Relation of Reason

...a relation of reason subsists in virtue of two facts, one only of which would disappear on the annihilation of either of the relates. Such are all resemblances: for any two objects in nature resemble each other, and indeed in themselves just as much as any other two; it is only with reference to our senses and needs that one resemblance counts for more than another.

By logical relations, I mean those in respect to which all pairs [of] objects in the universe are alike; by hemilogical relations those in respect to which there is in reference to each object in the universe only one object (perhaps itself) or some definite multitude of objects which are different from others; while the alogical relations include all other cases. The logical and hemilogical relations belong to the old class of relations of reason, while relations in re are alogical. But there are a few not unimportant relations of reason which are likewise alogical. In my paper of 1867, I committed the error of identifying those relations constituted by non-relative characters with relations of equiparance, that is, with necessarily mutual relations, and the dynamical relations with relations of disquiparance, or possibly non-mutual relations. Subsequently, falling out of one error into another, I identified the two classes respectively with relations of reason and relations in re.

The "paper of 1867" is 'On a New List of Categories'

Dual relations, - facts about pairs of subjects, - are of two types, first those which imply no more about their subjects that they have certain qualities between which some comparison is made; and secondly, those which imply more about their subjects than is true of them in their separate existences, something real and positive which could not be true of one if the other did not exist to enable it to be true, in other words a real action and reaction between the individuals. This is the old distinction between real relations and relations of reason. Real relations exhibit the fully developed type of duality. In this case, it is what happens to the individuals, the actions of them, which pairs them. Relations of reason imply no other facts than the possession of two qualities severally by two individuals; and it is primarily the qualities that are paired.
...what is true by virtue of a relation of reason is representative, that is, is of the nature of a sign.