GRANTS IN SUPPORT OF PHILOSOPHY CONFERENCES

THE ANALYSIS committee has agreed to make limited funds available to support philosophy conferences held in the United Kingdom. These funds are to help pay for the travelling expenses of invited speakers whose expenses cannot be funded from other sources. (Such speakers will typically be people invited from elsewhere in the U.K., as the British Academy may offer support for the expenses of people invited from abroad.) The sum available will normally be no more than £200 per conference.

In order to gain support, a conference must be organized in such a way that attendance is not narrowly restricted, and the following conditions must be met:

- (i) attendance at the conference should not be by invitation only, nor be limited to members of one institution,
- (ii) the conference should either take place out of normal university term time, or should take place at a weekend,
- (iii) the conference should be advertised widely (e.g. at least to a number of U.K. philosophy departments).

Applications for grants will be considered at the start of July and at the end of the year. Applications should be made to the Secretary of the ANALYSIS committee, Dr T. R. Baldwin, Clare College, Cambridge CB2 1TL.

AYER'S FIRST EMPIRICIST CRITERION OF MEANING: WHY DOES IT FAIL?

By DAVID LEWIS

In the first edition of Language, Truth and Logic, Ayer proposes that 'the mark of a genuine factual proposition' is 'that some experiential propositions can be deduced from it in conjunction with certain other premises without being deducible from those other premises alone' ([1], pp. 38-9).

Berlin objects that the criterion is 'a good deal too liberal' and admits patent nonsense. His example, near enough, is that the

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experiential proposition 'I dislike this logical problem' can be deduced from the nonsensical 'this logical problem is green' in conjunction with the premise 'I dislike whatever is green' without being deducible from the latter premise alone ([2], p. 234). Berlin's point is well taken, if indeed a category mistake is nonsense. But it shows at most that the criterion admits too much. We do not yet know how much too much.

In his introduction to the second edition, Ayer accepts Berlin's point in a greatly extended form. Not only does the criterion admit this or that piece of nonsense; it 'allows meaning to any statement whatsoever. For, given any statement "S" and an observation-statement "O", "O" follows from "S" and "if S then O" without following from "if S then O" alone' ([1], p. 11).

Here Ayer goes wrong. For it may very well happen that the consequent of a conditional 'if S then O' does follow from that conditional alone. For instance, O follows from 'if (P or not P) then O' and from 'if not O, then O'. Ayer has just overlooked such cases. In general, O follows from 'if S then O' just when 'S or O' is analytic.

(Two remarks. (1) I assume that Ayer's 'if... then' is meant truth-functionally. (2) I assume that 'follows' and 'analytic' are to be taken in corresponding senses, so that a conclusion follows from a premise just when the conditional from premise to conclusion is analytic. Then if 'analytic' covers more than narrowly logical truth, 'follows' must likewise cover more than narrowly logical implication. Alternatively, 'follows' can be glossed as 'follows by logic alone' provided that 'analytic' is glossed as 'logically true'. My point goes through either way.)

It should have been easy to see that the criterion does not admit just any statement as factual. For if S is analytic, nothing at all follows from S in conjunction with other premises, except for what follows from those other premises alone. To be sure, Ayer does count analytic statements as meaningful. But they are definitely not supposed to come out as factual; rather, the meaningful divides into

the analytic and the factual ([1], p. 31).

Ayer is right, however, that the criterion 'allows meaning to any statement whatsoever'. Only his proof is at fault, not its conclusion. Any statement S is either factual by the criterion or else analytic, and counts as meaningful either way. The correct proof is by cases. First case: for some observation-statement O, 'S or O' is not analytic. Then O does not follow from 'if S then O' alone, but does follow from S in conjunction with 'if S then O'. Then S is factual by the criterion. Second case: there is no such O. It is safe to assume that some two observation-statements O_1 and O_2 conflict, so that 'not both O_1 and O_2 ' is analytic. Also 'S or O_1 ' and 'S or O_2 ' are analytic ex hypothesi, and from these three analytic premises S follows. Then S itself is analytic. Q.E.D. Ayer's mistake was simply to omit the second case.

Later authors have perpetuated the mistake. Church writes that in Ayer's second edition, 'A criticism by Berlin ... is accepted as valid, according to which the definition as actually given in the first edition would make all statements verifiable' ([3], p. 52). Church himself implicitly endorses the criticism thus stated; yet it is mistaken, since Ayer uses 'verifiable' interchangeably with 'factual'. Further, Berlin said nothing so general. Several others paraphrase and endorse Ayer's faulty argument and conclusion: Hempel ([5], p. 49), Scheffler ([6], p. 41), and recently Foster ([4], p. 14).

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- [1] A. J. Ayer, Language, Truth and Logic, Gollancz, 1936; second edition, 1946. Page references are to the second edition.
- [2] Isaiah Berlin, 'Verification', Proceedings of the Aristotelian Society, 39 (1938-39).
- [3] Alonzo Church, review of the second edition of Language, Truth and Logic, Journal of Symbolic Logic, 14 (1949).
- [4] John Foster, Ayer, Routledge and Kegan Paul, 1985.
 [5] Carl G. Hempel, 'Problems and Changes in the Empiricist Criterion of Meaning', Revue Internationale de Philosophie, 4 (1950).
- [6] Israel Scheffler, The Anatomy of Inquiry, Knopf, 1963.

IS CONSISTENCY ENOUGH FOR EXISTENCE IN **MATHEMATICS?**

By Geoffrey Hunter

[ILBERT and Poincaré at various times said so:

Hilbert: 'If the arbitrarily given axioms do not contradict one another, then they are true and the things defined by them exist. This for me is the criterion of truth and existence.' (Letter to Frege, 1899)

Poincaré: 'What is the meaning in mathematics of the phrase to exist? It means, I said, to be free from contradiction.' (Science and Method, 1908, Bk 2, ch. V, pt. III)

Antony Flew asserted it in a discussion of the ontological argument in 1966: '... [Proofs of] the so-called "existence theorems" of [pure] mathematics... are not proofs of the actual existence of anything, but only and properly of the freedom from contradiction of concepts.' (God and Philosophy, p. 79)