

Plural Indefinites and Unexpected Pair-list Readings

INTRODUCTION. A generalization has been suggested, that *wh*- interrogatives such as (1a), where a universal *c*-commands the *wh*- trace, are said to yield three types of reading: individual (1b), functional (1c) and pair-list (1d). Under this generalization, the presence of the universal is crucial for generating the pair-list reading (e.g. Groenendijk & Stokhof 1984; Chierchia 1992). However, we will show that this generalization is not fully correct. First, we show that plural indefinites yield a pair-list reading under plural *wh*-. We then show that only a subset of plural indefinites yields this reading and propose a new generalization to capture the distribution of indefinites yielding the pair-list reading. Finally we offer an account of pair-list readings for these indefinites similar to that offered for definites by Dayal (1996).

DATA. Our data shows that plural indefinites such as *some*, *a few*, and *several* yield pair-list readings under *wh*-, as is shown in the examples in (2), counter to the above generalization. Two crucial facts about these pair-list readings are the following. First, these readings are revealed in contexts in which the *wh*- NP is also plural. This is shown in the contrast among examples (2a,d vs. 3a,d). Second, not all plural indefinites yield the pair list reading, even under plural *wh*-. *Most*, and *many*, are notably rejected by respondents who accept a pair-list reading for *some/a few/several* (examples 4-5).

NEW GENERALIZATION. We propose the following generalization to account for the pattern above. Plural indefinites that are sensitive to an absolute cardinality (e.g. *some*, *a few*, and *several*) yield pair-list readings. For instance, *Some A are B* is true if and only if $|A \cap B| = n$ where n is a (possibly vague) absolute number. On the other hand, plural indefinites that are sensitive to a relative cardinality (e.g. *many* and *most*) do not allow for pair-list readings. In particular, *Most A are B* is true if and only if $|A \cap B| > |A \cap \bar{B}|$; that is, the cardinality of the set of As that are Bs must be bigger than the cardinality of the set of As that are not Bs. Similarly, *Many A are B* is true if and only if $|A \cap B| > |A \cap B|_C$ (where C is a contextually determined threshold); that is, the actual cardinality of the set of As that are Bs must be bigger than the “expected”/“standard” cardinality of the very same set. We show evidence that some speakers have an absolute reading of *many* as well.

Under our generalization, we predict for example that bare numerals should yield pair-lists, which is the case (6), and that quantifiers like *more than half* should not yield pair-lists, which is also the case (7). While *some*, with a vague cardinality, yields a pair-list, *only some*, which is a comparison, does not (examples 8-9).

ANALYSIS. Dayal (1996) notes that questions with definites under *wh*- also yield pair-list readings (10). The pair-list reading is constrained by plurality, just as we noted earlier with indefinites: both the definite and the *wh*- must be plural (11). For Dayal (1996), the pair-list for definites is a species of individual answer, a mapping of the parts of plural individuals rather than a function over atomic individuals. We argue that Dayal’s approach can be extended to account for the two classes of plural indefinites we discussed and the presence or the absence of pair-list readings. We suggest that if plural indefinites from the class sensitive to absolute cardinality represent plural individuals, semantically similar to *the n’s/these n’s*, then the pair-list for indefinites can be accounted for as a species of individual answer mapping the parts of plural individuals. Available answers under universal (atomic individual) and indefinite (plural individual) readings differ as predicted on this account (12b-c). Further, specificational sentences that yield pair-list readings as discussed in Romero (2002) support our generalization and analysis: they yield pair-list readings when they contain plural indefinites like *some*, *a few*, *several*, but not when they contain plural indefinites like *most* and *many* (13); again, this species of pair-list is specific to non-universals (14). Finally, we argue that unlike the above analysis, a distinction among specific and non-specific indefinites (e.g. Fodor & Sag 1982; Farkas 1996; Schwarzschild 2002) would not fully cover the plural indefinites which do or do not yield pair-lists, especially considering the non-specific readings available for indefinites in English pair-list questions and the morphosyntactic evidence from languages like Russian which both yields pair-list readings and morphologically marks for specificity/non-specificity.

- 1a. Which woman does every Italian man we know love?
 1b. Every Italian man we know loves Sophia Loren (Individual reading)
 1c. Every Italian man we know loves his mother (Functional reading)
 1d. Pablo loves Rosa, Giovanni loves Sandra, Leo loves Lita, etc. (Pair-list reading)
- 2a. Which women do some/a few/several Italian men we know like?
 2b. Some/a few/several Italian men we know like Queen Elizabeth (Individual reading)
 2c. Some/a few/several Italian men we know like their mother-in-law (Functional reading)
 2d. Pablo likes Rosa, Giovanni likes Sandra, Leo likes Lita, etc. (Pair-list reading)
- 3a. Which woman do some/a few/several Italian men we know like?
 3b. Some/a few/several Italian men we know like Queen Elizabeth (Individual reading)
 3c. Some/a few/several Italian men we know like their mother-in-law (Functional reading)
 3d. *Pablo likes Rosa, Giovanni likes Sandra, Leo likes Lita, etc. (*Pair-list reading)
- 4a. Which classes did some/a few/several professors teach last semester?
 4b. Bill taught syntax, John taught semantics, etc. (Pair-list reading)
- 5a. Which classes did many/most professors teach last semester?
 5b. *Bill taught syntax, John taught semantics, etc. (*Pair-list reading)
- 6a. *Grant application question*: Which classes did two professors teach last semester?
 6b. Bill taught syntax, and Mary taught neurolinguistics (Pair-list reading)
- 7a. Which classes did more than half of the professors teach last semester?
 7b. *Bill taught syntax, and Mary taught neurolinguistics (*Pair-list reading)
- 8a. Which classes did some professors teach last semester?
 8b. Bill taught syntax, John taught semantics, etc. (Pair-list reading)
- 9a. Which classes did only some professors teach last semester?
 9b. *Bill taught syntax, John taught semantics, etc. (*Pair-list reading)
- 10a. Which women do these men love?
 10b. Bill loves Jane, Dave loves Jill, etc. (Pair-list reading)
- 11a. Which woman do these men love?
 11b. *Bill loves Jane, Dave loves Jill, etc. (*Pair-list reading)
- 12a. Hearer knows: Bill & John co-taught syntax. Mary taught neuro. John also taught Methods.
 12b. Q: Which classes did some professors teach last semester?
 A: Bill & John taught syntax, Mary taught neuro, and John taught Methods
 12c. Q: Which classes did every/each professor teach last semester?
 A: *Bill & John taught syntax, Mary taught neuro, and John taught Methods
13. Some/a few/several/*many/*most prices at the market are these: milk is 1.99, cheese is 2.39, etc.
14. *Every price at the market is this: milk is 1.99, cheese is 2.39, etc.