A Semantics for Object-Oriented Depictives

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Claim: This paper presents an analysis of English depictive secondary predicates (DSPs) that accounts for the restricted combinations of primary- and secondary-predicates for object-oriented depictives (OODs; see (1-a)), as opposed to subject-oriented depictives (SODs; see (1-b)), whose distribution is less restricted, while also explaining a previously un-noted connection between the constraints on direct objects in DSPs, and the constraints on NP-complements in partitive constructions.

Background: Pylkkänen (2008) gives a complex predicate analysis of DSPs employing Geuder's (2000) temporal overlap function, " $_o$ ", but her analysis does not account for asymmetries in the availability of OODs versus SODs, and the overlap function stipulates temporal overlap rather than deriving it. Rapoport (1999) notes the asymmetry that activity predicates, like 'hit', allow for SODs but not OODs (see (2)), but her analysis has empirical drawbacks: she predicts the sentences in (3) to be ungrammatical, and cannot explain the contrast in (4).

Analysis: I argue that OODs are introduced by a Dep head which takes the secondary predicate adjective. P, the direct object (DO), x, and the primary predicate, Q, as arguments, and imposes a presupposition on Q such that for all substituations, there is a (sub)part of the object which stands in the Q relation with that substituation (see (5)). Dep also introduces an open situation variable, s, existentially bound by a higher aspectual operator (Kratzer 1998). Situations are assumed to contain both states and events (in (5)-(6), s denotes a situation, and l is the type of situations). The derivation of the VP in (6) illustrates the composition. This explains the data in (2)-(4): (2) (SOD reading), (3) and (4-a) satisfy Q's presupposition, while (4-b) and the OOD in (2) do not. The presupposition requires that Dep combine only with predicates that denote a certain kind of situation: those in which the object or a part of the object is in the Q relation (denoted by the primary predicate) for every substituation of the situation denoted by the (primary) predicate. This predicts McNulty's (1988:122) generalization that themes can host OODs but goals cannot. The bear is being shot in every substituation of (4-a), but in (4-b), it is being shot only in the final substituation(s)—i.e. when the bullet reaches the bear (to use McNulty's terminology, the bear is conceivably goal-like in (4-b), but not in (4-a)). I argue for similar effects in (2) and (3): the cart is being pushed in every substituation of (3-a), but the target (Smith) in (2) is not being hit in every substituation of that event (assuming the denotation of hit includes those subsituations where Jones's arm is swinging but has not impacted Smith). This derives the fact that goals are excluded from hosting OODs without stipulating compatibility with certain thematic roles. Likewise, the temporal overlap of the secondary predicate and primary predicate that has been noted in the literature is a byproduct of the semantics of Dep rather than an explicit requirement of it.

Connection to Partitives: Dep employs the part-of relation, \leq , reminiscent of the part-of relation used in the semantics of partitives. Barker's (1998:698) semantics for the partitive part-of relation is given in (7), (modified slightly). As Ladusaw (1982) notes, the partitive constraint, in (8), explains the restrictions on NP complements of partitive of in (9). Individuals can be group individuals, like definite plurals, but bare plurals and mass nouns do not denote individuals; therefore, these NPs are not felicitous as NP complements of of p_{art} . Thus we predict that Dep's constraint, which employs the part-of relation in the presupposition of Q, will show the same constraints on DOs as the partitive construction shows for NP complements of partitive of. This is borne out: the restrictions on depictive objects parallel the restrictions of the Partitive Constraint on partitive NPs. Definite descriptions (including plural ones), pronouns, and proper names all host DSPs (see (10)), but mass and bare plural objects do not form grammatical depictives (see (11)) (past tense is used since present induces the habitual reading).

Partitive NPs and objects of OODs show a grammaticality contrast with respect to *every*, as shown in (12). I argue this difference is not a counterexample: (12-a) is grammatical because the quantified NP raises in the OOD construction, leaving an *e*-type variable as the individual to satisfy Dep's requirement. But in (12-b), raising is not an option for the quantified NP since the DP is an island for extraction.

