

and ' $A \supset B$ ' to be true and B false. Hence, on the Classical Account, it follows that A and ' $A \supset B$ ' entail B . But the Classical Account is wrong. That it is impossible for A and ' $A \supset B$ ' to be true and (&) B false does not show that A and ' $A \supset B$ ' entail B .

If Geach insists that he meant 'and' extensionally (that is, in such a way that the falsity of its conjuncts suffices for the falsity of the conjunction) then we can, nay must, agree that no counterexample is possible. But we must also deny that that shows that DS is valid. This move would be as irrelevant to the validity of DS as the earlier consideration (in §7.2) of intensional disjunction for its major premise. The impossibility of true premises and (&) false conclusion does not suffice for validity. What is needed is the impossibility of true premises fuse false conclusion.

How then can we show the invalidity of DS and EFQ? It follows from our considerations that we cannot do it merely by instantiating the truth-values of their component propositions, $A, B, \sim A$, etc. What we must show is that, for example, ' $A \& \sim A$ ' can be true fuse B false, not simply their extensional conjunction. Fusion is not truth-functional, in particular, the fusion of two propositions may be true even though both are false. Certainly, to repeat the point again, it would suffice to instance circumstances in which each component was true, since, at least in the strong relevant logic **R**, the truth of each component entails the truth of their fusion. But ' $A \& \sim A$ ' is false, whatever A may be, as even the dialetheist will admit; and we require B to be false too. So both components of the counterexemplary fusion to EFQ are false. That does not preclude the truth of their intensional combination.

The answer to Geach's challenge is, therefore, to instance A, B such that, for example, ' $(A \vee B) \& \sim A$ ' fuse ' $\sim B$ ' is true, that is, for which B does not follow from ' $A \vee B$ ' and ' $\sim A$ '.

How do we know that there are A, B for which this is true? We might similarly ask, of the dialetheist, Australian or American plans, how we know that there are A, B for which ' $A \& \sim A$ ' is true and B false. Geach, of course, would refuse to go any further: we know, he would say, that ' $A \& \sim A$ ' is never true. The advocate of the dialetheic plan can only reply by instantiating suitable A : for example, 'This sentence is false' or 'The Russell set belongs to itself'.

Similarly, on the Scottish plan, we instance A, B for which ' $(A \vee B) \& \sim A$ ' fuse ' $\sim B$ ' are true, that is, for which ' $((A \vee B) \& \sim A) \times \sim B$ ' is true—in other words, for which B does not follow from ' $A \vee B$ ' and ' $\sim A$ '. For example, let A be 'Socrates was a man' and B be 'Socrates was a stone' (cf. §2.6 above). It follows from the fact that Socrates was a man that Socrates was a man or a stone. So ' $A \vee B$ ' is true. But ' $(A \vee B) \& \sim A$ ' is not true,

since ' $\sim A$ ' is false. Nonetheless, ' $((A \vee B) \& \sim A) \times \sim B$ ' is true for this interpretation of A and B , even though ' $((A \vee B) \& \sim A) \& \sim B$ ' is false, since ' $(A \vee B) \& \sim A$ ' is false (though ' $\sim B$ ' is true). That (extensional, truth-functional) conjunction is a stronger statement than the corresponding fusion ' $((A \vee B) \& \sim A) \times \sim B$ ', so it is false even though the weaker "fusion"-statement is true. Why is the "fusion"-statement true? Because Socrates being a man or a stone and not a man is consistent with him not being a stone. That is, from Socrates being a man or a stone and not being a man it doesn't follow that he is a stone. Hence Geach's challenge is blocked, and B does not follow from ' $A \vee B$ ' and ' $\sim A$ ', nor from A and its negation.