

necessary that it should be divested, as far as possible, of artificial difficulties, and stripped of all such technicalities as tend to place it in the light of a craft and a mystery, inaccessible without a kind of apprenticeship. Science, of course, like every thing else, has its own peculiar terms, and, so to speak, its idioms of language; and these it would be unwise, were it even possible, to relinquish: but every thing that tends to clothe it in a strange and repulsive garb, and especially every thing that, to keep up an appearance of superiority in its professors over the rest of mankind, assumes an unnecessary guise of profundity and obscurity, should be sacrificed without mercy. Not to do this, is to deliberately reject the light which the natural unencumbered good sense of mankind is capable of throwing on every subject, even in the elucidation of principles: but where principles are to be applied to practical uses, it becomes absolutely necessary; as all mankind have then an interest in their being so familiarly understood, that no mistakes shall arise in their application.

(64.) The same remark applies to arts. They cannot be perfected till their whole processes are laid open, and their language simplified and rendered universally intelligible. Art is the application of knowledge to a practical end. If the knowledge be merely accumulated experience, the art is *empirical*; but if it be experience reasoned upon and brought under general principles, it assumes a higher character, and becomes a *scientific art*. In the progress of mankind from barbarism to civilized life, the arts necessarily precede science. The wants and cravings of our animal constitution must be satisfied; the comforts, and some of the luxuries, of life must exist. Something must be given to the vanity of show, and more to the pride of power: the round of baser pleasures must have been tried and found insufficient, before intellectual ones can gain a footing; and when they have obtained it, the delights of poetry and its sister arts still take precedence of contemplative enjoyments, and the severer pursuits of thought; and when these in time begin to charm from their novelty,