

## The problem of the two babies<sup>1</sup>

There are two babies, Peter and Robert, born at the same time in the same hospital. Their mothers are Mrs. Smith and Mrs. Jones, but it is not known which baby belongs to which mother. The father of Mrs. Jones' baby is Mr. Jones. The father of Mrs. Smith's baby is either Mr. Smith or Mr. Jones, but no one else. A baby both of whose parents have blue eyes always has blue eyes. Mrs. Smith, Mr. Jones, and Peter all have blue eyes, while Mr. Smith, Mrs. Jones, and Robert all have brown eyes. Blood tests show that Robert can be Mrs. Smith's child only if Mr. Jones is his father.

Use the above information to assign each baby to the correct mother and if possible to the correct father.<sup>2</sup>

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<sup>1</sup> Editors' note: The MS is located at the Prior archive, box 11, at the Bodleian Library in Oxford. It has been transcribed and commented on by Zuzana Rybařiková and David Jakobsen. The text is handwritten, but not in Prior's hand. The paper is probably Canterbury note paper. It is likely that the text is an exercise for one of Prior's logic classes. The title has been added by the editors.

<sup>2</sup> To find more information about paternal testing back in Prior's time see G. A. F. Seber (1985): Use of blood samples in paternity testing and forensic science, *Journal of the Royal Society of New Zealand*, 15:2, 157-168.