ANTINOMIES AND RATIONAL PREDICAMENTS: AN INESCAPABLE LABYRINTH[1]

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In this paper I argue that for some antinomies (I use a version of the Liar as a specimen) the attempt to escape merely results in a *predicament* (as defined below) and the attempt to escape that merely results in a new antinomy. I draw the conclusion that these antinomies and predicaments are inescapable. This throws a none too flattering light on almost all attempt to handle antinomies, including the heterodox position of *di-alethic logic*[2] (according to which there are some true contradictions), which I would otherwise find congenial.

Since my argument depends on the distinction between and interplay of antinomies and predicaments, I shall begin by defining them. By an *antinomy* I mean a pair of *prima facie* convincing arguments (the *halves* of the antinomy) for p, and for not-p, respectively, for some sentence p. (I call p the thesis of the antinomy.) By a *rational predicament* I mean a pair of prima convincing arguments (the *halves* of the predicament) for 'It is irrational, in the circumstances, to believe q', and for 'It is irrational, in the circumstances, to refrain from believing q'[3], respectively, for some sentence q. (I call q the *topic* of the predicament.) Notice that if I replaced 'irrational' by 'rational' in the definition of a predicament I would not have defined a predicament at all. For if it is both rational to believe and rational to refrain from believing we may rationally do as we please. I shall say

[1] This paper both overlaps and supersedes a paper. 'Why There are no True Contradictions', given to the A.A.P. Conference at Canberra in August 1984. I would like to thank all who commented on that occasion, as well as Philip Pettit who read a draft of the paper. I am also indebted to Richard Sylvan (formerly Routley) and Graham Priest for earlier 'awakening me from my dogmatic slumbers' so that I now take the di-alethic position seriously.

[2] See Graham Priest, 'Logic of Paradox', *Journal of Philosophical Logic* 8 (1979), pp. 219-24 and Richard Routley, 'Dialectical Logic, Semantics and Meta-mathematics', *Erkenntnis* 14 (1979), pp. 301-31.

[3] It is curiously difficult to find an English phrase for the negation of 'X believes that q'. I stipulate that 'X refrains from believing that q' is to be such a negation.

that an antinomy, or a predicament, is *escapable* if it can be shown that one or both halves fails to be convincing, that it is merely *prima facie* convincing. I do not require, for an escape, that it be shown which half fails, or that any explanation of the failure be given.

I

I now explain what I mean by a *prima facie convincing* argument. I mean a consideration which, but for the occurrence of some other consideration, would establish its conclusion as one which is required for rationality. That is, it would show that it was irrational, in the circumstances, to refrain from believing the conclusion. (Here the circumstances are those of being involved in the rational discussion, that is, of being argued against.)

Among prima facie convincing arguments I include, by way of stipulation, a degenerate case, that in which the 'conclusion' p is simply put forward as obvious or 'self-evident'. If that degenerate argument is prima facie convincing then I say there is an *intuition* that p. Notice that unless what is simply put forward is such that, but for other considerations, it would be irrational not to accept it, then it is not an intuition but a mere hunch. Also notice that intuitions, even if correct, are not automatically cases of *a priori* knowledge. For being *prima facie* convincing is not sufficient for being convincing all things considered.

II

Next I consider the connections between antinomies and predicaments. A predicament with topic p generates an antinomy whose thesis is 'It is rational, in the circumstances, to believe p'. To show this I assume we have an intuition that if it is irrational to refrain from believing p then it is rational([4]) to believe p. I call this the 'Ought' Implies 'May' Intuition. And it expresses our *intuitive* reaction to

([4]) I take 'rational' to mean 'rationally permissible' not 'rationally obligatory'. Hence 'irrational' is equivalent to 'not rational'.

predicaments. We say: It cannot both be irrational to believe and be irrational to refrain from belief, because if it is irrational to refrain from belief then, for that very reason, it is rational to believe. Given the 'Ought' Implies 'May' Intuition, the prima facie convincing argument for the irrationality of refraining from belief in the topic of the predicament is converted into a prima facie convincing argument for the rationality of believing the topic. Hence we obtain the new antinomy.

