

Type presuppositions and fine grained types: from Coercion to co-composition and a finer grained look at determiners

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In this talk I want to explore some data that can tell us more about internal contents, in the sense of the Type Composition Logic of my book *Lexical Meaning in Context*, and the type system that guides semantic composition. While quite a bit of research has been done on cases where type conflicts can be overcome via other instructions as in cases of coercion and dual aspect selection, little work has been done on a type theoretic approach to cases of unrepairable type conflict. In *Lexical Meaning in Context* I put forward an account of semantic anomaly, but this account fails to capture the gradable nature of this phenomenon. For example 'the square root of 2 is blue' is perhaps difficult to interpret, we can make up a context in which this sentence would make sense, perhaps more easily than we could for a sentence like 'Tigers are Zermelo Frankel sets'.

Nevertheless, for these sentences the source of the anomaly from a type theoretic perspective is clear; there is a mismatch between what type of argument a predicate demands and what type the actual argument supplies. However, there are other cases where it is much more difficult to figure out what has gone wrong. Consider the difference between

Every boy but John smoked.

and

Some boy but John smoked.

Or the difference between

How fast did you drive?

vs.

How fast didn't you drive?

The second sentences of these pairs are uninterpretable, and there are good reasons to think that this is a matter of semantics not syntax. In particular I will argue that there are good reasons to suppose that there is a failure here of semantic composition. In this talk I will sketch a type theoretic approach to this data and some consequences of it – namely that internal meaning has many layers some more modifiable than others. I will argue that such data, together with data about coercion and also copredication, gives us a much fuller understanding of internal meaning.