Don’t Sink My Battleship!

In the early days of World War I, German submarines devastated the British and American fleets. Submariners would sneak up on a moving ship, watch it just long enough to figure out its speed and direction, and then fire torpedoes into the ship’s path. There was little that surface boats could do to hide from submarines. Although the military was very good at camouflaging troops and tanks on land, ships couldn’t be painted to blend into the background because the colors of the sea and the sky are always changing. But then the British had a startling idea—if they can’t hide them, why not make the ships stand out instead? They decided to paint them in contrasting colors and random patterns, like zebras and giraffes, animals that are easy to spot but hard to track because the patterns they wear break up their outline. The Navy called this disruptive camouflage razzle dazzle: odd, irregular patterns and colors that would confuse enemy gunners and throw off their aim by disguising the shape and motion of their ships.

*Which way did it go?* USS Nebraska in camouflage paint, during World War I
Applying the razzle dazzle idea took a lot more than handing sailors buckets of paint and letting them have it. First, a wooden model of each ship was built to scale and then handed off to artists who designed and painted individualized patterns. Next, the dazzled model was placed next to a matching one painted plain gray and then the two were placed in front of various simulated backgrounds of water and sky. Designers studied the pair through periscopes to judge how well the camouflage worked and made adjustments as needed. After the pattern was approved, precise plans of the color scheme were drafted and sent to where the actual ship was docked.
Next, using the pattern plan as a guide, the outline of the camouflage was marked in chalk on the ship like a giant paint-by-numbers kit. Finally, the shapes were filled in with paint. If there was time in the rush of war, a ship might be photographed in the harbor and out at sea to assess how well the designed pattern was followed and how effective it was at disguising the vessel’s movements.

Over the course of the two World Wars, several thousand Allied ships were outfitted in dazzle camouflage. It isn’t clear how effective the technique was—the number of sinkings did drop sharply, but that may have been caused by other schemes adopted at the same time, such as grouping ships into large, guarded convoys. Although razzle dazzle was a great morale builder among the crews, it gradually fell out of use as sonar and radar technology replaced optical targeting systems that depended on the human eye.