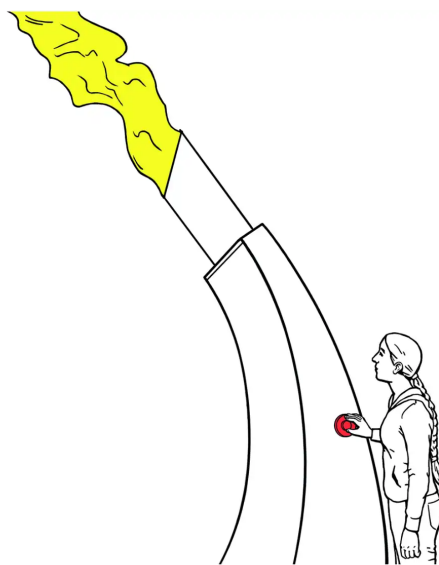


Fluttering silk

Ned Kahn

What movement patterns can you create in the flag?



Bitte die Fahne nicht berühren!

Notice the patterns that the blowing air makes in the long sheet of fabric.

Turn the wheel and see how the patterns change.

Each ripple you see in the fabric is a vortex passing by. When a fluid such as air moves in a circle, it's called a vortex.

Air blowing against the fabric makes vortices that travel down the length of the fabric.

You cannot see these cylinder-shaped air currents, but the wavy movements of the fabric reveal their presence. The same patterns appear on flags fluttering in the wind outside (Fig. 1).



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Fig. 1: Air vortices passing by the flags let the flags flutter in the wind.