

everything.<sup>1</sup> From this spell of mechanical connections, geometrical configurations or genealogical trees, to which we may add statistical regularities, it has always been the object of a deeper philosophy of

<sup>1</sup> Three thinkers of the very first order have given expression, quite independently of each other, to this reflection. The first is Goethe, who frequently dwells on the subject, but most explicitly in a conversation with Eckermann in the year 1824: "As soon as one belongs in science to a narrow confession, the unbiassed truthful view is at once gone. The decided Vulcanist will always see things through the eyeglass of the Vulcanist, in the same way as the Neptunist and the adherent of the recent 'elevation' theory will do so only through his own. The view of all such theorists, who are obsessed by a special exclusive aspect, has lost its innocence, and objects no more appear in their natural purity. Whenever such students give an account of their observations, we do not, in spite of the greatest personal veracity, receive in any way the truth of the object; we receive things ever only with the taste of a strong subjective flavouring. But I am far from maintaining that an unbiassed correct knowledge stands in the way of observation; rather the old truth stands, that we really have only eyes and ears for what we know. The professional musician hears, in the concord of the orchestra, every instrument and every single note; whereas an outsider remains embarrassed through the massive action of the whole. So also the man who merely enjoys himself sees only the graceful surface of a green and flowery meadow, whereas the eye of the observing botanist is struck by the infinite detail of the most various single

plants and grasses. . . . In science we meet persons who, by dint of too much erudition and hypothesis, never get back to seeing and hearing. With them everything turns rapidly inside; they are so much occupied with what they are pondering, that it happens to them as to a man in a passion who passes his nearest friends on the road without seeing them. Observation of nature requires a certain quiet purity of the inner self which is disturbed by nothing, nor pre-occupied. . . . Would to God that we all were no more than good labourers! Just because we want to be more, and carry about with us a large apparatus of philosophy and hypotheses, we spoil things." The second is Ruskin, who, at the end of the third volume of 'Modern Painters,' makes the same reflection, though he applies it somewhat differently: "This comparative dimness and untraceableness of the thoughts which are the source of our admiration is not a fault in the thoughts at such a time. It is, on the contrary, a necessary condition of their subordination to the pleasure of Sight. If the thoughts were more distinct we should not see so well; and beginning definitely to think we must comparatively cease to see. . . . It is evident that a curiously balanced condition of the powers of mind is necessary to induce full admiration of any natural scene. Let those powers be themselves inert, and the mind vacant of knowledge and destitute of sensibility, and the external object becomes little more to us than it is to birds or insects; we fall into