§ 1. Counting and collectivity: two puzzling contrasts.—In episodic contexts, comparative quantifiers do not felicitously combine with all types of predicates (cf. Hackl 2000, Winter 2001). They are felicitous with distributive and mixed activity predicates (*smoke, carry a piano*) as well as collective accomplishment predicates (*meet*) (1-a). But they are infelicitous with collective state and achievement predicates (*be a team, elect the class president*) (1-b). ▲ The infelicity illustrated in (1-b) disappears in generic contexts (1-c) (cf. Hackl 2000, Winter 2001) as well as under overt adverbs of quantification (1-c'). ▲ Furthermore, the pattern observed in (1) extends to other counting constructions: for instance, *how many* questions (2), and even unmodified cardinal quantifiers (3). All of these are degree constructions based on *many*. ▲ The contrast between (a) and (b) sentences will be shown to follow from the interaction between the semantics of *many* and the structure of events denoted by different collective predicates. The contrast between (b) and (c) sentences will be explained as a consequence of the interaction between adverbial quantification and indefiniteness.

§ 2. Event-sensitivity of *many*: explaining the (a)-(b) contrast.—We follow Hackl (2000) in assuming that *d-many* is a scalar determiner and propose that it has the meaning in (4). The three crucial properties of *d-many* are: (i) Quantification is possible only over atomic individuals (Quine 1953, Dobrovie-Sorin and Mari 2006). (ii) What gets counted are the agents of sub-events that specify the event denoted by the main predicate (cf. Link 1998, Dimitriadis 2004). (iii) Analogously to scalar predicates (cf. Klein 1980 and others), the scalar determiner presupposes that the intersection of its arguments has a non-zero cardinality. ▲ From (i) and (ii) together, the meaning of [[*d-many* NP] VP] comes out as follows: d is the number of atomic individuals x that are NP and are agents of specifying sub-events e, $S_{\leq}(E)(e)$, of the event E denoted by VP. ▲ The final ingredient needed to derive the (a)-(b) contrast is that collective activity and accomplishment predicates and collective state and achievement predicates denote events of different complexities (5) (cf. Dowty 1987, Moltmann 2005). This can be captured syntactically by assuming that the former predicates but not the latter are merged with a cumulated aspectual DO (6) (cf. Brisson 1998); the atomic DO events would thereby be exactly the specifying sub-events. ▲ A sample derivation of the unacceptability of (b) examples is given in (7-b) – in particular, for any non-zero number n, *n many students were a good team* is false. Therefore, the presupposition of the scalar determiner (iii) is not satisfied. (a) examples are felicitous (7-a) because the number of participants in a meeting event e equals the number of agents of the specifying sub-events of e (5-a).

§ 3. Genericity and indefiniteness: explaining the (b)-(c) contrast.—The contrast between (b) and (c) sentences results from the fact that [*d-many NP*] is an indefinite NP. As such, it has a tendency to be interpreted in the restrictor of the generic operator, while the main predicate is interpreted in the nuclear scope (cf. Rooth 1995). ▲ Analyzing adverbial quantification as quantification over situations (von Fintel 1994 and others), it is derived that (2-c) has the same meaning as (8), which is an acceptable sentence. This is shown in (9): in adverbial quantification constructions, the semantic contribution of the indefinite cardinality phrase (9-b) (cf. focus closure in Rooth 1995 and elsewhere) is separated from the main predicate (9-c); semantic ill-formedness observed with (b) sentences no longer obtains. Analogous analysis holds for other degree constructions based on *many* (1)-(3). ▲ An alternative proposal that (i) accounts for the contrast between (a) and (b) examples by assuming a sortal distinction between pluralities and groups and (ii) does not appropriately recognize the indefinite nature of the respective embedded numeral phrases, cannot explain the felicity of (c) examples: predicates selecting group arguments are always illicit with non-groups. The inability to avoid this mismatch was the main reasons why an explanation of the (b)-(c) pattern above has been so elusive.

