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*Symmetries in the Woven Tunics of Oaxaca, Mexico.* Preliminary report.

The clothing weavers of the state of Oaxaca in Mexico create highly decorated “huipil” tunics, which generally consist of multiple geometric patterns woven together. As with many cultures that enjoy such designs, all 7 strip symmetry groups appear in the collection of huipils we investigated, but some strip patterns were substantially rarer than others. There appear to be weaving reasons for some of the difference in frequencies. One strip pattern, pmm2, essentially only appears on the shoulder bands of these tunics, and may be related to a desire for a 3-dimensional “front-to-back” symmetry imposed upon the symmetries that appear in a more “standard” Oaxaca design. A surprisingly large number of variations of strip symmetries appear in these huipil, including 3-color and 4-color symmetry; combinations of adjacent strips with varying symmetries; and deliberate symmetry breaking. One huipil gives the impression of a weaver consciously playing with, or experimenting with, glide reflections. We will look at this collection of huipil tunics as an example of the interaction between geometric art and the cultural standards of the Oaxaca weavers. (Received September 26, 2017)