Conversely, to every antinomy there corresponds a predicament, whose topic is the thesis of the antinomy, and which I call the *associated predicament*. To show this I assume the Intuitive Rejection of Paradoxes, namely the intuition that for no p is it rational simultaneously to believe p and to believe not-p. Part of an antinomy whose thesis is p, is a prima facie convincing argument for p. By the definition of a prima facie *convincing* argument this demonstrates that, but for opposing considerations, it is irrational to refrain from believing p. Furthermore, this demonstration is itself prima facie convincing. Hence we automatically have a prima facie argument for the irrationality of refraining from belief in p. Likewise we have a prima facie convincing argument for the irrationality of refraining from believing not-p. Now suppose, for the moment, both that it is rational to believe p and that the Intuitive Rejection of Paradoxes is correct. Then, working within the scope of these suppositions, it would be irrational to believe not-p. But we had a prima facie convincing argument that it is irrational to refrain from believing not-p. So, relying on the 'Ought' Implies 'May' Intuition, we obtain a contradiction (namely 'It is both rational and irrational to believe not-p'). And obtaining a contradiction within the scope of a supposition provides a prima facie convincing case against the supposition. But part of the supposition is an intuition. So we have a prima facie convincing argument for the negation of the remainder of the supposition. In this way we obtain a prima facie convincing argument for 'It is irrational to believe p'. We already have a prima facie convincing argument for 'It is irrational to refrain from believing p'. So now we have a predicament whose topic is p, the thesis of the original antinomy. Similarly we could have obtained a predicament whose topic is not-p. Notice that in this tortuous argument I relied heavily on the method of reductio ad absurdum. This might seem controversial.

But I do not think it should. For all I am here engaged in is the provision of a *prima facie* convincing argument. I shall take quite seriously the di-alethic attempt to *escape* the predicament by insisting there are true contradictions and hence the method of reductio sometimes fails. But I do not take seriously any *initial* reliance on di-alethic logic to try to show there never was a predicament. I insist that reductio is intuitive and so *prima facie* convincing.

Because predicaments are associated with antinomies and themselves generate new antinomies, philosophers have not, I suspect, been at pains to distinguish antinomies from rational predicaments. For example, Mackie, is his treatment of antinomies (or paradoxes as he calls them) says:

> The paradoxes also constitute a radical challenge to the rationality of human thinking .... For the constructor of formal systems, a solution need only be an exclusion device, but for the general philosopher ... it must show that there are only apparent antinomies.([5])

I interpret Mackie here to mean 'escapable' by 'apparent'. My interest in this passage of Mackie's is that it strongly suggests that an inescapable antinomy would challenge our rationality. But, surely, it is only an inescapable rational predicament that would do that, by forcing us into a situation where we cannot be rational. By distinguishing antinomies from the associated predicaments I am able to distinguish, in turn, two strategies for defending ourselves against this threat to rationality. One, admittedly, is to attempt to escape the antinomy. However, if that fails, there is a second strategy: we can attempt to escape the associated predicament even though the antinomy be inescapable. Di-alethic logicians can be seen as proposing the second strategy. Some antinomies are, they say, inescapable. That is, both arguments succeed. So there are true contradictions. Hence, they say, we escape the associated predicament by rejecting the Intuitive Rejection of Paradoxes. My purpose in this paper is to

([5]) J.L. MACKIE, *Truth, Probability and Paradox; Studies in Philosophical Logic* (Oxford, 1973), p. 239.

show that neither strategy succeeds; both the antinomy and the predicament are inescapable.

III

At this point I find it convenient to concentrate on an version(6) of the Antinomy of the Liar. But what I say will generalise to all other genuine antinomies. The thesis is the self-referential sentence 'This sentence, for whatever reason, is not true'. Call that sentence P. And for my purpose I stipulate, as I am surely entitled to, that being neither true nor false, even being meaningless, are ways of being not true. Now suppose P, for whatever reason, is not true. Then, by the intuitive referential transparency of the '— is not true' context we have a prima facie convincing argument for P. But, intuitively, if from 'P is not true' we can derive P, then P must be true. So we have a prima facie convincing argument for P. But, again by the intuitive transparency of the '— is not true' context we can infer that P is not true from P, and hence by a further intuitive step infer not-P. So we have a prima facie convincing argument for not-P, as well. Hence the antinomy. It is all too easy to be wise after the event and declare that one or both halves are not even *prima facie* convincing. But the steps in the argument are recognisable as instances of inference-schemata whose instances would, in other circumstances, be acceptable. I submit it is ad hoc to pick and choose these instances. So we either have to regard none of them as even prima facie convincing or all of them as at least *prima facie* convincing. The former would be preposterously sceptical. So I conclude we should not be wise after the event. There *is* an antinomy.

