

proximate degree, *guess* the situation of the point from which a sound proceeds, this is a secondary process, distinguishable from the perception of the sound itself; whereas we cannot conceive visible things without form and place.

The law according to which the sense of vision is thus affected, appears to be this. By the properties of light, the external scene produces, through the transparent parts of the eye, an image or picture exactly resembling the reality, upon the back part of the retina: and each point which we see, is seen in the direction of a line passing from its image on the retina, through the centre of the pupil of the eye.* In this manner we perceive by the eye the situation of every point, at the same time that we perceive its existence; and by combining the situations of many points, we have forms and outlines of every sort.

That we should receive from the eye this notice of the position of the object as well as of its other visible qualities, appears to be absolutely necessary for our intercourse with the external world; and the faculty of doing so is so intimate a part of our constitution that we cannot conceive ourselves divested of it. Yet in order to imagine ourselves destitute of this faculty, we have only to suppose that the eye should receive its impressions as the ear does, and should apprehend red and green, bright and dark, without placing them side by side; as the ear takes in the different sounds which compose a concert, without attributing them to different parts of space.

The peculiar property thus belonging to vision, of perceiving position, is so essential to us, that we may readily believe that some particular provision has been made for its existence. The remarkable mechanism of the eye (precisely resembling that of a *camera obscura*,) by which it produces an image on the nervous web forming its hinder part, seems to

* Or rather through the *focal centre* of the eye, which is always near the centre of the pupil.