t find a richer colleague of mine than me.
    c. You’re the only one of your colleagues who cares about teaching.
    d. You’re the one of your colleagues that I like (the most).

Thus for instance (12a) and (12b) can be felicitous and true even though speaker cannot be considered to be his own colleague.

One thing that all of these examples have in common with the prototypical pro tem construction is that they all involve a partitive construction (see Barker 1998 for arguments that one of my colleagues and colleague of mine are partitives).

It is also worth noting that the predicate in question need not be a simple lexical predicate:

(13) a. I am the oldest of [all my siblings].
    b. I am the oldest of my [male siblings].
    c. I am the oldest of my [brothers and sisters].
    d. You are by far the nicest of your [senior colleagues].
The only requirement is that the resulting complex predicate have for its extension (at every world-time index) a quasi-equivalence relation, and this is the case for the examples in (13). Note that although (13d) does not entail that the addressee is her own senior colleague, it does entail that she is senior. This is exactly what we would expect given the near-equivalence requirement: the addressee must be a senior colleague of her senior colleagues.

If modification disrupts the near-equivalence property, however, it also disrupts the availability of a pro tem interpretation. Assume that the speaker of (13) is one of exactly four brothers:

(14) I am the oldest of my three brothers.

Allowing the speaker to count as one of his own brothers even temporarily produces a set that no longer has cardinality 3; this semantic conflict significantly degrades the acceptability of (14).

5. Conclusion

The surprisingly high degree of acceptability of (1c) suggests that some natural language predicates such as the meaning of sibling are at some deep conceptual level true equivalence relations. This aspect of their semantic nature is masked at a relatively superficial level, perhaps in alignment with what may be a systematic (perhaps universal?) tendency for nominal relations to avoid reflexive denotations. Under the stress of an otherwise unsatisfiable presupposition, this deeper nature can peek through, allowing expressions that denote quasi-equivalence relations to denote complete equivalence relations— but only temporarily, just long enough to evaluate the expression that gives rise to the presupposition.

NOTES

* Thanks for comments and advice from Chris Kennedy and Peter Lasersohn.

1 My characterization of the empirical facts may turn out to be too strong. A more conservative claim would be that (1c) is an instance of speaking loosely, in the sense discussed by Lasersohn [Forthcoming]. After all, we can assert a sentence like The townspeople are asleep even when a few isolated souls remain awake, provide that the few people who are awake can safely be ignored for practical purposes. Perhaps, then, (1c) is acceptable because it is close enough to being true relative to some pragmatic standard. Yet merely classifying (1c) as an instance of speaking loosely is not enough; the challenge for such an approach is to explain what in particular makes (1c) close enough to being true when (1b) is not. The reader should consider the additional examples given in (12) in section 4 before making up his or her mind about the status of (1c).
REFERENCES


