Paper folding

6.885
L6.1
Sept. 27, 2004

High-level constraints: - no stretching/shrinking/tearing
- no crossing (but touching OK)

- difference from linkages: creases can go anywhere (no physical "bars")
- also nominally 2D paper – but 1D paper interesting too

4 main topics:

① definitions/technicalities — surprisingly intricate
— connectivity of configuration space

② foldability — all about crease patterns & when they fold

③ design — specific geometric goal (shape/property/...)
→ find crease patterns folding

④ geometric construction — analog of straight edge & compass but more powerful ← used all the time by origamists