I now claim that none of the well-known methods of dealing with the Liar provide an escape from that antinomy. Nor, I suspect, are they intended to. And the reason for this is that they all assume, presumably as obvious, that at least one half of the antinomy fails. The intellectual effort then goes on the *diagnosis* or *explanation* of

(6) One based on the Mackie/Smart variants. See J.L. Mackie and J.J.C. Smart, 'A Variant of the Heterological Paradox', *Analysis* 13 (1953), pp. 61-66 and *Analysis* 14 (1954), pp. 146-9.

what is already assumed to have failed. But to diagnose or explain a fault, within the scope of the assumption that there is some fault, does not amount to a demonstration that the argument *is* at fault.

For example, following Tarski in all but his restriction to formal languages, it has been suggested that 'true' is ambiguous between a hierarchy of types of truth. I submit, however, that such appeal this has as a way of handling the Liar derives entirely from the assumption that at least one half of the antinomy fails and our problem is merely to find a fairly plausible diagnosis. To argue for this submission I rely on a thought-experiment. This involves the pretence that some *other* proposal concerning the Liar is correct. Suppose, for instance, that you adhered to a Tarski-type account and now you come to accept, say on reading Kripke,(7) that truth-value gaps will do the trick. Would you not say 'Thank goodness for Kripke, now we no longer need that hierarchy, we can go back to a non-hierarchical approach'? But if the appeal of the Tarski-type theory were more than that of a hypothetical diagnosis of the fault, we should have a different reaction, namely that now we have *two* reasons for not worrying about the Liar. The thought-experiment then shows that the Tarski-type handling of the Liar is being thought of a diagnosis. This is not to condemn it. Probably its adherents just think it is *obvious* that there is a defect in at least one half of the antinomy and so all that is required is diagnosis.

A similar thought-experiment shows I think that almost all attempts at handling the Liar simply assume that at least one half of the antinomy fails. (The exception here is di-alethic logic.)

There are two possible objections to my reliance on this thought-experiment. The first is that there are what Mackie calls *truth-teller* variants of the liar.(8) There is something mighty odd about 'This sentence, for whatever reason, fails to be false'. (Call that sentence Q.) But here there is, it might be thought, no antinomy or predicament involved. For either the truth or the falsity of Q is self-consistent. Hence, it could be objected, there must be something wrong with P quite independently of the way it leads to an antinomy, namely

(7) Saul KRIPKE, 'Outline of a Theory of Truth', *Journal of Philosophy* 72 (1975), pp. 690-716.

(8) See J.L. Mackie, *Truth Probability and Paradox*, pp. 240-1.

whatever it is that is wrong with Q. In this way, Q might be called as a witness to the escapability of the antinomy of the Liar. My reply to this objection is to point out that there *is* an antinomy associated with Q and that this antinomy explains the oddity of Q. The thesis of this antinomy is 'Q is neither true nor false'. Now we have a prima facie convincing argument from this thesis to its negation. But what about the argument for the thesis? That starts from the premiss that there is no fact of the matter as to whether or not Q, over and above Q's assertibility. (A similar premiss would hold for P also.) I then argue that since there are no reasons for asserting Q rather than not-Q, or not-Q rather than Q, neither Q or not-Q is assertible. So by the premiss mentioned above we obtain the thesis. In support of the mentioned premiss I note the peculiarity of the following comment:

> All this bother about Q (or about P) is a waste of time; for although there is a fact of the matter as to whether or not Q we just cannot discover it.

What is wrong with this comment? After all if we philosophers were discussing a priori the number of the planets, in the manner of Hegel, a similar comment would be perfectly in order. I submit that we do recognise the peculiarity of the comment and that the peculiarity is evidence that there is here no fact of the matter over and above assertibility. And if this conclusion is denied then I point out, as an ad hominem, that the objection to my thought-experiment itself fails. There would be, after all, nothing out of order about Q, except that we are not in a position to know whether it is true or false.

The second objection to the result of my thought-experiment is that an analysis of truth may well give us an argument for the defective character of P (and of Q) quite independent of the antinomy. In that case we are doing more than merely diagnosing a fault in pointing to that defective character. As an example, on a crude redundancy theory of truth(9), P would be equivalent to 'This sentence' which is not even a sentence. I have two replies to this objection. The first is that, because of the way I have set up the antinomy, any demonstra-

(9) Similar remarks hold on the more sophisticated pro-sentential theory of truth. See Dorothy Grover, 'Intuitions and Paradox', 74 (1977), pp. 590-604.

tion that P is neither true nor false just leads us back into the antinomy. The second is that, we can find variants of the Liar which do not involve *truth*. Thus on a redundancy theory 'P is neither true nor false' should get paraphrased as 'neither P nor not-P'. So 'P is not true' gets paraphrased as 'Either not-P or neither P nor not-P'. Let us call that, or whatever the theorist in question gives as the analysans for 'P is not true' the *weak negation* of P. Now consider the sentence 'This sentence is equivalent to its own weak negation'. If for any reason, that is defective, then, so the *prima facie* argument goes, we should accept the weak negation of P, which leads to an antinomy.

