Abstract: Beginning with an important challenge made by April Baker-Bell (2017) related to questioning whose linguistic and cultural norms are privileged by labels like “academic language,” I describe some of the ways mathematics education researchers have segmented “math discourse” from “everyday discourse.” Drawing on systemic functional linguistics, I provide an extended example from materials we developed for secondary math teachers to introduce them to the “mathematics register” through an idea we call the “language spectrum.” The grounding task for the example is one that considers the relationship between area and perimeter of triangles (see the information in the Google folder to read the task in advance). I describe some of the shifts we observed teachers make in their talk and practices during pilots of the activities and how and why we added positioning theory to the materials. Finally, I turn toward critiquing the perspectives we used by drawing on some work inside and outside of mathematics education. This work raises necessary points and questions toward ways I/we can take a more critical humanizing view on math discourse in our work with teachers and in research.