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**Brittany Anne Carlson\*** (bcar1005@ucr.edu). *The Narrative, the Visual, and Material Culture: Mediating the Humanistic Mathematical Discovery Process of the Nineteenth Century.*

This paper offers a brief history of the complex, mediated relationships between the narrative, the visual, and the mathematical in material culture to suggest a human-centered approach to mathematical discovery in the 19th century. This relationship emerges as a rejection of early nineteenth-century math pedagogy, which was steeped in rote memorization and corporal punishment. As the century progressed, pedagogues recognized the importance of active student involvement in their education, which was facilitated by material culture. Beginning with Friedrich Froebel's Gifts and expanding to include Mary Boole's curve stitching, Edwin Abbott's Flatland, and Sundara Row's Geometric Exercises in Paper Folding, I lay out a nineteenth-century historical overview of the role of material culture and mathematical discovery. Through this historical survey, I conclude that the complex relationships between the learner and their cultural capital, the narrative, and the visual work together to construct a grand narrative of the learner's observations and mathematical understanding. As a result, I argue that it is more productive to think of mathematics in the nineteenth-century as a quantitative literacy with history, culture, and narratives that are shaped by the discovery process. (Received July 10, 2020)