Singular Count Pseudopartitives

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Introduction: There is a well-known monotonicity constraint (MC) on pseudopartitives respecting the part structure of the stuff denoted by the head noun (Schwarzschild, 2002, 2006).

(1) a. three gallons of water
b. *three degrees Fahrenheit of water

As the amount of water increases, so does its volume (1a), but not its temperature (1b); volume, but not temperature, increases monotonically with respect to the ordering among water parts.

Nor can the head noun denote an atomic property (Schwarzschild, 2006), as illustrated by *three pounds of a cake*, which has only a true-partitive reading. The construction cannot be used to refer to something which (a) is a cake, and (b) weighs three pounds. I refer to this as the non-atomic domains constraint (NDC).

Despite appearances, I argue that English contains "singular count pseudopartitives" as well (2), which are more conventionally known as "degree/predicate-inversion" constructions (ICs). Once such constructions are given the right analysis, they are seen to obey both MC and NDC.

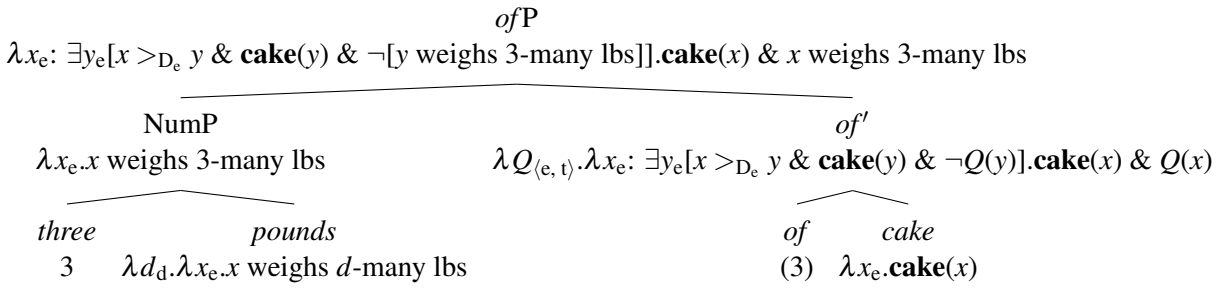
(2) a. too tasty (of) a cake
b. a disaster of a conference

Analysis: I propose that all of the grammatical constructions presented above are headed by a projection *of* in the nominal domain. *of* selects for an NP complement and either an NumP or DegP spec. It has the semantics shown in (3), where α ranges over the types of individuals (e) and states (s). MC and NDC are encoded as the indicated definedness condition.

(3) $[\![of]\!] = \lambda P_{\langle \alpha, t \rangle}.\lambda Q_{\langle \alpha, t \rangle}.\lambda x_{\alpha}\colon \exists y_{\alpha}[x >_{D_{\alpha}} y \,\&\, P(y) \,\&\, \neg Q(y)].P(x) \,\&\, Q(x)$

A mass pseudopartitive like (1a) will then have the structure and interpretation in (4).

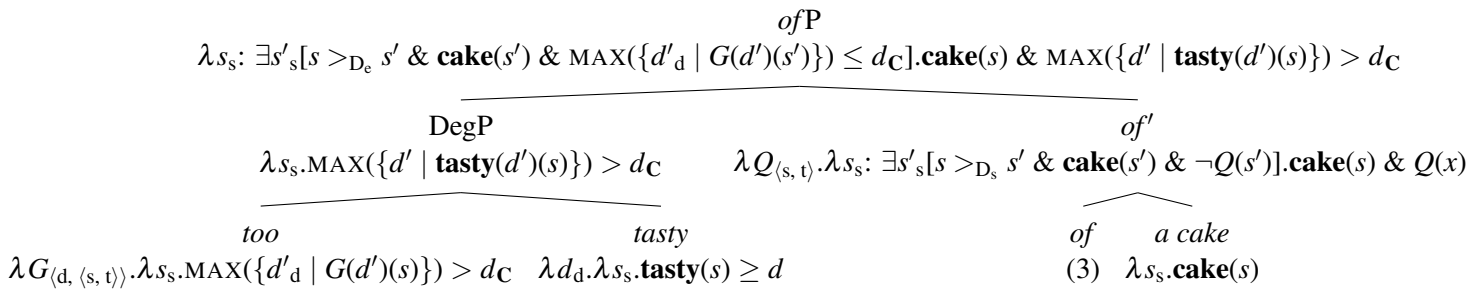
(4)