Conclusion: The parallel restriction on DOs of OODs and NP complements of partitive of provides independent and convergent evidence of the restriction the part-of relation places on Q in the semantics of Dep for object-oriented DSPs. Furthermore, this analysis provides a less stipulative and more empirically accurate account of the relationship between the primary and main predicates in OOD constructions than previous accounts, and explains a previously unnoted connection between depictives and partitives. This analysis also suggests, contra previous proposals, that depictives are sensitive to a more fine-grained conception of

aspect in terms of substituations and their components, rather than broader distinctions like thematic roles or Vendlerian verb classification.

(1)Sarah ate [the fish]_i raw_i. John, drove the car home drunk,

- (2)Jones_i hit Smith_j drunk_{i/*j}.
- (3)John pushed [the cart]_i loaded_i.
- b. I juggled [the torches] $_i$ lit $_i$.
- (4)John shot [the bear] i sad i. (With a cama.
- b. #John shot [the bear] $_i$ sad $_i$. (With a
- **Dep**: $\lambda P_{\langle e, \langle l, t \rangle \rangle}$. $\lambda x. \lambda Q_{\langle e, \langle l, t \rangle \rangle}$: $\forall s' [s' \leq s_1 \rightarrow \exists x' [x' \leq x \land Q(x')(s')]]$. $[P(x)(s_1) \land Q(x)(s_1)]$ (5)
- $[_{VP} \ eat \ the \ fish \ raw]$ (6)
 - $\lambda P_{< e, < l, t >>} . \ \lambda x. \ \lambda Q_{< e, < l, t >>} : \forall s\prime \ [s\prime \leq s_1 \rightarrow \exists x\prime [x\prime \leq x \land Q(x\prime)(s\prime)]].$ $[P(x)(s_1) \wedge Q(x)(s_1)](\llbracket raw \rrbracket)$
 - $\lambda x. \ \lambda Q_{\langle e, \langle l, t \rangle \rangle} : \forall s' \ [s' \leq s_1 \rightarrow \exists x' [x' \leq x \land Q(x')(s')]].$ $[P(x)(s_1) \wedge Q(x)(s_1)](\lambda x.\lambda s. \ x \ is \ raw \ in \ s)$
 - $\lambda x. \ \lambda Q_{\langle e, \langle l, t \rangle \rangle} : \forall s' \ [s' \leq s_1 \rightarrow \exists x' [x' \leq x \land Q(x')(s')]].$ $[[\lambda x.\lambda s. \ x \ is \ raw \ in \ s_1](x)(s_1) \wedge Q(x)(s_1)]([[the \ fish]])$
 - $\lambda Q_{\langle e,\langle l,t\rangle\rangle}: \forall s' \ [s' \leq s_1 \rightarrow \exists x' [x' \leq \mathbf{the \ fish} \ \land \ Q(x')(s')]].$ $[[\lambda s. \mathbf{the fish} \ is \ raw \ in \ s_1](s_1) \land [Q(\mathbf{the fish})(s_1)]]([[\mathbf{eat}]])$
 - [the fish is raw in s_1] \wedge [[$\lambda x.\lambda s.eating(s) \wedge theme(x,s)$](the fish)(s_1)] defined if $\forall s' \ [s' \le s_1 \to \exists x' [x' \le \text{the fish} \land [\lambda x. \lambda s. eating(s) \land theme(x, s)](x')(s')]]$
 - [the fish is raw in s_1] \land [eating $(s_1) \land theme(the fish, s_1)$] defined if $\forall s' \ [s' \le s_1 \to \exists x' [x' \le \text{the fish} \land [eating(s') \land theme(x', s')]]]$
- (7) $[\![of_{part}]\!] : \lambda x \lambda P \lambda y [P(y) \wedge y < x]$
- "The Partitive Constraint can be stated ... by requiring that the NP in a partitive phrase always (8)denotes an individual" (Ladusaw 1982:238).
- (9)a. Two of the beers.

(11)

*Two of beers.

b. *Two of beer. Some of the beer.

- (10)John drank the beer warm.
 - John drank the beers warm. b.
 - John drank it warm. c.

- Flip is John's goldfish. John ate **Flip** raw.
- ?/#John drank beer warm. (Compare to (10-a).) #John drank beers warm. (Compare to (10-b).)
- (12)John drank every beer warm.

*One of every beer [...]

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