Scalarity in the nominal and verbal projections

M. Ryan Bochnak, University of Chicago

This paper argues for structural parallels in the nominal and verbal domains that license the presence of certain types of scales in these domains. The proposed analysis captures the four different readings associated with the scalar modifier *half* in four distinct syntactic/semantic environments. The readings at issue are outlined in (1)-(4) below:

(1) Half of the books are on the table. (*partitive* reading)

(2) John ate a half sandwich. (*attributive* reading)

(3) Mary half washed the dishes. (*eventive* reading)

(4) Ann half sang. (*evaluative* reading)

In particular, I argue that while *half* always has a scalar meaning, the type of scale over which it can operate depends on the availability of certain scale types, depending on the modifier's syntactic/semantic environment.

Following Kennedy & McNally (2005), I take *half* to be a scalar modifier that takes as its input a property F associated with a fully closed scale S_F and returns the midpoint p of that scale (where $\mathbf{meas}[\alpha,\beta]$ is a function that returns a measurement of a closed interval $[\alpha,\beta] \subseteq S_F$):

(5) $[\![\, half \,]\!] = \lambda F \lambda x. \exists p[\mathbf{meas}[\min(S_F), p] = \mathbf{meas}[p, \max(S_F)] \wedge F(p)(x)]$

While *half* is given a uniform meaning across all its uses, the different readings arise from the differences in the types of scales targeted by the modifier in each of the contexts (1)-(4).

The partitive-attributive contrast in the nominal domain (1)-(2) parallels the eventive-evaluative contrast in the verbal domain (3)-(4): the partitive and eventive readings result from *half* targeting scales made available by the presence of functional structure in the nominal or verbal projection respectively, while the attributive and evaluative readings target scales that are lexically encoded by the noun or verb itself. The partitive-attributive contrast essentially follows the spirit of Schwarzschild's (2002, 2006) account of partitive and attributive uses of measure phrases, in that the presence or absence of functional structure mediates the type of interpretations available in each case. The eventive reading depends on event structure and aspectual composition within the VP, relying on the presence of functional structure to introduce the internal argument that measures out an event (see e.g. Kennedy & Levin, 2008). Meanwhile, the evaluative reading is unmarked with respect to lexical aspect, and targets a scale evaluating the extent to which the event names by the verb is a stereotypical instance of that event type.

In sum, structural parallels within the nominal and verbal domains restrict the types of scales available for modification by *half*, resulting in the different readings associated with this modifier.