Dwarf-class verbs, Theta-theory, and Argument Linking

Keywords: theta-roles, argument structure, experiencer predicates

This paper investigates a previously unnoted class of English verbs that pose a challenge for theories of the linking between thematic roles and syntactic structure. Verbs of this class express two overt arguments, and have a meaning such that the (non-agentive) subject causes one to perceive or experience the object in some particular way. Examples include the verbs *dwarf*, *accentuate*, and *obscure* (1). The specific nature of the perceptual/experiential effect varies from verb to verb. In (1a-c), the subject causes one to perceive the object, as small(er), as more prominent, and incompletely/not at all, respectively. Further examples are given in (2).

I argue that the thematic specification for these verbs includes, in the terminology of Pesetsky (1995), a Causer, a Subject Matter (SM), and an Experiencer, the last of which is not realized overtly, for reasons discussed below. Evidence for this implicit experiencer comes from the compatibility of *dwarf*-class verbs with "perspectival" PPs (3), which are available only in the context of a (possibly implicit) Experiencer. Further evidence comes from adjunct control. Williams (1994), extending an argument from Reinhart and Reuland (1991), notes that implicit Experiencers can often act as controllers (4). *Dwarf*-class verbs appear to license these types of adjuncts as well (5).

I further claim that the *dwarf* class provides a crucial argument against the theta-hierarchy assumed in Belletti and Rizzi's (1988) analysis of psych verbs, according to which subjects that would appear to bear a 'Causer'-type theta-role are in fact underlying Themes which have undergone unaccusative-style movement. Empirical arguments aside, a major conceptual advantage of this analysis was that it eliminated the need for a specialized 'Causer'-type theta-role for the surface subject of ObjExp predicates. *Dwarf*-class verbs, however, give evidence for the distinctness of the Causer and Theme/SM roles in the theta-hierarchy, since these verbs are a case of the two roles co-occurring. I argue that the subject of these verbs is an independently needed Causer that cannot be analyzed away as a Theme/SM, and that any moved-Theme analysis is simply inconsistent with the semantics of this class of verbs.

The theta-hierarchy of Pesetsky 1995 (6), which admits an independent Causer role, is better equipped to handle the dwarf class. However, I note that dwarf-class verbs violate Pesetsky's posited restriction on the co-occurrence of Causer and SM (7). I develop a reformulation of this restriction that involves a three-way ban on the overt co-occurrence of Causer, SM, and Experiencer. This new formulation correctly rules out the examples in (7), and correctly rules in dwarf-class verbs, which avoid violation because they lack an overt Experiencer. It also offers an explanation for why dwarf-class verbs never allow overt Experiencers (8-10). Assuming the theta-hierarchy of Pesetsky (1995), this three-way ban makes possible a unified typology of experiencer predicates. Any predicate whose thematic specification includes all three roles (Causer, Experiencer, SM) stands to violate the three-way ban unless one argument is "suppressed" in the overt syntax. Three logical possibilities thus exist. If the suppressed argument is the Experiencer, leaving the Causer and the SM to be expressed overtly, then the hierarchy dictates that the Causer is projected as the subject, and the result is a verb of the dwarf class (11a). In the other two cases, the verb is a traditional 'psych-verb' of Belletti and Rizzi's preoccupare-class. If the SM is suppressed, leaving the Causer and Experiencer to be expressed overtly, then the hierarchy dictates that the Causer is the subject, resulting in a structure like (11b). If the Causer is suppressed, leaving the SM and Experiencer to be expressed overtly, then the hierarchy dictates that the Experiencer is the subject, resulting in the alternation in (11c).

I show that unlike the causative ObjExp verbs (11b) discussed by Pesetsky, *dwarf*-class verbs are not zero-derived, since their roots are never SubjExp verbs. We thus correctly predict that *dwarf-class* verbs are able to undergo nominalizations (12) without violating what Pesetsky terms "Myers' generalization" (no further derivational affixation of zero-derived words). Two theoretically relevant cross-linguistic properties of *dwarf*-class verbs (in prep.) will be explored, as will the idiosyncratic requirements of a few *dwarf*-class verbs regarding the cause of the altered perception (*magnify*, e.g., requires that it involve a physical virtual image (13); *dwarf* and *overshadow*, that it involve comparison(14).)

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Example	es
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- (1) a. The mansion dwarfs the house next door.
 - b. That necklace accentuates the color of your eyes.
 - c. This pillar obscures the left side of the stage.
- (2) magnify, highlight, distort, emphasize, exaggerate, mask, overshadow, underscore
- (3) a. From the roof, John seemed so small. [Implicit experiencer]
 - b. *From the roof, John kissed Mary. [No implicit experiencer]
 - c. From the roof, the skyscrapers dwarfed the people below.
 - d. From the roof, the sunset accentuates/highlights the skyline.
 - e. From the roof, the smog effect magnifies/distorts the mountains.
- (4) a. Standing in the corner, everything seemed fine. [Implicit experiencer] [Williams 1994:87, his (33c)]
 - b. *Standing in the corner, Bill arrived at the door. [No implicit experiencer]
- (5) a. Standing on the mountaintop, the fresh air highlighted the natural beauty of the surroundings. (cf. *Standing on the mountaintop, birds were singing.)
 - b. While on this drug, life's troubles are overshadowed by a sense of euphoria.
- (6) Causer > Experiencer > Target/Subject Matter
- (7) a. *The article in the Times angered Bill at the government.
 - b. *The Chinese dinner satisfied Bill with his trip to Beijing [Pesetsky (1995:60)]
- (8) a. *The bridge dwarfed Mary the lighthouse.
 - b. *The bridge dwarfed the lighthouse to Mary.

 (meaning: "The bridge caused Mary to perceive/experience the lighthouse as smaller.")
- (9) a. *Nixon's crimes overshadowed Americans his accomplishments
 - b. *Nixon's crimes overshadowed his accomplishments to Americans.

 (meaning: "Nixon's crimes caused Americans to perceive/experience his accomplishments as less prominent/important in comparison.")
- (10) a. *The glass magnified me the coin.
 - b. *The glass magnified the coin to me.

(meaning: "The glass caused me to perceive/experience the coin as larger.")

- (11) a. The bridge dwarfs the lighthouse.
 - b. The news report worried Mary.
 - c. Mary worried about the news report.
- (12) a. The glass's magnification of the coin.
 - b. The makeup's accentuation of her eyes.
 - c. The water's distortion of the rocks.
- (13) a. #That rug really magnifies the room.
 - (cf. "That rug really makes the room look bigger")
 - b. #The dachshund magnified the golden retriever.
 - (cf. "The dachshund made the golden retriever look bigger")
- (14) a. #This special lens dwarfs the penny.
 - ("This special lens makes the penny look small.")
 - b. #This article overshadows my role in the project.
 - ("This article makes my role in the project seem less prominent.")

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