

Hemp for Victory!: The History of Hemp in America, Embodied in an Educational Artifact

Dr. Jennifer Harmon, University of Wyoming

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Contextual Review. Hemp has a complicated history in the United States. The purpose of this piece was to immerse the primary designer in this history and create an educational artifact which would summarize and make accessible this history to textile and apparel scholars and students. An educational artifact, or object, is a re-useable item incorporating interactive simulations and materials (Friesen, 2010). Though hemp fiber has recently gained popularity in creative scholarship (See Yang, 2019 & Pasricha, 2018), the fiber itself and the domestic history have yet to be the focus of a creative scholarship project. After thorough interdisciplinary research on the topic, the created garment, or educational artifact, utilized flat pattern, Optitex, Adobe Illustrator and Adobe Photoshop to highlight the pivotal events for hemp in the US.

Prehistoric artifacts uncovered from present day China and Taiwan suggest hemp's relationship with humanity predates written history (Merlin, 2003). Select varieties were introduced in America and cultivated by early settlers, largely for export to Britain, who needed hemp for naval ships (Swenson, 2015; Deitch, 2003). Because of strong domestic demand for this fiber, hemp is speculated to be a contributing factor to the Revolutionary War (Deitch, 2003). After the War, the popularity of hemp began to decline. Technological advancements rendered sails for naval ships less necessary and with that advance, hemp became a minor crop in the US by 1910 (USBC, 1913). The decorticator, which was able to separate the fiber from the plant stalk mechanically, could have led to a revival of the hemp industry by expanding the fiber's use in paper. However, the turbulence of the Great Depression interfered. The Great Depression beginning in 1929 brought with it massive unemployment coupled with hostility towards Mexican American immigrants (Library of Congress., n.d.). By the 1930s, several states began regulating marijuana (USCBP, 2015). Hemp, as a variety of marijuana (*cannabis sativa*), became entangled in the anti-marijuana sentiments circulating around this community (USCBP, 2015; Musto, 1972). Though the motives behind the crusade against marijuana are not fully known, the 1937 Marihuana Tax Act regulated the importation, cultivation, possession and/or distribution of marijuana (USCBP, 2015). Taxes, heavy fines and penalties for regulation violation made hemp cultivation less attractive for farmers.

Just hours after Japan attacked Pearl Harbor during World War II, Japan also invaded the Philippines (The Thistle, 2000). The Philippines was the main supplier of manila hemp, made from a close relative of the banana plant abaca (The Thistle, 2000; Lee, 1920). Now without a source of hemp, there was not enough raw material to make ropes and rigging for the US navy during the war effort (USDA, 1942; Johnson, 2019). According to the Hemp for Victory motion picture, "In 1942, patriotic farmers at the request of the government, planted 36,000 acres of seed hemp... (USDA, 1942)." This patriotic role of hemp was quickly forgotten. The 1950s saw new legislation, which increased penalties for drug offenses (Sacco, 2014). In 1971, President Nixon began the War on Drugs. It is alleged that Nixon's administration put marijuana on the same schedule as heroin in the Controlled Substances Act as a way of reducing the power of the anti

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Vietnam War “hippies” (Downs, 2016). Growing hemp wasn’t illegal, but it required a permit from the newly formed Drug Enforcement Administration (Johnson, 2014). The extreme penalties under the new CSA classifications made hemp cultivation too risky for most farmers.

Subsequently, hemp fiber cultivation all but disappeared in the United States. A wide array of sustainable benefits that accompany hemp cultivation were left largely unexplored. Prominent among these benefits are hemp’s low pesticide requirement, low water needs and ability to prevent soil erosion (Van der Werf, 2004; Andre et. al., 2016; Kraenzel, 1998). The 2018 Farm Bill differentiated hemp and marijuana cannabis plants, paving the way for reintroduction of domestic hemp cultivation under state regulated pilot programs (Hudak, 2018).

Concept. The goal of this design is to illustrate the history of hemp in America and the fiber’s sustainable potential by creating an educational artifact which details the main events of this history. With the recent changes in legislation regarding hemp cultivation, it is vital for textile and apparel scholars to better understand this history. After an interdisciplinary study of history, government records, industry participants and creative textile and apparel scholarship, the initial design and history were constructed. Next, the history needed to be chronically sectioned and imported into the design’s pattern pieces. In order for the piece to be a viable educational artifact, the text needed to maintain a consistent angle across the piece, which accounted for angle changes from darts and other shaping devices. This was achieved through angle matching of the dress form to flat pattern pieces with angled and shaped text boxes in Adobe Photoshop.

Aesthetic Properties. The black border throughout the piece acts to segment the history displayed into four “story” main areas: 1) Hemp in the Ancient World on the bodice top, 2) Hemp in Early America on skirt front, 3) Height of Hemp in America, the Decline and the Drug War on the skirt back and 4) Current Research in Hemp Uses on bodice back. The border also provides harmony with the black text. The design and print utilize symmetrical balance.

Process, Technique, and Execution. After drafting the initial design with flat pattern technique, this pattern was digitized using Optitex software and then exported to Adobe Illustrator.

Adjustments to the original pattern points and curve angles were made in Adobe Illustrator. The pattern was then exported to Adobe Photoshop, where text and images were added. The angle of text was adjusted to the shape of the dress to maintain a straight angle for left to right reading. The completed pattern filled with text was printed on a Canadian imported fabric comprised of 24% hemp and 76% cotton. Digital printing provided a more sustainable coloration option as this method uses less water and produces less waste (Bomgardner, 2018). Machine stitching was used to construct the exterior and lining, while hand stitching attached the lining to the exterior.

Significance, Rationale, or Contribution. When searching for creative scholarship using hemp as a keyword from the International Textile and Apparel Association community, only 3 pieces were found from 2016 through 2020 (Pasricha, 2018; Yang, 2016 & Sanchez, 2016). This piece is the first to focus primarily on the hemp fiber and its history in America. Further, bringing this history to life as an educational artifact adds observer interaction with the piece. Additionally, the “Just Say No” clothing pin artifact from the 1970s displays an historical reference.

Originality and Innovation. While previous designs have incorporated newspaper inspired prints, it is often only the headlines that are intended to be read due to the changes in direction in the design and the size of the text. This dress uses larger size text, sequenced intentionally to match the timeline of hemp in America. Additionally, the fabric medium for the text exemplifies a main use of hemp fiber.

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Visual Impact. Front View



Back View



Side View



Interesting Detail

