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#### Buldan Dokumalarının Moda Endüstrisinde Kullanılabilirliğine Yönelik Bir Uygulama

#### An Application Concerning Utility of Buldan Weaves in Fashion Industry

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<u> Araştırma Makalesi / Research Article</u>

# AN APPLICATION CONCERNING UTILITY OF BULDAN WEAVES IN FASHION INDUSTRY

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**ABSTRACT:** A beautiful township of Denizli, Buldan has been famed for its weaves for more than eight centuries and contributed to the regional economy. Buldan Weaves also reflected regional history and cultural identity. These weaves were used widely especially in home textile products. Today, expanded utility examples of these weaves are encountered in very different products. In this study concerning applicability of Buldan Weaves in the fashion industry, designs for women's clothing were realized and applied. In these designs, Buldan Weaves were adorned in various ways and differentiated appearance was obtained. Additionally, the study is deemed significant in terms of the industrial utility dimension of Buldan Weaves.

Keywords: Weave, Buldan Weaves, Clothing Design, Fashion Industry.

### BULDAN DOKUMALARININ MODA ENDÜSTRİSİNDE KULLANILABİLİRLİĞİNE YÖNELİK BİR UYGULAMA

**ÖZET:** Denizli şehrinin güzel bir ilçesi olan Buldan, sekiz yüzyıldan daha fazla süredir dokumalarıyla ünlenmiş ve yörenin ekonomisine dokumalarıyla katkıda bulunmuştur. Buldan Dokumaları ayrıca, yüzyıllardan beri yörenin kültürel kimliğini ve tarihini de yansıtmıştır. Bu dokumalar özellikle ev tekstili ürünlerinde yaygın olarak kullanılmıştır. Günümüzde ise bu dokumaların daha farklı ürünlerde yaygın kullanımına yönelik örneklere rastlanmaktadır. Moda endüstrisinde Buldan Dokumalarının kullanılabilirliğine yönelik yapılan bu çalışmada ise; kadın giyimi için tasarımlar yapılmış ve uygulanmıştır. Bu tasarımlarda Buldan Dokumaları çeşitli şekillerde süslenerek farklı bir görünüm elde edilmiştir. Ayrıca çalışma, Buldan Dokumalarının endüstriyel boyutta kullanılması açısından önemli görülmektedir.

Anahtar Kelimeler: Dokuma, Buldan Dokumaları, Giysi Tasarımı, Moda Endüstrisi.

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#### **1. INTRODUCTION**

For centuries, the cotton raised in the Aegean Region has been processed and used in the fabric of weaves. Buldan Weaves are a unique example of Aegean Weaves. Therefore, these weaves have gained an identity representing the locality and brought favourable economic value to the district. Today the weaving industry of the district has developed more; the manufacturing capacity has increased because of the technological innovations and in this way Buldan Weaves have taken an important step in the industrialization process.

A town of Denizli, Buldan is one of the centres of art of weaving. When the name of the town: Buldan is said, first comes to mind is the art of weaving which their own selves call as the "Buldan Cloth". Buldan weaving in history is as old as the history of the district. As early Buldan residents turned to farming, crafts such as cotton and wool fabrics were produced by processing raw materials in workshops. Textile is not only a business in Buldan, but also a way of life. In Buldan, textile began in houses, followed by small industries, workshops and factories in the collective work as the type of businesses developed [1].

Family and small workshop type weaving has been the Buldan economy for many centuries. It has a respected and justified reputation for authentic regional designs, colours, silver threading, cotton and silk clothes, and accessories. Currently in the township centre, 3000 motorized looms, 30 handlooms and 1250 processing machines are active. Furthermore, in a separate study done in 2009 at Buldan, 45 handlooms were identified. 31 of these looms were operational, and the remainder were non-operational but preserved by their owners [2, 3].

Naturally, weaving in Buldan began with handlooms, gained acceleration through mechanical looms with the

arrival of electricity, and is carried out today with advanced automated looms. Although weaving is an important source of revenue for Buldan, in a way the township wages a serious survival struggle to preserve traditionality while trying to keep pace with rapidly industrialized and developed post-1980 textile sector located at the urban centre of Denizli [4, 5].

Although Buldan Weaves have started to be produced in factories, traditional in-house weaving is also maintained by inheritance "from father to son". In the past, weavers, who are the owners of traditional houses, established ateliers within a part of their houses. However, today weavers realize productions both in the ateliers formed in their houses and in semiautomatic and automatic loom, under the light of developing technology [5, 6, 7].

