## Logic of Relatives

1893 | Book II. Division I. Part 2. Logic of Relatives. Chapter XII. The Algebra of Relatives | MS [R] 418:354

As all of logic deals with relations, it is more accurate to describe the branch of logic with which I am going to expound as the logic of relatives, i.e. relative terms. Relations as relatives are either *dual*, as in "A loves B" or *plural*, as "A gives B to C".

1898 | Cambridge Lectures on Reasoning and the Logic of Things: Detached Ideas on Vitally Important Topics. Lecture II | CP 4.5

The great difference between the logic of relatives and ordinary logic is that the former regards the form of relation in all its generality and in its different possible species while the latter is tied down to the matter of the single special relation of similarity. The result is that every doctrine and conception of logic is wonderfully generalized, enriched, beautified, and completed in the logic of relatives.

Thus, the ordinary logic has a great deal to say about *genera* and *species*, or in our nineteenth century dialect, about *classes*. Now, a *class* is a set of objects comprising all that stand to one another in a special relation of similarity. But where ordinary logic talks of classes the logic of relatives talks of *systems*. A *system* is a set of objects comprising all that stand to one another in a group of connected relations. Induction according to ordinary logic rises from the contemplation of a sample of a class to that of the whole class; but according to the logic of relatives it rises from the contemplation of a fragment of a system to the envisagement of the complete system.