

1125-D1-2839 **Kira Hylton Hamman*** (kira@psu.edu). *Mathematics beyond Mathematics: Uses and Abuses*. Preliminary report.

Mathematicians get a bit bristly when non-mathematicians use mathematics for non-mathematical purposes. Uses that are obviously figurative are usually okay: love > hate, silence = death, that kind of thing. And the fine arts, for some reason, get a pass. You rarely hear mathematicians complain about, say, Escher. But when the non-mathematician attempts to use an abstract mathematical concept (applied math is a different story, of course) outside of its mathematical context in a serious academic way, all hell breaks loose. In fairness, some of this work is at best problematic, and mathematicians are right to call it out. But sometimes – too often, I will argue – work that has merit is dismissed by mathematicians in their enthusiasm to point out its mathematical flaws. This talk will focus on the work of Piaget and Lacan, in a preliminary attempt to characterize work that advances knowledge and to sort it from work that uses mathematics for intellectual posturing, or worse. (Received September 20, 2016)