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LOGICAL CONTINUITY

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In discussing the principles to be found in our thinking about species and genera in nature, Kant enunciated this law:

"... there are no species or sub-species which (in the view of reason) are the nearest possible to each other; intermediate species or sub-species being always possible, the difference of which from each of the former is always smaller than the difference existing between these."¹

Hamilton called Kant's law the law of "Logical Continuity". Here is how Hamilton puts it:

''... no two coördinate species touch so closely on each other, but that we can conceive other or others intermediate.''²

He cites the pairs, men and orang-utangs, and elephants and rhinoceroses, as classes that conform to the law. But he holds that there are many classes that do not conform. I am going to consider his countercases. Hamilton argued:

"... all angles are either acute or right or obtuse. For between these three coördinate species or genera no others can possibly be interjected, though we may always subdivide each of these, in various manners, into a multitude of lower species."³

Furthermore, there are classes distinguished from each other by *contradictory* attributes:

"For example: —in the Cuvierian classification the genus *animal* is divided into the two species of *vertebrata* and *invertebrata*, that is into animals with a

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^{1.} Immanuel Kant, Critique of Pure Reason, London, J. M. Dent & Sons, 1945, p. 382.

^{2.} Sir William Hamilton, Lectures on Metaphysics and Logic, Boston, Gould and Lincoln, 1860, Vol. II, p. 149.

^{3.} Ibid.