

Tri-Dodecas

I first came across the pattern for the Tri-dodeca flexagon in Anthony Conrad's paper, The Theory of Flexagons. That is the pattern that I used to make my first models. I realized later that this exact pattern shows up in Ann Schwartz's folding sequence of her 12-gon and it also showed up in Harold McIntosh's paper, Trigonal Flexagons. No one, until Ann's articles, seemed to know, including my self, that this flexagon has such varied dynamic properties. In the standard flexing of the dodecaflexagons, the variations of faces can only be matched by the hexahexaflexagon when using the V-Flex. There are also numerous non-standard flex moves for the dodecaflexagons that add another layer of interest and possibilities.

My pattern for the tetra-dodecaflexagon also shows up in Ann's folding sequence for her 12-gon. In fact the tetra-dodecagon has the same dynamic properties of Ann's 12-gon. My pattern for the penta-dodecaflexagon is a new dodecaflexagon model, with an added layer of dynamic complexity. The front and back toggle triangles are the best example of a new dynamic feature introduced by the penta-dodecaflexagon. I designed the penta-dodecaflexagon based on general flexagon theory presented in various papers.