

have given new life to speculations which were already familiar to the ancients, systems of natural philosophy have in our own country for some time past turned aside the minds of men from the graver study of mathematical and physical sciences. The abuse of better powers, which has led many of our noble but ill-judging youth into the saturnalia of a purely ideal science of nature, has been signalized by the intoxication of pretended conquests, by a novel and fantastically symbolical phraseology, and by a predilection for the formulæ of a scholastic rationalism, more contracted in its views than any known to the Middle Ages. I use the expression "abuse of better powers," because superior intellects devoted to philosophical pursuits and experimental sciences have remained strangers to these saturnalia. The results yielded by an earnest investigation in the path of experiment can not be at variance with a true philosophy of nature. If there be any contradiction, the fault must lie either in the unsoundness of speculation, or in the exaggerated pretensions of empiricism, which thinks that more is proved by experiment than is actually derivable from it.

External nature may be opposed to the intellectual world, as if the latter were not comprised within the limits of the former, or nature may be opposed to art when the latter is defined as a manifestation of the intellectual power of man; but these contrasts, which we find reflected in the most cultivated languages, must not lead us to separate the sphere of nature from that of mind, since such a separation would reduce the physical science of the world to a mere aggregation of empirical specialities. Science does not present itself to man until mind conquers matter in striving to subject the result of experimental investigation to rational combinations. Science is the labor of mind applied to nature, but the external world has no real existence for us beyond the image reflected within ourselves through the medium of the senses. As intelligence and forms of speech, thought and its verbal symbols, are united by secret and indissoluble links, so does the external world blend almost unconsciously to ourselves with our ideas and feelings. "External phenomena," says Hegel, in his *Philosophy of History*, "are in some degree translated in our inner representations." The objective world, conceived and reflected within us by thought, is subjected to the eternal and necessary conditions of our intellectual being. The activity of the mind exercises itself on the elements furnished to it by the perceptions of the senses. Thus, in the