

# An Application of Hemp as Fiber Material in Art Applications From Past to Present: A Brief Artist Perspective

## ABSTRACT

Hemp has been a longstanding material choice for textile creations. As far back as early Chinese civilizations humans have been using hemp for items including paper, clothing, rope, and various other household items. As trading moved westward, more civilizations began to pick up on cultivating hemp for textile uses. This was easily done due to the simplistic growing conditions necessary for hemp. Items made from processed hemp have since been found and collected from all over the globe and are now preserved in history and art museums. These items began getting recognition by art communities in more recent years. After World War II fiber art became a recognized art medium instead of its previous classification of utilitarian craftwork. Since then, fiber art has flourished, and it is celebrated in art museums and similar works worldwide. Now, old and new items and textiles utilizing hemp are preserved through art museums and collections.

Keywords: Art History; Fiber art; Handmade papermaking; Hemp fiber; Historic Artifacts

## 1. INTRODUCTION

Hemp and other bast fibers have long been used to create textiles for household and utilitarian purposes as archeological finds have documented. Attributed to hemp's ease of growth and high durability, it has long been a prime component for clothing, ropes, sailcloth, and other more delicate applications including paper. The soil requirements for hemp growth are low and made for many early civilizations, particularly Ancient Chinese civilizations, to take advantage of all it offers.

Throughout history, we continue to see hemp being used as a prime material while other fiber options are being discovered. Hemp's resiliency has led to many ancient textiles being recovered and preserved in historical and art contexts. Although fiber textiles were not considered to be an artistic craft until after World War II, these textiles are often classified as early art historical documents.

After World War II an increased understanding of the artistic value in these objects rose and artists specializing in fiber art became popularized. Fiber works created vary in form and functionality. Most commonly woven, knitted, stitched, and otherwise handcrafted fiber works and handmade paper root fiber art. Hemp continues to be a valued material through these processes as hemp's environmental benefits triumph over other common commercially reliant materials.

## 2. HEMP USED THROUGHOUT EARLY CIVILIZATIONS

37 Hemp became a widely used fiber to fulfill many tasks when China began cultivating  
 38 Cannabis Sativa (hemp) at roughly 2700 BC [1]. Hemp fibers proved to be highly  
 39 resourceful, being used for clothing, sails, and papermaking among others. Hemp textiles  
 40 were located near Taixi village in Hebei province dating to the Shang Dynasty, 1700 to 1100  
 41 BC [2]. As for paper uses, hemp paper fragment findings date back to 140-87 BC in China  
 42 near Xi'an. Hemp paper is thought to be the earliest paper sample as fragments of hemp  
 43 paper found predate paper's invention attributed to T'ai Lun in 105 CE in China [3,4].  
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Note. Biblia latina, 42 lines, (Mainz: Johann Gutenberg and Johann Fust, about 1455). On paper. British Library. CC0 Public Domain Designation (Gutenberg & Fust).

45 **Fig. 1.: Gutenberg Bible [5]**  
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47 Ancient Chinese papermaking utilized diverse plants, including bast fibers which contrasted  
 48 with techniques of Western cultures who used cloth and cordage. Western cultures did not  
 49 begin processing plant fibers for paper creation until relatively recently [6]. In mid-1450  
 50 Maize, Germany saw the first commercially printed set of books. Using **mostly** hemp paper,  
 51 Johann Gutenberg printed over 150 copies of this Bible in Latin. This became the Gutenberg  
 52 Bible which was the first book run printed fully with moveable type; utilizing what became the

53 first form of mass-market printmaking [3]. A fragment of the printed Gutenberg Bible is  
54 shown in Figure 1.

55 Hemp and other bast fibers have historically been a common medium for their environmental  
56 and cultural benefits as well. To begin with, hemp's commonality for product production is  
57 largely attributed to its ability to grow in high pH, muddy soils that are **unsuitable** for many  
58 other crops [7]. This reason is largely attributed to hemp's use for hand papermaking for a  
59 long period as well. Traditional hand papermaking is the more sustainable option as it  
60 utilized renewable resources and helps to bind communities and social groups through  
61 practice and labor [8]. Unlike materials such as cotton, bast fibers require less intervention in  
62 the growing and cultivation process **which is makes it easy grow these fibers** for smaller  
63 communities and personal production. Cotton and synthetic fibers have negative  
64 environmental effects due to pesticide and irrigation use and toxic emissions. Cultivation of  
65 cotton is therefore labor and resource dependent as it requires specific growing conditions  
66 and aids. These factors contribute to it having a high climate impact [9].

67 As cultivation of Cannabis Sativa moved west it has been recorded too those Western  
68 civilizations including Scandinavian Viking and Middle Ages found hemp's course nature  
69 advantageous. Remains of hemp household textiles, rope, and sails of this time have been  
70 preserved [9]. Many of these objects have been preserved from an archeological viewpoint  
71 although many of these artifacts can **equally** be found in various art museums worldwide.  
72 This occurred later on when textiles began being recognized as a **creative** practice instead of  
73 solely for utilitarian purposes [10].

