

MLAT Philosophy Test notes

4. "They all seem to have a motive, sir", said Lewis, surveying the mangled remains of Jobsworth the Porter, "so the problem is whether the Bursar is telling the truth. I'm assuming of course that everyone is either lying, or telling the truth, but not both." "Well done, Lewis!", cried Morse. "In logic there are no surprises. And if the Bursar is telling the truth, so is the Chaplain." "What's more, sir", said Lewis, "the Chaplain and the Dean have given conflicting statements, so they can't both be telling the truth." "Excellent, Lewis!", exclaimed the great detective. "We'll make a copper of you yet. But nor are the Dean and the Warden both lying. And if the Warden is telling the truth, the Chaplain isn't." "I think I follow that, sir. But we still don't know if the bursar is lying." [Bob Hargrave]

Giving the clearest reasoning for your conclusion possible, assess whether Lewis's final claim, 'But we still don't know if the bursar is lying', is true, if we accept the truth of the other claims made by Lewis and Morse.

Lewis's claim in 'I'm assuming of course that everyone is either lying, or telling the truth, but not both' is not that every person is lying or every person is telling the truth, but that for each person lying and telling the truth are exclusive and exhaustive possibilities. Thus, for each person, if he or she is not lying then he or she is telling the truth, and *vice versa*. One approach to the argument is to notice the disjunction 'nor are the Dean and the Warden both lying' – either the Dean or the Warden is telling the truth, and potentially both are. So we follow each path and see where it takes us.

If the Dean is telling the truth, the Chaplain is lying ('the Chaplain and the Dean have given conflicting statements, so they can't both be telling the truth'), and if the Chaplain is lying then so is the Bursar ('if the Bursar is telling the truth, so is the Chaplain').

If the Warden is telling the truth, the Chaplain is lying ('if the Warden is telling the truth, the Chaplain isn't'), and again if the Chaplain is lying then so is the Bursar ('if the Bursar is telling the truth, so is the Chaplain').

So whichever disjunct in 'either the Dean or the Warden is telling the truth' is true – or indeed if both are true – we know that the Bursar is lying.