§ 4. Examples.—

(1) a. More than seven students {smoked / carried a piano / met} yesterday
b. #More than seven students {were good team yesterday / elected the class president}
c. More than seven students {are a good team / elect the class president}
c'. More than seven students are usually a good team

(2) a. How many students {smoked / carried a piano / met} yesterday?
b. #How many students {were good team yesterday / elected the class president}?
c. How many students {are a good team / elect the class president}?
c'. How many students are usually a good team

(3) a. Seven students {smoked / carried a piano / met} yesterday
b. #Seven students {were a good team yesterday / elected the class president}
c. Seven students {are a good team / elect the class president}
c'. Seven students are usually a good team

(4) $[\![\text{d-many}]\!] = \lambda P.\lambda Q.\lambda E.|\{x \mid \exists e \exists X[S_{\leq}(E)(e) \wedge ag(e)(x) \wedge x \leq_{at} X \wedge P(X) \wedge Q(E)(X)]\}|=d$

(5) a. Assume e is a minimal event s.t. [[John and Mary met]](e) = 1. The set of specifying sub-events of e: $S_{\leq}$(e)={e', e" | e'≤e ∧ e"≤e ∧ John (≈ agent) met with Mary (≈ theme) in e' ∧ Mary (≈ agent) met with John (≈ theme) in e"}
b. Assume e is a minimal event s.t. [[John and Mary are a team]](e) = 1. The set of specifying sub-events of e: $S_{\leq}$(e)={e' | e'=e ∧ John and Mary are a team in e'}

(6) a. $[_{\langle e,\langle v,t\rangle\rangle}$ $[_{\langle e,\langle v,t\rangle\rangle}$** DO] meet]
b. $[_{\langle e\langle v,t\rangle\rangle}$ be a team]

(7) a. [[(3-a)]]=1 iff $\exists E|\{x \mid \exists e \exists X[S_{\leq}(E)(e) \wedge ag(e)(x) \wedge x \leq_{at} X \wedge *student(X) \wedge meet(E)(X)]\}|=7$
b. [[(3-b)]]=1 iff $\exists E|\{x \mid \exists X[ag(E)(x) \wedge x \leq_{at} X \wedge *student(X) \wedge be\_team(E)(X)]\}|=3$. But it always holds: $\exists E|\{x \mid \exists X[ag(E)(x) \wedge x \leq_{at} X \wedge *student(X) \wedge be\_team(E)(X)]\}|=0$

(8) When there is something that is three students, then there is (always) something that is a good team (*that something being the respective three students*)

(9) a. Quantifier: GEN (≈ ∀e)
b. Restrictor: λe. ∃P[[[7-many]]([[boys]])(P(e))]
c. Nuclear scope: λe. ∃x[[[good team]](e)(x)]

§ 5. References.—Brisson, C. (1998) *Distributivity, Maximality and Floated Quantifiers.* PhD thesis, Rutgers. • **Dimitriadis, A.** (2004) "The event structure of irreducibly symmetric reciprocals." In J. Dölling et al. *Event structures in linguistic form and interpretation.* de Gruyter. • **Dobrovie-Sorin C. and A. Mari** (2006) "Generic plural indefinites: Sums or groups?" *NELS* 37. • **Dowty, D.** (1987) "Collective Predicates, Distributive Predicates, and *All*." *ESCOL*. • **von Fintel, K.** (1994) *Restrictions on Quantifier Domains.* PhD thesis, UMass. • **Hackl, M.** (2000) *Comparative Quantifiers.* PhD thesis, MIT. • **Hackl, M.** (2002) "The Ingredients of Essentially Plural Predicates." *NELS* 32. • **Klein, E.** (1980) "A semantics for positive and comparative adjectives." *L&P* 4. • **Link, G.** (1998) *Algebraic Semantics in Language and Philosophy.* CSLI. • **Moltmann, F.** (2005) "Two kinds of universals and two kinds of collections." *L&P* 27. • **Quine, W.V.O.** (1953) *From a logical point of view.* Harvard Press. • **Rooth, M.** (1995) "Indefinites, adverbs of quantification and focus semantics." In M. Krifka et al. *The Generic Book.* UChicago. • **Winter, Y.** (2001) *Flexibility Principles in Boolean Semantics.* MIT Press.