Fiber-Reactive Dyeing

Andrew Dodge

Fiber-reactive dying, or tie dying, works very well thanks to a special property of cotton. Cotton is made of polymers of glucose called cellulose, and each of these monomers has lots of hydroxyl groups attached to it. These hydroxyl groups have the ability to react



with dyes so the dyes can become permanently attached to the fabric.

The art of tie dying has been around for quite some time, but it didn't become very popular until somewhat recently. In the US, the modern psychedelic practice didn't become popular until around the '60's as a cheap and easy way to customize cheap clothes.

I really enjoy tie dying. I find it extremely fun turning a completely plain white t-shirt into a crazily colored creation of mine. I also like the variability that can be had while tie dying. There are so many different ways to swirl the shirt so that the dyes go certain places rather than others, and so many ways to mix the colors. There are just a seemingly endless amount of design opportunities, and the process of tie dying is also very fun.