

notions with which men are conversant in the common course of practical life, which give meaning to their familiar language, and employment to their hourly thoughts, are compared with the Ideas on which exact science is founded, we find that the two classes of intellectual operations have much that is common and much that is different. Without here attempting fully to explain this relation (which, indeed, is one of the hardest problems of our philosophy), we may observe that they have this in common, that both are acquired by acts of the mind exercised in connecting external impressions, and may be employed in conducting a train of reasoning; or, speaking loosely (for we cannot here pursue the subject so as to arrive at philosophical exactness), we may say, that all notions and ideas are obtained by an *inductive*, and may be used in a *deductive* process. But scientific Ideas and common Notions differ in this, that the former are precise and stable, the latter vague and variable; the former are possessed with clear insight, and employed in a sense rigorously limited, and always identically the same; the latter have grown up in the mind from a thousand dim and diverse suggestions, and the obscurity and incongruity which belong to their origin hang about all their applications. Scientific Ideas can often be adequately exhibited for all the purposes of reasoning, by means of Definitions and Axioms; all attempts to reason by means of Definitions from common Notions, lead to empty forms or entire confusion.

Such common Notions are sufficient for the common practical conduct of human life: but man is not a practical creature merely; he has within him a *speculative* tendency, a pleasure in the contemplation of ideal relations, a love of knowledge *as* knowledge. It is this speculative tendency which brings to light the difference of common Notions and scientific Ideas, of which we have spoken. The mind analyzes such Notions, reasons upon them, combines and connects them; for it feels assured that intellectual things ought to be able to bear such handling. Even practical knowledge, we see clearly, is not possible without the use of the reason; and the speculative reason is only the reason satisfying itself of its own consistency. The speculative faculty cannot be controlled from acting. The mind cannot but claim a right to speculate concerning all its own acts and creations; yet, when it exercises this right upon its common practical notions, we find that it runs into barren abstractions and ever-recurring cycles of subtlety. Such Notions are like waters naturally stagnant; however much we urge and agitate them, they only revolve in stationary