74 Figure 2 displays an example of an artifact dating back to Italy from 1705-15. In this artifact,  
75 textiles were used to depict The Adoration of the Magi, a story from the Bible. This biblical  
76 story, for instance, has been rendered by various artists including Leonardo Di Vinci many  
77 years prior in 1481 [11]. **This practice of utilizing textiles to create fabric tapestries to show**  
78 **stories of the Bible was common for many centuries. Fabric tapestries would be hung in**  
79 **places of worship in place of a painting or print potentially which would have been more**  
80 **costly to acquire during this time period.**

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Note. *The Adoration of the Magi*. Italian, late 14th century. Material includes linen and cotton plain weave with linen plain weave, embroidered with silk and gilt-metal-strip-wrapped silk in bullion, split, and stem stitches, laid work, couching, and couching padded with cotton. Underdrawings and wash in sepia ink. Edging is hemp plain weave. Robert Lehman Collection, 1975. The Metropolitan Museum of Art. CC0 Public Domain Designation.

**Fig. 2.: The Adoration of the Magi [12]**

### 3. DEVELOPMENT OF FIBER ART

Various fiber-based artifacts from around the world have been recovered and preserved as art objects and now live in museums worldwide. Fibrous materials were used as an art medium for ages through techniques including weaving, knitting tinting, and other methods; all of which appear in artifacts dating throughout the history of mankind [13]. Despite the objects not being recognized as art items at the time of their creation, society's current standards for art now include many items including wall hangings, clothing, and ceremonial papers. Figure 3 shows an intricately patterned textile used for clothing that uses hemp and floral embellishment from 1625-1675.

It was after World War II that fiber art began being viewed as an artistic medium instead of only as a functional object [10]. At this time the loom was also reevaluated as a tool for art making as weavers learned to utilize fibers to construct nonfunctional forms to be validated under the title of art [10]. Fiber art began to take varying forms as it expanded away from common household manufacturing. Through this process fiber artworks created can be

116 described through a wide narrative including terms such as freestanding, two-dimensional,  
117 three-dimensional, varying in size, figurative, nonobjective, representational, or any other  
118 type used to discuss traditional art forms. Most notable is the introduction of fiber being used  
119 to create nonfunctional, purely aesthetic, and potentially conceptual purposes.



Note: Made 1625-1675. England. Hemp, plain weave; embroidered with silk in tent stitches. 28.4 x 53.9 cm (11 1/4 x 21 1/4 in.). The Art Institute of Chicago. CC0 Public Domain Designation.

120 **Fig. 3.: Panel of Uncut "Slip" Designs [14]**

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122 As fiber art is a recently acknowledged art form, it often still fights for the classification of art  
123 over craft. Material choices often have a large impact on whether the work is considered  
124 more on the side of art or craft as well. Using more traditional cotton or synthetic fibers as  
125 well as materials such as silk, which carry an ingrained sense of value, push the work to be  
126 accepted as more of a craft or utility object over art by the public. To combat this fight to be  
127 recognized as art, many artists pushed their material decisions to utilize more that are not  
128 found in the home as frequently. For artists such as Sheila Hicks "These common concerns  
129 led to the production, albeit with great variation, of large-scale, radically abstract, hand-  
130 constructed objects in coarse animal fibers, heavy-gauge rope, and other highly textured,  
131 synthetic, and plant-based fibers such as sisal, hemp, and jute. The exploration of hand  
132 technique (woven and off-loom) included" [15].

133 Public recognition of fiber art as an artistic medium occurred with Lenore G. Tawney's  
134 exhibition of fiber work at the Staten Island Museum in 1961 [10]. Tawney became a strong  
135 runner in the effort to have textile and fiber work classified as artwork. Figure 4 displays  
136 Tawney's ability to make fiber art painterly, a well-recognized artistic practice. Her practice  
137 was captivating and pushed the bounds of the medium. Regarding her work, biographer  
138 Karen Patterson is cited to have said:



139 “The way that her works change the shape—the texture— of a room  
140 places new demands on us. They feel partially immersive, which  
141 makes us want to both get closer and yet maintain a respectful  
142 distance. They emanate intimacy, inspire contemplation, heighten  
143 awareness, and increase a sense of *presentness*, which is exactly what  
144 weaving insists upon”[16].



Note. Lenore Tawney. *Landscape*. 1958. Silk, cotton, bast fibers, and rayon, plain weave with discontinuous wefts and exposed warps; knotted warp fringe over wooden pole wrapped with linen, plain weave. CC0 Public Domain Designation

145 **Fig. 4.: Landscape [17]**  
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147 It did not take long for fiber art to gain additional traction of recognition in the public eye. In  
148 1969 the Museum of Modern Art held the United States' first group exhibition titled *Wall*  
149 *Hangings* which promoted fiber art as 'high art'. Curators of this show, Mildred Constantine  
150 and Jack Lenor Larsen explained their views on the emergence of fiber art stating "during  
151 the last ten years, developments in weaving have caused us to revise our concepts of this  
152 craft and to view the work within the context of twentieth-century art." [15]. *Wall Hangings* at  
153 the Museum of Modern Art installation photos can be seen in figures 5 and 6.



