

described the phænomena in appropriate terms, it will be evident that a certain difficulty must attach to their reduction under the dominion of *any* theory, however competent, ultimately, to render a true account of them. Where such evidence of complication and suddenness of transition subsists on the face of any large assemblage of facts, we are not to expect that the mere mention of a few general propositions, like cabalistic words, shall all at once dissipate the complication, and render the whole plain and intelligible. If we represent the total intensity of light, in any point of a partially-absorbed spectrum, by the ordinate of a curve whose abscissa indicates the place of the ray in order of refrangibility, it will be evident, from the enormous number of maxima and minima it admits, and from the sudden starts and frequent annihilations of its value through considerable amplitudes of its abscissa, that its equation, if reducible at all to analytical expression, must be of a singular and complex nature; and must at all events involve a great number of arbitrary constants dependent on the relation of the medium to light, as well as transcendents of a high and intricate order. We must not, therefore, set it down to the fault of either of the two rival theories if we do not at once perceive how such phænomena are to be reconciled to the one or to the other; but rather endeavour to satisfy ourselves whether there be, in the first instance, anything in the phænomena, generally considered, repugnant either to sound dynamical principles, or to the notions which those theories respectively involve as fundamental features.