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**AN ESSAY TOWARDS A NEW
THEORY OF VISION**

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An Essay Towards a New Theory of Vision

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1. My design is to show the manner wherein we perceive by sight the distance, magnitude, and situation of OBJECTS. Also to consider the difference there is betwixt the IDEAS of sight and touch, and whether there be any IDEA common to both senses.

2. It is, I think, agreed by all that DISTANCE, of itself and immediately, cannot be seen. For DISTANCE being a Line directed end-wise to the eye, it projects only one point in the fund of the eye, which point remains invariably the same, whether the distance be longer or shorter.

3. I find it also acknowledged that the estimate we make of the distance of OBJECTS considerably remote is rather an act of judgment grounded on EXPERIENCE than of SENSE. For example, when I perceive a great number of intermediate OBJECTS, such as houses, fields, rivers, and the like, which I have experienced to take up a considerable space, I thence form a judgment or conclusion that the OBJECT I see beyond them is at a great distance. Again, when an OBJECT appears faint and small, which at a near distance I have experienced to make a vigorous and large appearance, I instantly conclude it to be far off: And this, it is evident, is the result of EXPERIENCE; without which, from the faintness and littleness I should not have inferred anything concerning the distance of OBJECTS.

4. But when an OBJECT is placed at so near a distance as that the interval between the eyes bears any sensible