

1023-N1-1392 **Sam Stueckle*** (sstueckle@trevecca.edu), Department of Science and Mathematics, Trevecca Nazarene University, 333 Murfreesboro Road, Nashville, TN 37210. *Mathematics as Representational Art*. Preliminary report.

There are several models of aesthetic value in the philosophy of aesthetics, including imitation/representation, formalism, and expressionism. In this talk I intend to examine the ways in which mathematics can be seen as having a representational aesthetic. Many forms of representation in aesthetics, from those that are very realist, where the aesthetic value is in how accurately the aesthetic object represents the real world, to the more general forms, where the aesthetic value is in how well the aesthetic object represents some abstract world, can be applied to mathematics. In *Works and Worlds of Art*, Nicholas Wolterstorff emphasizes the fundamental role of representation in art. He argues that although representation is not essential, it is both pervasive and fundamental in art. Also, representation is not merely about symbols and their relationship to entities that they symbolize; rather, it fundamentally involves the human activity of "world projection." From this viewpoint mathematics is art at its best, from how well an applied mathematics model fits the real world to how well a mathematical theory represents an underlying mathematical structure. (Received September 25, 2006)