Textile products with high industrial value produced in Buldan receive much attention in wholesale, retail and textile markets. Buldan Weaves have succeeded in attracting the attention of the world by reaching beyond the domestic market. In the 1970s, these weaves were exported to European countries. Today, it is exported to a total of 109 countries such as Germany, USA, United Kingdom, France, Italy, Netherlands, Austria, Belgium and Denmark. Furthermore, Buldan Weave textile products sold in the shops of the central bazaar of Buldan Township attract the attention of domestic tourists as well as guests from abroad visiting Turkey [2, 4, 8, 9].

It is known that Buldan Weaves may be classified as piece/part and metered weave. Part weave is peshtemal, headscarf, sheet, towel, handkerchief and tablecloth; metered weave is Buldan cloth, lining fabric, flannel and canvas. Furthermore Buldan Weaves are generally classified as home textile products and exported under the trade name of "Buldan's". The most significant products in the district are sheet, bed linen, bedspread, tablecloth, lace pillow, pique, curtain, towel and bathrobe [4, 8]. Examples of these products are given in Figure 1.



Figure 1. Some examples of home textile products utilizing Buldan Weaves [10]

Buldan Weaves and products attract attention as

- they are healthy, natural and soft,
- they do not contain any chemical additives,
- they keep warm in winter and cool in summer,
- they form rich ornament design and product variety,
- they possess a historical background and a mystical history,
- they do not lose their characteristics even after long term usage [11].

Buldan Weaves possess a crimped appearance resulting from the characteristics of the yarns. Before they were used to produce underwear, especially chemise; however today, they are utilized also for production of outerwear by designing different styles or processing with yarns such as floss and purl. At the same time, Buldan Weaves are elastic due to their twisted yarn, and wrap the body with their elasticity. The air among the wrinkles keeps the body cool, and the 100% cotton absorbs sweat while retarding perspiration. Currently, these weaves loomed as plain, lined, bordered and square are embroidered with various yarns and are used in clothing designs [4, 6, 12, 13].

Due to the presence of weaving culture in Buldan, many studies of art and science were done. Some of these listed in the literature are given below:

In a study by Yakınol et al., 2009, analysing the weaving looms, working people and environmental conditions of traditional Buldan hand weaving from an ergonomic viewpoint, an evaluation was made about handloom textile industry in this region [9]. In another study by Ertuğrul and Utkun, 2011, it was aimed to determine the status of innovation activities of 59 textile companies located in Buldan [1]. In a study by Yılmaz, 2006, the historical process of Buldan weaving was examined and ways of advancing the textile activities further were considered [14]. In another study by Utkun and Kırtay, 2009, the steps of a hand weaving process and the factors that affect the quality and price of hand weaving were researched [15]. In a study by Kahvecioğlu, 2006, characteristics affecting the plain Buldan Weaves were examined in a laboratory environment [5]. In another study by Utkun and Öndoğan, 2012, the objective was to determine the ideal fabric width for the cut of the ladies' classical blouse models that are made from Buldan cloth [16]. In another study by Utkun et al., 2009, the optimum cloth usage amounts in different models of women's blouses made from Buldan cloth were estimated in the computer system [13]. In another study by Özbek and Aral, 2006, various decorative handicraft art designs were created in order to contribute to the promotion of Buldan Weaves [4].

When the studies above are examined it may be concluded that clothing design investigations based on Buldan Weaves are nearly non-existent in the literature. For this reason, current study considers women's clothing designs and production based on Buldan Weave while underlining the importance of Buldan's utility in the fashion industry. Buldan Weaves should not be abandoned to unpredictable fate, but should be valued and popularized in conformance with currently prevailing economic conditions and globalization, and must be effectively promoted internationally. This study also concludes that in terms of aesthetics, Buldan Weaves can be classified within the scope of high added-value products, and they possess utilitarian qualities very suitable for processing and ready-made clothing [3, 13, 17].

This study prepared in light of the opinion to create clothing design from Buldan Weaves; aims to animate the woven culture being maintained in Buldan for ages and transfer it to the future, move from traditional weaving to universal character, and meet the past with the fashion designs of today.

