Christ Church Library, Carroll Collection

Digitised image notes and captions by Edward Wakeling

Carroll-MS 15 – A Disputed Point in Logic

Introductory notes:

This logic manuscript, dated 16 April 1894, is from Thomas Vere Bayne. It is published in Bartley, pp. 453-454. It concerns a disagreement between Professor John Cook Wilson and Dodgson on propositions of inference forming a logical sequence. Dodgson's concrete example is about the sale of property and whether the sale has been completed.

Carroll-mss_0080-ms15_r

The text reads:

A Disputed Point in Logic   16/4/94

A Concrete Example.

  This island consists of a Northern and a Southern Division; but I am not sure where the boundary-line is.
  The Northern Division is Brown's Estate: the Southern is mine.
  Brown is selling his Estate to me; but I do not know whether the sale is completed.
  The following propositions are true.
    I. If this field is Brown's, it must be in the Northern Division (for otherwise it would be part of *my* estate).
    II. If the sale is completed, then, if this field is Brown's, it cannot be in the Northern Division (otherwise it would be *mine* by purchase).
  Now let   "A is true" = "this field is Brown's"
                "B is true" = "this field is in the Northern Division"
                "C is true" = "the sale is completed"
  Then Propositions I, II, are equivalent to (i) and (ii), and the question "can C be true?" is equivalent to "is it possible that the sale is completed?"

  Here the 2 Propositions, "if A is true, B is true" and "if A is true B is not true," both of them contain a logical sequence. Also they are *compatible*; their combined effect being "A is not true."
  Hence, if C is true, A is not true; and *vice versa*, if A is true, C is not true: i.e. A and C cannot be true together.

But there is nothing to prevent C *alone* being true; i.e. it is possible, consistently with I and II, that the sale *may* have been completed.

Carroll-mss_0081-ms15_v

The verso is blank.