‘Continuum’ (pub. 31.03.15-19:39). 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-infinitesimals.

Term: Continuum

Quote: Although Kant confuses continuity with infinite divisibility, yet it is noticeable that he always defines a continuum as that of which every part (not every *echter Theil*) has itself parts. This is a very different thing from infinite divisibility, since it implies that the continuum is not composed of points, as, for example, the system of rational fractions, though infinitely divisible, is composed of the individual fractions. If we define a continuum as that every part of which can be divided into any multitude of parts whatsoever – or if we replace this by an equivalent definition in purely logical terms – we find it lends itself at once to mathematical demonstrations, and enables us to work with ease in topical geometry.

Source: Peirce, C. S. (1900). Infinitesimals. *Science*, *2*, 430-433.

References: CP 3.569

Date of Quote: 1900

URL: http://www.commens.org/dictionary/entry/quote-infinitesimals