'Learning' (pub. 10.06.14-18:59). Quote in M. Bergman & S. Paavola (Eds.), *The Commens Dictionary: Peirce's Terms in His Own Words. New Edition*. Retrieved from http://www.commens.org/dictionary/entry/quote-topical-geometry-general-t.

Term: Learning

Quote: It remains to be shown that this element is the third Kainopythagorean category. All flow of time involves learning; and all learning involves the flow of time. Now no continuum can be apprehended except by a mental generation of it, by thinking of something as moving through it, or in some way equivalent to this, and founded upon it. For a mere dull staring at a superficies does not involve the positive apprehension of continuity. All that is given in such staring is a feeling which serves as a sign that the object might be apprehended as a continuum. Thus, all apprehension of continuity involves a consciousness of learning. In the next place, all learning is virtually reasoning; that is to say, if not reasoning, it only differs therefrom in being too low in consciousness to be controllable and in consequently not being subject to criticism as good or bad, no doubt, a most important distinction for logical purposes, but not affecting the nature of the elements of experience that it contains. In order to convince ourselves that all learning is virtually reasoning, we have only to reflect that the mere experience of a sense reaction is not learning. That is only something from which something can be learned, by interpreting it. The interpretation is the learning. If it is objected that there must be a first thing learned, I reply that this is like saying that there must be a first rational fraction, in the order of magnitudes, greater than zero. There is no minimum time that an experience of learning must occupy. At least, we do not conceive it so, in conceiving time as continuous; for every flow of time, however short, is an experience of learning. It may be replied that this only shows that not all learning is reasoning, inasmuch as every train of reasoning whatever consists of a finite number of discrete steps. But my rejoinder is that if by an argument we mean an attempt to state a step in reasoning, then the simplest step in reasoning is incapable of being completely stated by any finite series of arguments.

Source: Peirce, C. S. (1899). *On Topical Geometry, in General (T)*. MS [R] 141.

References: CP 7.536

Date of Quote: 1899

URL: http://www.commens.org/dictionary/entry/quote-topical-geometry-general-t