Paradoxes, Second Edition by R.M. Sainsbury. Cambridge, Cambridge University Press, 1995. x +1 65 pp, paperback.

Review by

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Unlike modern physics or computer science, logic is without a popular literature. R. M. Sainsbury's text *Paradoxes* is a partial remedy, as it is accessible to those without any familiarity with the philosophical treatment of paradox. Here Sainsbury blends analytical approach and an appreciation of the broadly engaging notion of paradox into a small book that will serve as an agreeable introduction to and a handy compendium of discussion of some important paradoxes, and, more importantly, the notion of paradox.

Perhaps more than any topic in logic, paradox is suited to a general audience. Like many interesting open problems in number theory, the paradoxes Sainsbury addresses himself to are easy to state. The essential antinomies are easy to motivate in nearly all the cases he presents. Whether due to *Alice in Wonderland*, or the popular writings of Smullyan, or riddles in the oral tradition, many readers will be familiar with puzzles like that of the Barber.

The Barber is cast by Sainsbury as: In an isolated village a barber shaves all and only those villagers who do not shave themselves. Who shaves the barber? If the barber shaves himself, then he is among those villagers who do shave themselves, and so the barber, since he shaves only those who do not shave themselves, cannot shave himself. Likewise, if he does not shave himself, then he is clearly among those who do not shave themselves, and so, since he shaves all those who do not shave themselves, he shaves himself.

This is the least interesting paradox that Sainsbury considers; and he admits that. He offers a solution to the Barber paradox, which ranks in difficulty as a one on his scale to ten (where the Liar paradox is a ten), saying that we can simply reject the premise that there is such a Barber. Thus, the paradoxical result is avoided. We can do this without cost to intuitions held dear, for no one has ever seen such a Barber, nor has reason to think that one exists.[1] In the pages that follow, Sainsbury admits that

[1] Charles Chihara discusses a paradox similar to the Barber in his useful [*1979*]. The Sec Lib club follows the rule "A person is eligible to join this club if, and only if, he is secretary of a club which he is not eligible to join." If the