TWO SURPRISINGLY NON-PARADOXICAL SENTENCES

André KUKLA

Consider the following sentences:

- (A) Sentence A is false.
- (B) Sentence B is true.

Sentence A needs no introduction. As for B, it has occasionnally been noted – by Mortensen and Priest [1], for example – that it also has its peculiarities. Mortensen and Priest call B the 'truth-teller paradox'. It is not strictly speaking paradoxical, however. No contradiction follows from the assumption that it is false; nor do we get into trouble by assuming that it is true. But is it true or is it false? One cannot imagine an empirical test for determining its truth-value; and there do not seem to be any arguments that establish its truth or falsehood aprioristically. Nevertheless, as Mortensen and Priest note, there is an argument showing that B must be either true or false. Suppose that B is neither true nor false. Then, since it claims of itself that it is true, it follows that it is false. But this contradicts the assumption that it is neither true nor false. Therefore B is either true or false. Now we are returned to the impenetrable question: is it true or is it false?

I do not have a persuasive answer to this question, and neither do Mortensen and Priest. But this much is clear: whatever general approach is adopted for resolving the paradox of A should also provide an account of the peculiarity of B. A proposed solution to A which leaves us in the dark about the status of B must strike us as piecemeal.

Now here are two other sentences which obviously belong to the same family:

- (C) Sentence C is neither true nor false.
- (D) Sentence D is either true or false.

Using the style of reasoning that generates a paradox from A and a peculiarity from B, we come to a rather surprising conclusion about C and D: these sentences are neither paradoxical nor even peculiar. C is

straightforwardly false and D is straightforwardly true.

Let us look at C first. Suppose, to begin with, that C is neither true nor false. Then, since this is exactly what it claims, it follows that it is true. Thus the assumption that it is neither true nor false must be rejected. Now is it true or is it false? Suppose it is true. Then, since it claims to be neither true nor false, we must conclude that it is not true. Therefore it cannot be true. And therefore it must be false.

Similarly, D must be either true or false. For suppose it is neither true nor false. Then, since it claims to be either true or false, it follows that it is false. Thus the assumption that it is neither true nor false must be rejected. Now is it true or is it false? Suppose it is false. Then, since it claims to be either true or false, we must conclude that it is neither true nor false. But then it cannot be false. Therefore it must be true.

So C and D are false and true, respectively, on a priori grounds. Of course this conclusion must be tempered by the fact that the same kind of reasoning leads to a contradiction when it is applied to A. The arguments establishing the truth-values of C and D can only be said to provide more grist for whatever analytical mills are devised for dealing with A and B: now we have four samples of a certain kind of argument, each of which leads to a different conclusion.

University of Toronto
Department of Psychology
Scarborough College
West Hill, Ontario
Canada M1C 1A4

André KUKLA

REFERENCE

[1]C. Mortensen & G. Priest, 'The truth teller paradox', Logique et Analyse, 24 (Sept-Dec 1981), 281-288.