The definedness condition on *of* in (3) forces the measure phrase to denote a collective property; i.e., it must be the case that some proper subpart of an entity weighing three pounds does not weigh three pounds (which is true). In fact, this condition holds for all and only monotonic properties; e.g., for any three-degree portion of water, all sub-portions are three degrees, since the denoted property is distributive. An IC like (2a), on the other hand, has the structure and intepretation in (5). A crucial ingredient of the account is that *too tasty* and *a cake* can denote properties of states, rather than individuals. (I assume the semantics for *too* in (5) for the sake of illustration. $d_{\mathbf{C}}$ is some contextually-given degree.)

For (5) to receive an interpretation, the definedness conditions in (3) must invoke an ordering on states. As argued in Wellwood (2012), gradable adjectives (after combining with a covert *much*) denote non-atomic gradable properties of states that are monotonic with respect to their ordering. An immediate prediction of the current account is therefore that [spec, *of*] always denotes

(5)



a gradable property (prediction **(A)** below). Moreover, while singular count pseudopartitives are ruled out when the head noun denotes a property of individuals, not so when it denotes a property of states. I therefore follow Roy (2004) (building on Larson (1995, 1998)), who argues that singular count indefinites have eventuality arguments. Last, in order for expressions like (5) to be interpreted as properties of individuals, either a type-shift or a null head converts them.

Predictions: (A) (6) shows the prediction is borne out when the specifier is a noun.

(6) a. a disaster of a talk, a sweetheart of a kid, an idiot of a student
b. *a talk of a disaster, a kid of a sweetheart, a student of an idiot

The linearly first nouns in (6a) are gradable (Morzycki, 2009). But, not in (6b), ruling them out.

(B) Because head nouns in ICs denote properties of states, they should not permit modification by constituents, such as relative clauses, denoting properties of individuals.

(7) a. I read a long book that Camilla recommended
b. ??I read too long of a book that Camilla recommended

Insofar as (7b) is acceptable, it requires modification of the full (individual-property-denoting) *of*P.

(C) Pylkkänen (2002) assumes that adjectives entering into depictive secondary-predication must denote properties of states. If that is correct, the current account predicts that NPs that head ICs may also enter into depictive secondary-predication. Moreover, there is a well known constraint to the effect that such NPs must be singular count nouns (cf. **too tasty cake*, **too tasty cakes*). Therefore, the current account predicts that mass and plural nouns may not enter into secondary-predication, assuming they are ruled out in singular count pseudopartitives because they cannot denote properties of states (explaining the ban, as far as I know, unaccounted-for, against, e.g., **so tall of men*). This prediction is also confirmed, though a survey of several people indicates some individual variation on these constrasts.

(8) a. The dough came out of the oven {a pizza, ??pizza}
b. The doughballs came out of the oven pizzas

(9) a. The batter will come out of the oven {a cake, ??cake}
b. The cups of batter will come out of the oven cakes

The present account therefore proposes a unified treatment of pseudopartitives and ICs by treating ICs as stative-property-denoting. The account explains a variety of restrictions on ICs, including their unacceptability with plural and mass nouns in English.

Selected references: • Morzycki, Marcin. 2009. Degree Modification of Gradable Nouns: Size Adjectives and Adnominal Degree Morphemes. *NLS*. • Pylkkänen, Lina. 2002. *Introducing Arguments*. PhD thesis, MIT. • Roy, Isabel. 2004. Predicate Nominals in Eventive Predication. *USCWPL*. • Wellwood, Alexis. 2012. Back to basics: more is always much-er. *Proceedings of SuB*.