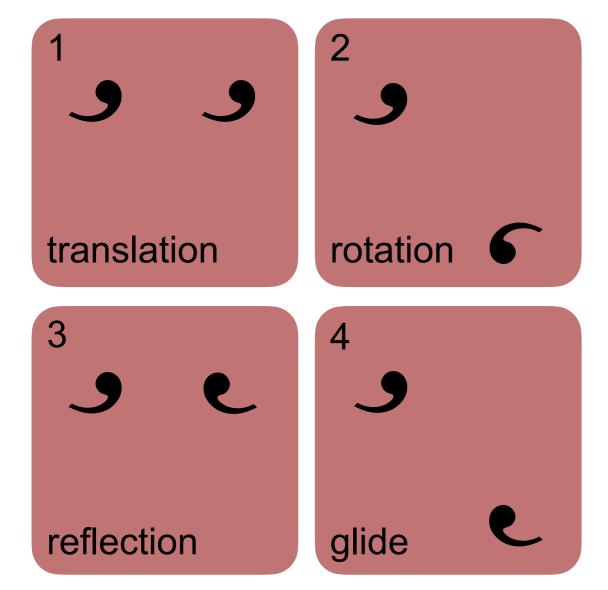
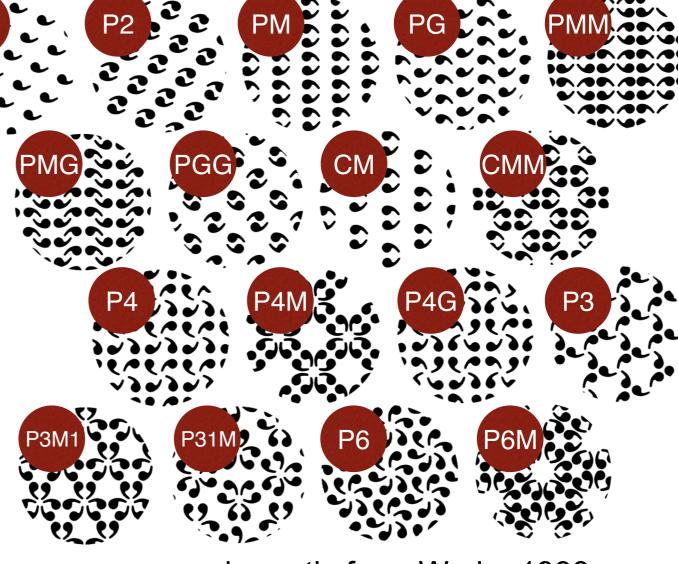
Wallpaper groups

four kinds of symmetry can be combined in exactly 17 unique ways





schematic from Wade, 1993

this is the complete set of symmetries in 2D images

(Liu, Hel-Or, Kaplan & van Gool, 2010)