Annalisa Crannell* (annalisa.crannell@fandm.edu), Marc Frantz (mfrantz@indiana.edu) and Fumiko Futamura (futamurf@southwestern.edu). The perspective image(s) of a square.

Moving from the visual realm of perspective art into the mathematical realm of projective geometry yields some surprising and counter-intuitive results. One of these surprises is that *every* quadrangle (whether convex or not) is the perspective image of a square. We will describe implications of this result for computer vision, for photogrammetry, for topology of non-orientable surfaces, and of course for perspective art and projective geometry. (Received September 21, 2015)