Wittgenstein trivia
A squib for Manfred Krifka

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One current strand of research into the interface between grammar and logic is concerned with two kinds of trivialities: those that result in deviance and those that do not. Consider the contrast between (1a) and (1b).

(1) a. #Some student but John came to the party.
     b. Some student who is not John came to the party and it is not the case that some student came to the party.

According to the well-known, and widely accepted, analysis proposed by von Fintel (1993), (1a) sounds strange because it is contradictory: the semantics which von Fintel assigned to *but* results in (1a) meaning, essentially, what (1b) means. Note, however, that (1b) is a fine sentence. It is a contradiction, but it does not feel "wrong" in the same way (1a) does.

Similarly for tautologies. Consider the contrast between (2a) and (2b).

(2) a. #At least zero students came to the party.
     b. Zero or more students came to the party.

According to Haida and Trinh (2020), (2a) is weird because it is trivially true: what it says is that either no student came to the party or some did. However, this is also what (2b) says, but (2b), just like (1b), feels like a perfectly fine sentence.

Attempts have been made to clarify the distinction between the two kinds of trivialities, and it has become consensus to call trivialities which result in deviance "L-trivialities" (cf. Gajewski 2002, Abrusán 2007, Gajewski 2009, Del Pinal 2019, Pistoia-Reda and Sauerland 2021, among others). I will not discuss the notion of L-triviality any further. My purpose in writing this squib, for this book, is to point out two facts. One is that Manfred Krifka was among the first linguists to explain ill-formedness in terms of triviality. In 1995, he proposed an analysis for NPIs which accounts for the contrast between (3a) and (3b) by interpreting the first as contingent and the second as contradictory (Krifka 1995).

(3) a. John did not read any book.
     b. #John read any book.

The other fact is that long before any linguist said anything about triviality and deviance, a philosopher, who happens to share the same birthday with Manfred, had talked about the grammatical status of contraditions and tautologies in a remarkably similar manner. In his dissertation, commonly referred to as the *Tractatus*, Wittgenstein put forward a theory of

language according to which sentences are pictorial: they represent states of affairs in the same way as, say, the score of Schubert's *Unvollendete* represents the sound of this symphony (Wittgenstein 1921). And just as we can compare the score and the sound to see if they match, we can compare a sentence and reality to see if it is true. Here is what Wittgenstein said about tautologies and contradictions in proposition 4.466 of the *Tractatus*.

4.466	Einer bestimmten logischen Verbindung von Zeichen entspricht eine bestimmte logische Verbindung ihrer Bedeutungen; *jede beliebige* Verbindung entspricht nur den unverbundenen Zeichen	To a definite logical combination of signs corresponds a definite logical combination of their meanings; *every arbitrary* combination only corresponds to the unconnected signs.
	Das heißt, Sätze, die für jede Sachlage wahr sind, können überhaupt keine Zeichenverbindung sein, denn sonst können ihnen nur bestimme Verbindungen von Gegenständen entsprechen.	That is, propositions which are true for every state of affairs cannot be combinations of signs at all, for otherwise there could only correspond to them definite combinations of objects.
	(Und keiner logischen Verbindung entspricht *keine* Verbindung der Gegenstände.)	(And to no logical combination corresponds *no* combination of objects.)
	Tautologie und Kontradiktion sind die Grenzfälle der Zeichenverbindung, nämlich ihre Auflösung.	Tautology and contradiction are the limiting cases of the combination of symbols, namely their dissolution.

The proposition makes perfect sense. Can we use musical notation to produce a score which matches every possible piece of music, or no possible piece of music? Obviously not! In the same way, we cannot put linguistic symbols together to produce a model of every, or no, state of affairs. Reading 4.446, one would think that the grammar of Wittgenstein's ideal language, i.e. one which mirrors thought, cannot generate tautologies and contradictions. Just as we cannot *picture* a triviality, we cannot *construct* a trivial sentence. Such a sentence would be no *Zeichenverbindung* at all, and constructing it would amount to throwing syntax to the wind.

It should thus be a consequence of Wittgenstein's theory that trivialities are ill-formed. However, Wittgenstein faced a dilemma: he had to accept that trivialities such as *it's raining or not raining* are grammatical. In fact, he claimed that all propositions of logic and mathematics are of this kind. The way he got out of this dilemma is to introduce a distinction between sentences that are *unsinnig* 'nonsensical' and sentences that are *sinnlos* 'without sense'. Specifically, *unsinnig* are sentences that violate the rules of syntax, and *sinnlos* are sentences that are trivial but syntactically well-formed.

I find the *unsinnig–sinnlos* distinction one of the least cogent and, also, one of the least comprehensible aspects of the Tractatus. How can there be sentences that are not pictures of anything, given the central thesis that sentences are pictures. Wouldn't it mean that there are pictures that are not pictures of anything? It seems to me that Wittgenstein never really got out of the dilemma, and what he really needed is something like the distinction between L-triviality and

triviality in general. Specifically, what would have helped him is a more differentiated notion of triviality according to which the sentences that he called *sinnlos* are not trivial after all.

Maybe Manfred can think about this when he has more free time.

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