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## How the Symmetry Problem solves the Symmetry Problem

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Matthijs Westera  
*University of Amsterdam, ILLC*  
[matthijs.westera@gmail.com](mailto:matthijs.westera@gmail.com)

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Zeit  
Raum

A well-known challenge for accounts of exhaustivity (or “scalar”) implications is the Symmetry Problem (for an early statement see Kroch 1972):

- **Symmetry Problem:** if relevance is closed under negation, then excluding all relevant, stronger alternatives leads to a contradiction.

What would make this a problem can be understood in two ways:

- I. **Foundational:** Relevance is necessarily, fundamentally symmetrical.
- II. **Empirical:** Relevance is sometimes symmetrical in cases where exhaustivity is implied.

The first understanding is the most common, but, following Horn (1989), we argue the contrary: relevance is quite typically *asymmetrical*. Instead, the Symmetry Problem must be approached as an empirical puzzle – namely that exhaustivity occurs despite explicitly symmetrical interests, e.g.:

- (1) a. A: I need to know, for each of these five individuals,  
          whether they were present or absent.  
      b. B: John was there, and Bill was there.  
      c. A: Wow, only two! That’s disappointing!

I present a new, precise explanation of what is going on here, thereby solving the empirical Symmetry Problem. Its central component is the assumption that speakers can implicitly raise new questions under discussion, provided these are part of a discourse strategy for a previous question (Roberts, 1996). I show that the explanation is superior to existing complexity-based or scale-based attempts to break the symmetry. Surprisingly, it works for any account of exhaustivity (pragmatic or grammatical) that runs into the symmetry problem – the problem, in a sense, solves itself.

**References:** • Horn, L.R. (1989). *A natural history of negation*. University of Chicago Press. • Kroch, A. (1972). Lexical and Inferred Meanings for Some Time Adverbs. *Quarterly Progress Report of the MIT Research Laboratory of Electronics* 104. • Roberts, C. (1996). Information structure in discourse. In Yoon & Kathol (eds.), *Ohio State University Working Papers in Linguistics* 49:91-136.