Paradoxes of the Material Conditional

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1 Indicative Conditional vs Subjunctive Conditional

Indicative *If Art does not sell Baja Bar & Grill, then we will meet at Baja Bar & Grill for Phil Club.*

Subjunctive *If Art had not put Baja Bar Grill up for sale, then we would not have to consider a different location for Phil Club.*

2 Materialism

Materialism (M) The material conditional, denoted by "$\supset$", is the correct analysis of the English indicative conditional.

P	Q	$P \supset Q$
T	T	T
T	F	F
F	T	T
F	F	T

3 Paradoxes

$\neg P \vDash P \supset Q$

C If 2+2=5, then 2+2=3.

Turkey-Paris Paradox[1]

P1 If John is in Paris, then he is in France.

P2 If John is in Istanbul, then he is in Turkey.

C Therefore, if John is in Paris he is in Turkey, or, if he is in Istanbul he is in France.

Switches Paradox[2]

P1 If you throw switch S and T, the motor will start.

C Therefore, either if you throw switch S the motor will start, or if you throw switch T the motor will start.

4 Resolutions

3-Valued Logic[1]

P	Q	$P \implies Q$
T	T	T
T	F	F
T	G	G
F	T	G
F	F	G
F	G	G
G	T	T
G	F	F
G	G	G

Conversational Implicature[4]

Robustness in Assertions[3]

"*If P, then Q*" is assertable just in case it is *robust* with respect to P. That is, if one

5 References

1. *The Propositional Logic of Ordinary Discourse* - William S. Cooper (1967)
2. *The Logic of Conditionals* - Ernst Adams (1965)
3. *On Assertion Conditions and Indicative Conditionals* - Frank Jackson (1979)
4. *Studies in the Way of Words* - H.P. Grice (1989)
5. *Ifs* - Editors: William L. Harper, Robert Stalnaker, Glenn Pearce (1981)