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Thomas Hull* (thull@merrimack.edu), Department of Mathematics, Merrimack College, North Andover, MA 01845. *The history of origami geometric constructions.*

In the past dozen years there has been a renewed interest in the power of geometric constructions via paper folding (being compared to, say, straightedge and compass constructions). This interest is likely due to the fact that origami offers an easy construction method that can solve arbitrary cubic equations and thus can trisect angles, double cubes, and so on. It turns out, however, that the first person to prove that paper folding can solve cubics was Margherita Piazzolla Beloch, an Italian mathematician in the early 1900s, and this fact repeatedly goes unmentioned in the literature. We will present the evidence that Beloch was, indeed, the first person to do this and describe her approach to the problem, which utilizes geometric techniques which seem to have since been forgotten by the larger mathematical community. (Received July 26, 2007)