A Quick Exchange Between Barbara and Seth on Groups
September 30, 2010

You may recall from class my comment that the ‘up arrow’ in Landman (2000) and Link (1998: Chapter 3) seems to do some injustice to the intuitive concept of a ‘group’ developed in class.

In particular, I remarked that making the ‘up arrow’ and the ‘down arrow’ inverses of one another seems to imply that every plurality has a unique group associated with it, and vice versa, which seemed counterintuitive.

Barbara and I had an e-mail exchange afterwards that was quite clarifying, and which we’d like to share with you all, for the record.

---

Email from Seth, 9/30/10, 2:51PM

I just wanted to send a quick note that, in fact, neither Link (1984) nor Landman (2000) states that ‘up’ and ‘down’ are inverses of one another. They do both state that they are *functions*. I think I had myself from that concluded that the two must be inverses (since surely sending a plurality to its group, and then that group to its plurality should produce the same plurality).

I think my worry about the two being functions still stands, in as much as those functions are supposed to be the intuitive 'constitution' relation between pluralities and groups. Moreover, I also doubt my remark in class that you could spell out a theory where these relations *aren't* functions, but still do the same work in allowing distributivity down to sub-pluralities. The problem is just one of what the meaning of "the boys and the girls" should be in this case. Should it be an existential statement like "a group corresponding to the boys and a group corresponding to the girls"? This might work if we assume indefinites are type e (like, if we suppose a CF analysis of them...)

Anyways, I just wanted to clarify that I had, in fact, put some unneeded words into Landman and Link's mouths...

Hope everything goes wonderfully in Israel!

Best,

Seth.
Thanks. And I couldn't resist and have looked in Landman (2000) too. I found the crucial passage on p. 101. It agrees both with you and with me, that's nice.

Up is a function (whose meaning is "as a group" - he's explicit about that, too). It's a one-one function INTO the set of atoms, but not necessarily ONTO. [Hence "the faculty members as a group", derived by "up", can yield an atom that's distinct from "the personnel committee" even if the two groups have the same members. I assume that 'up' will be involved only in deriving group-readings from various plural DPs, not in 'deriving' group readings for things like 'the committee', since those aren't really "derived" from anything.] And he then immediately says "We have assumed 'down' to be a function. This means that all groups are assumed to have members."

So I think that as with Montague's up-operator and down-operator, a one-way inverse relation does hold, but not the other way. If you start from a plurality like 'the boys', then I'm quite sure that down (up ( the boys)) = the boys. But if you start from the personnel committee, then I don't believe that up (down (the p.c.)) = the p.c. I think that up (down (the p.c.)) will get you something paraphrasable as "the members of the p.c. as a group", which is not the same thing as the p.c. (but IS the same thing as "the members of the dept. faculty as a group", if the p.c. has exactly the same membership as the dept. faculty.)

Fun stuff!

Best, Barbara

The passage that Barbara refers to above, which is quite clarifying, reads as follows:

As the above informal formulation suggests, the group formation operation ↑ can be interpreted as the appositive restriction operation AS A GROUP of Landman 1989b (as suggested to me by Craig Roberts, p.c.), and since other appositives may be group forming as well, ↑ is a one-one function into the set of atoms, but not necessarily onto.

We have assumed ↓ to be a function. This means that all groups are assumed to have members. We could relax this requirement by making ↓ a partial function. (Landman 2000: 101)

Thus, as Barbara mentioned in class, in Landman’s (2000) system, the ‘UP’ operator is not supposed to be equivalent to the ‘constitution’ relation that holds between a plurality and the group(s) they make up.

Rather, ↑ signifies a relation between a plurality and a particular kind of group that it constitutes, namely, that group which you get if you add the phrase ‘as a group’ to the plurality in question.

I apologize for the mix-up, and any confusion it may have caused.