

A geometrical object can be thought of as a map from the corresponding type to the corresponding representation space; when a space maps into another space it turns into a type. This observation reveals a duality between logic and geometry, which underlies various versions of categorical logic including topos logic and homotopy type theory. This duality provides a basis for the modern axiomatic method, which differs from the classical Hilbert's axiomatic method but shares some features with the more traditional Euclid's method.