

This process was first introduced in the mathematical and dynamical sciences, and in the more or less successful attempts to reduce other branches of natural science such as acoustics, optics, thermotics, electrics, chemistry, and biology, to a study of mechanical processes, which possess merely quantitative (easily measurable) in the place of qualitative differences. It went hand in hand, in the region of psychology, with the distinction of primary and secondary qualities: the former, such as size, figure, and resistance being measurable, more permanent and objective, as compared with the latter, such as colour, sound, and heat, which are subjective and difficult to fix. Being objective, *i.e.*, the same or similar to different observers, the former acquire the character of greater reality, whereas they only possess, in the world of our experience, more definiteness, more stability, and more permanence; they can also be easily reproduced in diagrams and models and recalled by the powers of memory. All these advantages make them more thinkable or intelligible, for they do not disappear so easily out of our mental field of vision as the sensations of colour, heat, taste, smell, or the numerous and ever-changing inner sensations, such as those of effort and emotion.

Thus it came about that the so-called primary quali-

thought." With most persons this breaking up of the original synoptic aspect, the primary self, is carried as far as intersubjective communication with other persons through the aid of language, and the interests of life and practical work make it necessary. Science only carries this process a step further

through what is termed "analysis and synthesis" of ideas, using ideas in the sense of Hume. This process of analysis or synthesis reaches perfection only in the notions of number and space, and in the sciences that work with these notions.