Note. *Wall Hangings* at Museum of Modern Art. Feb 25–May 4, 1969. Curated by Mildred Constantine and Jack Lenor Larsen. CC0 Public Domain Designation.

154 **Fig. 5.: Installation photo 1 [18]**  
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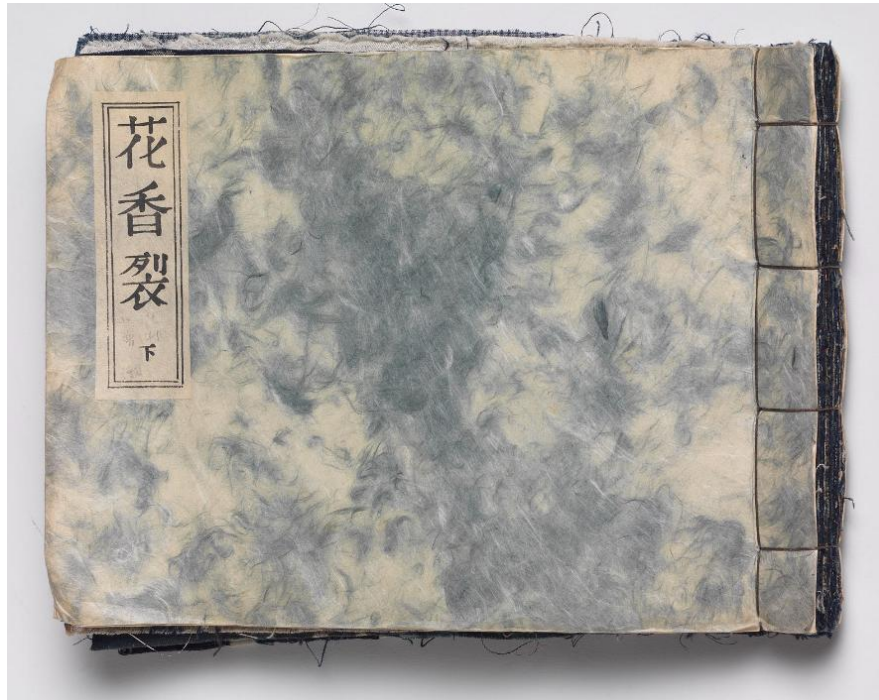


Note. *Wall Hangings* at Museum of Modern Art. Feb 25–May 4, 1969. Curated by Mildred Constantine and Jack Lenor Larsen. CC0 Public Domain Designation.

**Fig. 6.: Installation photo 2 [18]**

Outside of textile-specific works, handmade papermaking is a large artistic practice continuing to utilize hemp and other bast fibers. Handmade papermaking is the craft of forming sheets of paper out of a range of desired materials by hand in small, unique batches instead of exact commercial production. Paper art can be works constructed utilizing paper as a material or it can be the paper itself, especially when the paper has been manipulated for a desired artistic purpose or aesthetic [8]. Figures 7 and 8 display an art object of a handmade book utilizing hemp, linen, cotton, and various inks.





Note. Japanese sample book. Materials include hemp, cotton, linen, indigo, paper mulberry bark. 19th-20th century. Cotsen Textile Traces Study Collection. The George Washington University. CC0 Public

184 Fig. 7.: Japanese sample book 1 [19]  
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Note. Japanese sample book. Materials include hemp, cotton, linen, indigo, paper mulberry bark. 19th-20th century. Cotsen Textile Traces Study Collection. The George Washington University. CC0 Public Domain Designation.

186 Fig. 8.: Japanese sample book 2 [19]  
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Benefits of hand papermaking outside of the environmental ones include the artist's ability to manipulate factors on a minute scale to create unique results. Manipulations may result in a change in ink absorption ability, texture, grain appearance, coloring, and many other methods. similar to textile fiber art, papermaking can incorporate other non-fiber materials either into the fiber pulp itself or during later application. This process acts akin to that of fiber art as it is rooted in taking a natural fiber and altering the treatment and application in a non-conventional or mass-utilitarian method to form an art object.

#### 4. CONCLUSION

Hemp has been a prevalent fiber used in textile creation as far back as historians have been able to study humankind. Popularity of the material is due to hemp's ease of cultivation and low growing conditions, environmentally friendly nature compared to other fibers, versatility through creation, and ability to bond communities. Archeologists have recovered a plethora of artifacts comprised of hemp including paper, clothing, rope, sailcloth, tapestries, and others that reflect hemp's importance in utilitarian usage. In modern times as fiber art became more of a recognized artistic medium hemp continues to be a frequently named material. As hemp is used less often for household goods, it is less seen as a utilitarian material compared to ancient times. Hemp is now used for its rigidity and aesthetics for art making as we have seen continuing through contemporary artmaking. Artists will continue to utilize hemp as a prime component of fiber artmaking largely due to its ease of access, environmental benefits compared to other fibers, and strong application characteristics.

#### 5. COMPETING INTERESTS

Author has declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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