

A Postscript to the Theory of Conditional Elements

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Convinced of the equivalence thesis, yet bothered by a variety of *ifs* that do not seem to measure up (or, more exactly, down) to material implication, I put forward a pragmatic extension of the thesis refining it and working it out over twenty years. The initial statements of the theory are in Fulda (1999) and Fulda (2009a), with the full development in Fulda (2010) and the special case of mathematical discourse in Fulda (2009b), the special case of biscuit conditionals in Fulda (2012), and a number of other special cases in Hernández Ortiz and Fulda (2012). Although *if* retains its core meaning, the full meaning of those *ifs* that don't measure down to material implication is stronger logically and pragmatically, *but is in fact one of seven truth-functional compounds of the antecedent and consequent*. (The eighth is just material implication itself.) A good part of the elaboration of the theory in the above papers (Fulda, 2009b, 2010, 2012, and with Hernández Ortiz in 2012) is working out a mapping between specific types of *ifs* and these seven compounds.

Sometimes, however, that is so context-dependent as to be impossible *a priori*, an example of which follows. Consider the proposition P: (P) I'm going to take those biscuits on the sideboard, if you don't mind. The overall context is that Mary and Joseph share an accommodation and Joseph regularly buys two boxes of biscuits. In case C1, Mary doesn't partake of biscuits. In case C2, both eat biscuits, but the first box is on the sideboard, with the second box still full. In case C3, both eat biscuits, the first box is already finished, and the second nearly so and on the sideboard. Then, when Joseph utters (P) above, literally $\sim M \rightarrow B$, he implicates $B \ \& \ \sim M$ in C1 (\rightarrow_4 in the scheme of Fulda (2010)), B in C2 (\rightarrow_2 in the scheme of Fulda (2010)), and $B \leftrightarrow \sim M$ in C3 (\rightarrow_3 in the scheme of Fulda (2010)). Since it is Joseph who has the work and expense of purchasing biscuits, the only reason Mary might mind if Joseph has some is that she would like them herself. That, however, makes no sense in context C1. The protasis is simply a polite notification that Joseph is about to partake. But Mary doesn't mind, either. In context C2 (the usual case), Joseph is using the same polite notification signal, but intends his announcement to be firm and irrespective of Mary's wishes. In context C3, however, he waits for a reply. While he has said only that he will partake if Mary doesn't mind, he has implicated also that he will do so *only if* Mary doesn't mind, a move called conditional perfection. Note as well that each of $B \ \& \ \sim M$, B , and $B \leftrightarrow \sim M$ entails, is logically stronger than, $\sim M \rightarrow B$.

Turner (2013: 89) asks *Why The Equivalence Thesis?* complaining that I haven't motivated the entire theory (for The Theory of Conditional Elements is built atop The Equivalence Thesis and is an attempt to rescue it from apparent counterexamples using pragmatics). But he himself gives a perspicuous answer: "It also contributes, with its use in universally quantified first-order propositions, to the integrity of a less modest deductive system, one in which multiple and mixed quantification is possible" only to conclude "but that is another story" (Turner, 2013: 90). But that is actually *not* another story but a good part of the reason for retaining material implication, its use as a base in the versatile and powerful predicate calculus. Nor is it material implication *per se* that causes the bafflement of the paradoxes of material implication. That honour goes to *Ex Falso Quodlibet* as Turner points out, but contrary to Turner's citation of Grice on the disjunctive particle, that particle causes equal consternation *in this regard* through \vee -Introduction and Disjunctive Syllogism.

Indeed, in a major, award-winning undertaking, Sherry (2006) develops PL-, propositional logic minus the funny business, which both bars the paradoxes *and* necessarily \vee -Introduction. (Sherry allows Constructive Dilemma, which as he notes introduces \vee without opening the door for *Ex Falso Quodlibet*.) While Sherry's organon is very successful in modelling discursive propositional argument, only failing to render provable those arguments that don't occur in ordinary discursive practice, as he concedes there is no way of building upon PL- to obtain the predicate logic and thereby work within not merely between propositions (and also handle the Aristotelian corpus). The Theory of Conditional Elements seems an attractive unification of indicative conditionals consistent with using standard propositional and predicate logic to model argumentation.

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