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Natalie L.F. Hobson* (natalie.hobson@sonoma.edu), 1801 E. Cotati Ave., Darwin Hall,
Rohnert Park, CA 94924. *Students' ways of thinking about graphs.*

Numerous researchers and educators have reported and observed persistent difficulties students encounter with graphs. Given these reports and the prevalence of graphical representations in the study of mathematics, students' ways of thinking for graphs is an important focus. In this talk, I draw from clinical interviews to illustrate certain ways of thinking (or habits) undergraduate students maintain for assimilating graphs. In particular, I characterize students' ways of thinking about graphs that were incompatible with a covariational relationship they came to conceptualize constituted a given situation. These findings signal curriculum and instructional features that may potentially constrain students' opportunities to understand graphs as representing covariational relationships between quantities. (Received January 27, 2018)