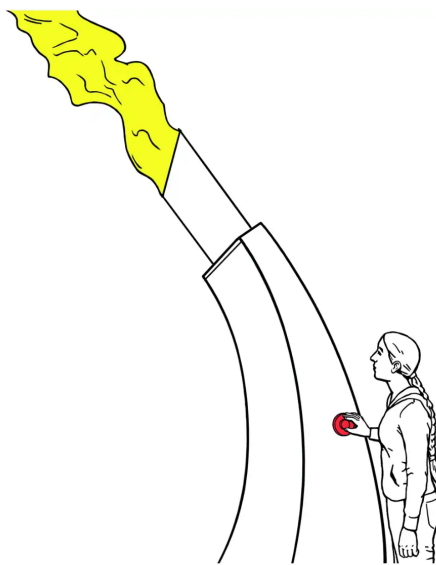


# Fluttering silk

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.