

cumstance is, that he appears, like many persons in whom the poetical imagination is very active, to have been destitute of the talent and the habit of geometrical thought. In all probability, he never apprehended clearly and steadily those relations of position on which the Newtonian doctrine depends. Another cause of his inability to accept the doctrine probably was, that he had conceived the "composition" of colors in some way altogether different from that which Newton understands by composition. What Göthe expected to see, we cannot clearly collect; but we know, from his own statement, that his intention of experimenting with a prism arose from his speculations on the rules of coloring in pictures; and we can easily see that any notion of the composition of colors which such researches would suggest, would require to be laid aside, before he could understand Newton's theory of the composition of light.

Other objections to Newton's theory, of a kind very different, have been recently made by that eminent master of optical science, Sir David Brewster. He contests Newton's opinion, that the colored rays into which light is separated by refraction are altogether simple and homogeneous, and incapable of being further analysed and modified. For he finds that by passing such rays through colored media (as blue glass for instance), they are not only absorbed and transmitted in very various degrees, but that some of them have their color altered; which effect he conceives as a further analysis of the rays, one component color being absorbed and the other transmitted.²² And on this subject we can only say, as we have before said, that Newton has incontestably and completely established his doctrine, so far as analysis and decomposition *by refraction* are concerned; but that with regard to any other analysis, which absorbing media or other agents may produce, we have no right from his experiments to assert, that the colors of the spectrum are incapable of *such* decomposition. The whole subject of the colors of objects, both opaque and transparent, is still in obscurity. Newton's conjectures concerning the causes of the colors of natural bodies, appear to help us little; and his opinions on that subject are to be separated altogether from the important step which he made in optical science, by the establishment of the true doctrine of refractive dispersion.

[2nd Ed.] [After a careful re-consideration of Sir D. Brewster's asserted analysis of the solar light into three colors by means of

²² This latter fact has, however, been denied by other experimenters.