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Stop This Absurd War on the Color Pink

By Michael Moyer | March 5, 2012

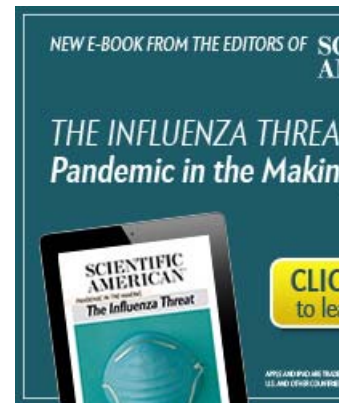
Last week Robert Krulwich, a co-host of the wonderful program [Radiolab](#), Pluto'd pink. In a [blog post](#) he noted that pink doesn't occupy a slot in the familiar colors of the rainbow—there's no *P* in *Roy G. Biv*. From this, he concludes that pink does not really exist:

That's why pink is an invention. It's not a name we give to something out there. Pink isn't out there.



This dog does not exist

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True, no single wavelength of light appears pink. Pink requires a mixture of red and purple light—colors from opposite ends of the visible spectrum. Easy enough to do, and no seeming threat to pink's ontological status. (Although this property does imply that the laws of the universe have conspired against pink lasers.)

The trouble begins when Krulwich imagines the visible spectrum curling up into a circle, with pink the missing slice between purple and red. "Pink happens when the red and violet sides get together, but they don't get together—which makes pink an act of thinking, or, to put it bluntly—pink is a made up color," he writes.

Perhaps you are as confused by this statement as I am (and, I suspect, Krulwich is). He cites as evidence a short animated video from the ordinarily great [Minute Physics](#) team. I've embedded the [video](#) below so you can watch for yourself, but the important purpose is their explanation of where pink comes from:

If you try to roll up the rainbow to make a color wheel, there will be a gap between red and violet. That's where all of the rest of the light in the universe is supposed to go—radio waves, microwaves, infrared, ultraviolet, x-rays, gamma rays and so on. But since we can't see any of those wavelengths, we replace all of that hidden grandeur with pink.

This explanation is so muddle-headed and absurd that I hardly know where to begin. The classical electromagnetic spectrum goes from a wavelength of zero meters all the way up to infinity. How is one to connect those two ends? And even if one could, more) invisible wavelengths together would never produce something visible. Infrared light plus ultraviolet light is just that combination of infrared and ultraviolet. They do not average out to yellow.

On a more fundamental level, however, Krulwich is right. Pink is not out there, because *no color* is really "out there." The electromagnetic radiation, and the only intrinsic properties that this radiation possesses are physical ones such as wavelength and intensity. Color, on the other hand, is all in your head. "Color is not actually a property of light or of objects that reflect light," biologist Timothy H. Goldsmith in his 2006 *Scientific American* article [What Birds See](#). "It is a sensation that arises within the brain. My colleagues at *Scientific American Mind* have for years been elucidating the ways in which the optic system converts electromagnetic radiation into color, a mysterious and fascinating process (and one that can go wrong in interesting ways). Recent research indicates that people can be made to see "forbidden colors"—greens that are tinted red, or blues that appear yellow.

Pink is real—or it is not—but it is just as real or not-real as red, orange, yellow, green, blue, indigo and violet.

The reddish green question will have to wait for another day.

Photo by jonner on Flickr.


About the Author: Michael Moyer is the editor in charge of space and physics coverage at Scientific American. Follow on Twitter [@mmoyr](#).

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