1046-Q1-1515 Karl Schaffer* (schafferkarl@fhda.edu), P.O. Box 8055, Santa Cruz, CA 95061. Dance and Mathematics: A Survey. Preliminary report.

Despite a recent wave of work connecting mathematics to the arts, less has been done with respect to the art of dance. We will examine possible explanations for this, but will also briefly look at a variety of connections that have been explored, for example, links to polyhedral geometry, intricate baroque dance notation systems, rhythms in percussive dance forms, choreographer Merce Cunningham's use of randomness, math/dance integrations designed for the classroom, and end with a survey of recent or upcoming performances (including those of the speaker). We will also look at how mathematical problems can arise during or inspire the choreographic process, and will outline possible future directions. (Received September 15, 2008)