Reply to Mr. Leavitt

In a short article in *Russell 6*, entitled "On an Unpublished Remark of Russell's on 'If...Then'", Mr. Frank J. Leavitt makes two claims: (A) that Russell has an argument in an unpublished paper, "Necessity and Possibility", which in effect refutes the non-truth-functional contention that there must be a special connection between the antecedent and consequent of an 'if...then'; (B) that a similar argument can be produced to show that '⊃' or the material conditional is 'if...then'. Consequently, my purposes here are twofold: (A') to examine Leavitt's claim that Russell has such an argument in "Necessity and Possibility"; (B') to scrutinize logically Leavitt's constructed argument in terms of what it tries to prove.

The particular passage of Russell's which Leavitt adduces to show that the material conditional is the correct interpretation of 'if...then' is the following:

> This view of implication is rendered unavoidable by various conside-
> rations.... Suppose p, q, r to be such that if p and q are true,
> then r is true. It follows that if p is true, then q is true, r is
> true.... Now if p and q are true, then p is true. Hence, by the
> above principle, if p is true, then if q is true, p is true; that is,
> if p is true, then q implies p; that is, a true proposition (p) is
> implied by every proposition (q).

The conclusion of Russell's argument is: a true proposition is implied by every proposition. It seems odd that such a conclusion could esta-blish the material conditional as the correct interpretation of 'if...then'. I say this because the sentence, 'a true proposition is implied by every proposition', strictly does not follow from the truth-functional, material conditional; it can only follow if 'implies' is construed as a binary connective, in which case the usage of 'implies' will sin against Quine's distinction of use and mention.[1] In other words, 'a true propo-sition is implied by every proposition' will mean that given a true pro-position; for example, 'snow is white', such a proposition will follow logically from any proposition whatsoever. This of course does not hold, but perhaps this type of criticism would be unfair to the general intent of Russell's argument. What Russell really attempts to prove in the argument in question is the following: if 'p' is true, then 'if q then p' is true, i.e. if the consequent of a conditional is true, then the condi-tional itself is true regardless of the truth value of the antecedent. I will not state my specific objection against Russell's argument at this point since I believe that Leavitt's argument employs the same sort of logical device in order to establish the material conditional as the correct interpretation of 'if...then'. I will only point out that it is quite dubious whether Russell himself deemed such an argument to be a logically definitive proof of the material conditional as 'if...then'; otherwise, Russell would not have added these lines to the argument in question: "I shall not pursue the arguments in favour of this view of implication; I shall content myself by pointing out that it is accepted (tho' without a full realization of its consequences) by Shakespeare and Mr. Bradley ..." ("Necessity and Possibility", p. 17).

Leavitt's own argument runs as follows: if 'p' is false and 'q' is false, then 'p' is false; therefore, if 'p' is false, then if 'q' is false then 'p' is false; in turn, this means: if 'p' is false, then if 'p' is true then 'q' is true, i.e. if 'p' is false, then 'if p then q' is true. The import of Leavitt's argument is that if the antecedent of a conditional is false, then the conditional will be true regardless of the truth value of the consequent. Russell's argument and Leavitt's argument, taken together, attempt to prove that 'if p then q' is true in all cases except when 'p' is true and 'q' is false; indeed, if their arguments were sound, then the material conditional would be an adequate rendering of 'if...then'. I come now to my specific objection. Within the framework of the classical propositional calculus (CPC), both these arguments are sound, but this would *not* establish the interpretation of the material conditional as 'if...then' because the CPC presupposes the material conditional. In both arguments, we find the move from 'if p and q, then p' to 'if p, then if q then p'; such a move is supposedly warranted by the principle of exportation, but I submit that it is exactly this principle which is questionable as a property or feature of the 'if...then' of ordinary language.

When C.I. Lewis objected to the material conditional as the correct interpretation of 'if...then', he had in mind several theses of the CPC which were generated by such an interpretation of 'if...then'. I will list five such theses of the CPC:

$$(1) \quad \vdash P \supset (Q \supset P)$$
$$(2) \quad \vdash \sim P \supset (P \supset Q)$$
$$(3) \quad \vdash [(P \cdot Q) \supset P] \supset [P \supset (Q \supset P)]$$
$$(4) \quad \vdash (P \supset Q) \lor (Q \supset P)$$
$$(5) \quad \vdash [(P \cdot Q) \supset R] \supset [(P \supset R) \lor (Q \supset R)][2]$$

The conclusion of Russell's argument corresponds to (1), and the conclu-sion of Leavitt's argument corresponds to (2). (3) is the thesis for exportation. It seems to me to be quite unfair to employ (3) in an attempt to prove (1) or (2); in fact, (1) or (2) cannot be proved unless we have a thesis which incorporates the import of (3). (4) and (5) likewise are objectionable in a proof of the material conditional as the correct interpretation of 'if...then' since they capture properties

of the material conditional. Consequently, if Russell's or Leavitt's argument is put forward as a proof of the correctness of the material conditional as 'if...then', it will beg the question.

The controversy concerning the nature of 'if...then' has created quite a lot of philosophical upheaval, and one thing, perhaps, which should be learnt from this controversy is that the issue has not been resolved one way or another. Formulas of the CPC which were objected to by Lewis still retain their controversial character today. Consequently, those who employ purely logical arguments in support of the material conditional as the correct interpretation of 'if...then', in which the premisses contain questionable properties of 'if...then', run the risk of begging the issue. Perhaps the only way to argue the case for the material conditional is to provide corroborating examples from ordinary language.

In conclusion, therefore, I would like to make two claims: first, it was *perhaps* due to this kind of circularity that Russell did not claim that his argument in "Necessity and Possibility" was a definitive proof of the material conditional as 'if...then'; secondly, contrary to Leavitt's remark that English speakers are unaware of "the consequences of their day-to-day use of 'if...then'", I would like to say that English speakers *are* aware of such consequences, and it is precisely *due* to such consequences that English speakers have objected to the material conditional as the correct interpretation of 'if...then'.

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[1]W.V. Quine, *Mathematical Logic* (New York: Harper & Row, 1962), pp. 28-9.

[2]C.I. Lewis and C.H. Langford, *Symbolic Logic* (New York: Dover, 1959), pp. 85-8, 146.