

HOW MUCH PLURALS COUNT

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It is often suggested that a comparative like that in (1a) is understood as expressing a greater-than relation between measurements provided by much (i.e., more \equiv much-er), whereas comparatives like that in (1b) express a comparison of measurements provided by many (i.e., more is ambiguous; Bresnan 1973, Heim 1985, Hackl 2001, a.o.).

- (1) a. Al found more rock than Bill did. **num, weight*
b. Al found more rocks than Bill did. *num, *weight*

I consider new data crossing the adjectival and verbal domains (eventive and stative) that suggest an alternative explanation of the pattern in (1a-b). On my account, much provides the semantics of measurement for -er in all cases; cardinal comparisons are the result of an interaction between much and the semantic effects of stacking functional morphemes on its evident argument.

The surface difference between (1a) and (1b) is the addition of the plural morpheme. Another kind of surface difference with a similar effect is that between (2a) and (2b), in the choice of preposition in versus on. Yet another kind is that between (3a) and (3b), where more appears postadjectivally as opposed to preadjectivally. Finally, there is no surface difference between (4a) and (4b) apart from the parenthetical context-setting expressions, yet, (4b) has more readings than (4a). I argue that this pattern follows without stipulation from the analysis offered for (1-3).

- (2) a. Al ran in the park more than Bill did. *num, duration*
b. Al ran to the park more than Bill did. *num, *duration*
- (3) a. Al was more upset than Bill was. **num, upset*
b. Al was upset more than Bill was. *num, *upset*
- (4) a. (Friday at lunch) Al worried more than Bill did. **num, worry*
b. (During the week) Al worried more than Bill did. *num, worry*

I propose that much provides the semantics of measurement in all comparatives: it is interpreted as a strict structure-preserving map from the measured domain to degrees (a generalization/extension of Schwarzschild 2006), which explains the restrictions on which dimensions for measurement are possible in mass and atelic comparatives noted in (5).

- (5) a. Al ate more soup than Bill did. *volume, *temperature, *tastiness*
b. Al ran more than Bill did. *distance, duration, *speed, *effort*

I analyze upset and worry as one-place predicates of states, on a par with rock and run which are predicates of stuff and process respectively (6). (This conclusion is independently motivated by facts like (7).) In (2a) and (3a), much takes V or A as an argument directly. In (2b) and (3b), much takes VP as an argument. Plural readings are triggered by the presence of the verbal plural (e.g. Ferreira 2005), and telic run to the park must be pluralized else it will not be interpretable

with much. The stative predicate upset “becomes VP” via an “eventizer” (von Stechow 2003, cf. Kratzer 2000) that converts stative predicates to eventive ones.

- (6) a. $\llbracket \text{upset} \rrbracket = \lambda s[\text{UPSET}(s)]$
 b. $\llbracket \text{worry} \rrbracket = \lambda e[\text{WORRY}(s)]$
 c. $\llbracket \text{rock} \rrbracket = \lambda x[\text{ROCK}(x)]$
 d. $\llbracket \text{run} \rrbracket = \lambda e[\text{RUN}(e)]$
- (7) a. Al was upset three times last night.
 b. Al is more upset with Carl in the late morning on Mondays from arguments about the Sunday night football game than Bill is.
 c. Al worried every afternoon last week.
 d. Al worries about Carl in the early morning on Mondays when she doesn't see his shoes in the hallway more than Bill does.
- (8) a. $\llbracket \text{Ev} \rrbracket = \lambda P \lambda e [\exists s [P(e) \ \& \ \Theta_R(e, s)]]$
 b. $\llbracket \text{PL} \rrbracket = \lambda P \lambda \alpha [*P(\alpha)]$

(4a-4b) show the same pattern, yet there is no overt marking of the proposed structural distinctions. Restricting our attention to a single instant, only the “degrees of worry” reading is available. Restricting our attention to a time period that can contain multiple instances of a state holding, either of the “degrees of worry” or the cardinal comparison are available. This possibility likely reflects a limitation of English verbal morphology; in a language which overtly marks the relevant distinctions, the two readings of (4b) should correspond to two minimally different strings.