I have argued that attempts as handling the Liar never demonstrate, but rather assume the antinomy can be escaped. But I doubt they are even intended as escapes from the antinomy. Probably it is taken as *obvious* that at least one half of the antinomy fails. But it is not obvious, or at least not obviously obvious. For why not draw the conclusion of the di-alethic logicians, namely that *both* halves succeed and jointly provide a proof that there are true contradictions? A common reply here is that, by the logical rule of *ex impossibile quodlibet*, if there are true contradictions then everything is true, which is something we just *know* not to be so. So, it is claimed, we have a knowledge that there are no true contradictions more secure than the mere intuition I am trading in. That reply is a weak one, because the rule of *ex impossibile quodlibet* cannot be justified except on the basis of intuitive rules of inference, such as disjunctive syllogism. Therefore, at very best, the case for *ex impossibile quodlibet* is no stronger than anything else based on intuition. But, in any case, even if we *knew* there were no true contradictions this would not show that at least one half of the antinomy failed. All that would happen is that we would obtain a *new* antinomy whose thesis is 'There are some true contradictions'. The old antinomy would provide one half, and either the supposed knowledge, or more moderately an intuition, the other. Di-alethic logicians are quite happy with the conclusion that there both are and are not true contradictions.

I argued earlier in this section that the usual ways of handling the antinomy provide no escape. This left the possibility that escape was obvious. But that route was blocked by the di-alethic position. Now, I cannot rule out the possibility that in some roundabout way an escape

from the antinomy will be provided. However I have at least made a *case* for the inescapability of the Liar. At this point it might look as if I am arguing for the di-alethic position. And indeed I admire di-alethic logicians for their thoroughness. Not put off by prejudice they simply follow through the dictates of reason. Unfortunately they are not, I submit, thorough enough. The di-alethic position is that P and not-P. But by the Intuitive Rejection of Paradoxes it is (prima facie) irrational simultaneously to believe P and to believe not-P. So the di-alethic logicians have to reject that intuition. And that is tantamount to claiming that the *associated predicament* can be escaped, even though they agree with me that the antinomy cannot be. But, I claim, the predicament is inescapable for the same reasons as the antinomy. The obvious ways of handling the predicament simply assume it is escapable and then decide what goes wrong with one or both halves of the predicament. For example if we rank the Intuitive Rejection of Paradoxes lower than other relevant intuitions *and* we assume one of our intuitions is incorrect, then the Intuitive Rejection should be rejected. And that leads to di-alethic logic. Conversely, if we rank that intuition higher than some other relevant one *and* we assume one of our intuitions is incorrect, then some other relevant intuition should be rejected and this will, presumably, be one of those on which the antinomy was based. So we would escape the antinomy after all. But, as with the case of antinomies, it is premature to reject *any* intuition until we can show the predicament can be escaped. Just as the di-alethic logicians, with commendable thoroughness, draw the conclusion that both halves of the *antinomy* are convincing, we should draw the conclusion that both halves of the *predicament* are convincing.

If someone suggested *for no reason* that it was both irrational to believe p and irrational to refrain from believing p, we could appeal to the 'Ought' Implies 'May' Intuition. This, by generating the contradiction that it is both irrational to believe p and rational to believe p would provide a prima facie convincing argument for escape from the predicament. But appeal to the 'Ought' Implies 'May' Intuition, in the present case, merely generates a new antinomy. And only by escaping *that* could we even *hope* to escape the predicament. And even if we could escape this new antinomy the escape might well consist in rejecting the 'Ought' Implies 'May' Intuition itself.

I draw the conclusion that, an antinomy, and in particular that of the liar, generates an inescapable labyrinth of predicaments and antinomies. There is no escape from the antinomy without first escaping from the associated predicament. Conversely, there is no escape from the predicament without first escaping from a further antinomy. So there is no escape either from the antinomy itself or the associated predicament.

IV

Where, then, has our reasoning about the Liar led us? Nowhere, I say. At each stage we have a prima facie convincing argument. But at each stage we have an opposing argument. So we never obtain an argument to be relied on. But being led nowhere is not in this case a reason for believing P if we like. For being led nowhere by the rules of right reason is merely a *prima facie* convincing argument for believing if we like. That is, it is merely a prima facie convincing argument for 'It is rational to believe P and it is rational to refrain from believing P'. And we already have arguments which oppose this one. Rather, antinomies are beyond the scope of all reasoning. Reason fails.

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