

***Occasional*-type frequency adjectives: pluractionality and stages**

Charlotte Sant & Gillian Ramchand
UiT The Arctic University of Norway

The Puzzle. Sentences like the one below pose some challenges for theories of the relationship between form and meaning (Bücking, 2012; Gehrke, 2021; Gehrke & McNally, 2011, 2015; Morzycki, 2016; Schäfer, 2007; Stump, 1981; Sæbø, 2016). Intuitively, the adjective *occasional* seems to contribute a meaning as if it were the adverb *occasionally*, saying something about the frequency of a particular kind of ‘strolling’ situation.

- (1) An/The occasional sailor strolled by.
~ Occasionally, a sailor strolled by.

Occasional-type frequency adjectives (FAs) are special in that they can give rise to a pluractional verb event reading *without* making use of a plural DP or a pluractional adverb. Compare *occasional(ly)* and *frequent(ly)* below:

- (2) a. **Occasionally/Frequently**, she wrote a letter to her mother. (Adv)
b. She wrote a(n) **occasional/#frequent letter** to her mother. (Adj)

This feature of *occasional*-type FAs makes it hard to indirectly ascribe event plurality to the plural marking on the modified noun (Champollion, 2019; Link, 1987, 1991). Finally, these events are necessarily distributive (e.g., in (1), one sailor is involved in each ‘strolling’ event).

Earlier work. *Occasional*-type FAs seem to modify the frequency of the cardinal overlap of the set of individuals and the set of events they participate in, requiring a close, symmetrical relationship between the two sets. **Zimmermann (2003)** solves this by introducing an ordered pair of the event and entity, $\langle e, x \rangle$. These ordered pairs can also explain the distributive reading, but Zimmermann’s (2003) analysis falls short in that it predicts *all* uses of *occasional*-type FAs to pluralize the *verb* event, but this is not the case (e.g. *an occasional meeting*; *an occasional dancer*). **Gehrke and McNally (2015)** propose an analysis that draws on what we believe is a correct intuition, namely that *occasional*-type FAs are semantically adnominal, but say something about the distribution of ‘manifestations’ of that nominal (making use of Carlson’s (1977) realization relation). However, a purely context-based explanation of verb event plurality cannot explain proportion ambiguity or the sensitivity to clause boundaries.

Our analysis. Our goal is to combine Zimmermann’s (2003) ordered pairs with Gehrke and McNally’s (2015) intuition that these adjectives pluralize stages of a kind. Like other famous cases such as “4,000 ships passed through the lock last year”, what is being counted by *occasional*-type FAs is manifestations, not individuals (Krifka, 1990). We adopt Barker’s (1999) representation of stages as ordered pairs of events and individuals $\langle e, x \rangle$. This solution not only captures the manifestation of stages and the symmetry of the two sets, but it helps us preserve the intuition in (2): that it is the *occasional*-type FA itself that asserts the plurality of events. We think that adjectives like *occasional* provide independent evidence for interpreting event stages as ordered pairs of events and individuals.

4. In conclusion, we argue that *occasional*-type FAs are specialized to quantify over stages of individuals (accounting for their adjectival distribution), and that these should be represented as ordered pairs of individuals and eventualities (following Barker 1999). This accounts for how *occasional*-FAs themselves introduce the plurality of the individual, while still linking to the eventuality introduced by the VP.

References

- Barker, C. (1999). Individuation and quantification. *Linguistic Inquiry*, 30, 683–691.
- Bücking, S. (2012). The semantics of frequency adjectives. *Proceedings from the Annual Meeting of the Chicago Linguistics Society*, 48, 93–107.
- Carlson, C. (1977). *Reference to Kinds in English* (Unpublished doctoral dissertation). University of Massachusetts.
- Champollion, L. (2019). Distributivity in formal semantics. *The Annual Review of Linguistics*, 5, 289–308.
- Gehrke, B. (2021). Multiple event readings and *occasional*-type adjectives. In P. C. Hofherr & J. Doetjes (Eds.), *The Oxford Handbook of Grammatical Number* (pp. 362–380). Oxford: Oxford University Press.
- Gehrke, B., & McNally, L. (2011). Frequency adjectives and assertions about event types. In S. Ito & D. Lutz (Eds.), *Proceedings of salt 19* (pp. 180–197). eLanguage.
- Gehrke, B., & McNally, L. (2015). Distributional modification: the case of frequency adjectives. *Language*, 91, 837–870.
- Krifka, M. (1990). Four thousand ships passed through the lock: object-induced measure functions of events. *Linguistics and Philosophy*, 13, 487–520.
- Link, G. (1987). Generalized quantifiers and plurals. In P. Gärdenfors (Ed.), *Generalized Quantifiers* (pp. 151–180). Berlin: Springer.
- Link, G. (1991). Plural. In A. von Stechow & D. Wunderlich (Eds.), *Semantik: Ein internationales Handbuch der zeitgenössischen Forschung* (pp. 418–440). Berlin: de Gruyter.
- Morzycki, M. (2016). *Modification*. Cambridge: Cambridge University Press.
- Schäfer, R. (2007). On frequency adjectives. In E. P. Waldmüller (Ed.), *Proceedings of Sinn und Bedeutung 11* (pp. 555–567). Barcelona: Universitat Pompeu Fabra.
- Stump, G. T. (1981). The interpretation of frequency adjectives. *Linguistics and Philosophy*, 4, 221–257.
- Sæbø, K. J. (2016). *Adjectives and Determiners of Distribution*. (Talk presented at FishFeed, UiT The Arctic University of Norway)
- Zimmermann, M. (2003). Pluractionality and complex quantifier formation. *Natural Language Semantics*, 11, 249–287.