



## Meaning Infused into Fiber: Exploring Motivations of Natural Dyers

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In research, one can often find natural dyes touted as a sustainable alternative to synthetic dyes (Bechtold & Mussak, 2009; Doty et al., 2016; Erdem İşmal et al., 2014; Khatri & White, 2015). A natural dye is extracted from plants, minerals, or insects and can be used to color textiles (Choudhury, 2017; Patel, 2011). In some cases, natural dyes may be more sustainable because they can easily biodegrade due to their organic origins (Bhatti et al., 2010; Fletcher & Gross, 2012; Mirjalili & Karimi, 2013). However, there are factors such as water use, a limited supply of raw materials, and scalability that complicate the use of natural dyes (Bechtold et al., 2003; Fletcher & Gross, 2012). Fletcher and Gross (2012) pointed out that the sustainability critics of natural dyes often miss the point, that individuals are motivated to use natural colorants to work within the limits of nature and to connect more deeply to the land and community.

While natural dyes have been studied for their colorfastness (Haar et al., 2018; Hossain et al., 2017; Sarkar & Seal, 2003), for their use in historical artifacts (McGovern et al., 1990), and as part of Indigenous knowledge (Modesto & Niessen, 2005), little research exists about the implications of natural dye use and an individual's self-identity or motivations. There is a research gap on how and why individuals choose to use them in the context of craft, art, and design. This paper is important because I ask what motivates an individual to use natural dyes.

### Methods and Analysis

For my research I utilized qualitative methods including interviews (over the phone and in person), documentary filmmaking, audio recordings, photography, field work, participant observation research, and field notes to explore the use of natural dyes by textile artists and production dyers. I interviewed a total of 20 dyers based in the United States from November 2016 to June 2019. Each interview was informal, and my guiding questions were: How long have you been using natural dyes? Why did you begin using natural dyes? How did you educate yourself about natural dyes? Why do you continue to use natural dyes?

Interviewees using natural dyes included production dyers, independent fashion designers, and textile artists. Each interview was 45-90 minutes long and all the participants agreed to allow their names and likeness for use as part of this research. I conducted site visits and participant observations in 15 different locations across the United States. Through participant observation, I had the opportunity to experience the physical labor involved in the production of natural dyes or naturally dyed products. Participants gave permission for field notes, audio recordings, and photographs. I transcribed my interviews and coded them with NVivo computer software with a Grounded Theory approach. First round coding used an In Vivo coding method to find "participant-generated words from members of a particular culture"

(Saldaña, 2015, p. 91) and aided in the production of a code book utilized for second round thematic coding.

### **Results and Discussion**

After analyzing my data, I found three main sources of motivation: (a) perceived environmental and health concerns, (b) personal fulfillment and identity, and (c) the opportunity for autonomy over production. First, the natural dyers interviewed articulated concerns for their ecological and personal health by the rejection of synthetic colorants. Natural dyers often rejected the use of synthetic dyes and cited their concern for the impact of synthetic dyes on the environment and their personal health. For my participants, natural dyes represented a process that is more respectful to the environment and safer for the human body. Second, the natural dyers explained they developed a sense of personal fulfillment and identity through the study of natural dyes. Natural dyes occupy a multidisciplinary space that include subjects such as botany, chemistry, history, color theory, horticulture, design, and many more. When they create a complex color or print, a natural dyer makes their own tacit knowledge visible through the finished textile. Dyers expressed that they continue to use natural dyes because it provides a source of learning and exploration. Lastly, natural dyes represent the ability for more autonomy over production. A dyer can focus on parts of the process they most enjoy, be it growing plants or dyeing fabrics, and make choices that represent that dyer. Natural dyes can represent ideas of time and place. A dyer can communicate a narrative of a specific location through a dye from that environment. They can also communicate broader philosophical ideas through their dye choices.

Through these motivations to use natural dyes, it appears natural dyers can share aspects of their personal identity in an object they have colored, infusing meaning into the very fiber of the cloth they dye. Individuals used natural dyes to infuse meanings into cloth, whether their own perceived environmental and health concerns, a sense of personal fulfillment, or autonomy over the production process.

### **Limitations and Future Research**

My first limitation was the way in which I found my research participants, namely through Instagram. This limited me to only individuals who use natural dyes on Instagram and left out many other populations that might not interact through the social media platform. Another limitation of my study was the lack of personal information gathered on research participants. For this study, I did not obscure the identities of my participants. This led to uneasiness when I asked for basic demographic information. In future research, I would like to focus more on who uses natural dyes and obscure the identities of my participants. This way I can comfortably gather demographic and background information. For future research, I would also like to explore the unintended and intended meanings natural dyers infuse into their fibers. More information could be gathered on what types of dyes individuals use, why they use them, and what meanings are being produced by those choices.

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