#### 2. MATERIAL AND METHOD

In this study which considers utilizability of Buldan Weaves in the fashion industry, a survey method is used. The material of the study consists of Buldan Weaves. Clothing designs for women were done. Weaves, adornments and models are provided, and clothing designs are applied in the study. The properties of Buldan Weaves were laboratory determined and have been limited to the analysis of weaving construction, fiber composition, weave weight and weave density. The constructions of the weaves were evaluated by checking with the loupe. The compositions of the fibers were identified as per ISO 1833-1/11: 2006 test. The weight of the weaves was determined as per ISO 3801: 1977 Method 5, and the warp and weft densities of the weaves was tested as per EN 1049-2: 1993 Method A.

#### 3. THE EXAMPLES OF CLOTHING DESIGNS CONCERNING UTILITY OF BULDAN WEAVES IN FASHION INDUSTRY

In this study concerning utility of Buldan Weave in the fashion industry, five clothes were designed. The fol-

lowing figures (2-6) present the details of weave, adornment, model and application of these clothing designs. Additionally, findings relevant to the properties of the weaves used are given in the tables (1-5) below.

Clothing Design 1 given in Figure 2 consists of a skirt and blouse adorned with lace produced by crochet-hook. It can be seen from Table 1 that weave used in this design has the properties: 1/1 plain weave, 100 % cotton, weight 172 gr/m<sup>2</sup> and 10 wefts/cm and 12 warps/cm.

When Figure 3 details of Clothing Design 2 are examined it will be noticed that the design consists of a skirt and blouse with needlework surface. Additionally, Table 2 presents properties of the weave: 1/1 plain weave, 100 % cotton, weight 177 gr/m<sup>2</sup> and 26 wefts/cm and 20 warps/cm.

Clothing Design 3 in Figure 4 consists of a skirt and blouse adorned with crochet-hook knitting. Table 3 presents properties: 1/1 plain weave, 100% cotton, weight 144 gr/m<sup>2</sup> and 23 wefts/cm, 12 warps/cm.

Clothing Design 4 given in Figure 5 consists of shorts and a blouse with surface adorned by warp applied needlework surface crochet-hook knitting. Table 4 highlights the properties: 1/1 plain weave, 100 % cotton, weight 242 gr/m<sup>2</sup>, 19 wefts/cm and 23 warps/cm.



Figure 2. The Details of Clothing Design 1

Table 1. Properties of Weave 1

Weave	Weave Construction	Fiber Composition	Weave Weight	Weave Density
Weave 1	1/1 plain weave	100 % cotton	172 gr/m²	10 wefts/cm
				12 warps/cm



**b.** Adornment 2

Figure 3. The Details of Clothing Design 2

#### **Table 2.** Properties of Weave 2

Weave	Weave Construction	Fiber Composition	Weave Weight	Weave Density
Weave 2	1/1 plain weave	100 % cotton	177 gr/m²	26 wefts/cm
				20 warps/cm



c. Model 3 **d.** Application 3 Figure 4. The Details of Clothing Design 3

Table 3.	Properties	of Weave	3
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Weave	Weave Construction	Fiber Composition	Weave Weight	Weave Density
Weave 3	1/1 plain weave	100 % cotton	144 gr/m²	23 wefts/cm
				12 warps/cm



Figure 5. The Details of Clothing Design 4

Table 4. Property	ties of Weave 4
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Weave	Weave Construction	Fiber Composition	Weave Weight	Weave Density
Weave 4	1/1 plain weave	100 % cotton	242 gr/m <sup>2</sup>	19 wefts/cm
				23 warps/cm



Figure 6. The Details of Clothing Design 5

 Table 5. Properties of Weave 5

Weave	Weave Construction	Fiber Composition	Weave Weight	Weave Density
Weave 5	1/1 plain weave	100 % cotton	234 gr/m <sup>2</sup>	13 wefts/cm
				14 warps/cm

Clothing Design 5 in Figure 6 is formed of shorts and a blouse, adorned with needlework. Table 5 presents weave properties: 1/1 plain weave, 100% cotton, weight 234 gr/m<sup>2</sup>, 26 wefts/cm and 20 warps/cm.

All five weaves used in the study have 1/1 plain weave of 100 % cotton. Weave weight ranges between 144-242 gr/m<sup>2</sup>, weft densities between 10-26 wefts/cm, and warp densities between 12-23 warps/cm. A leading feature of Buldan Weave, 1/1 plain weave type, was observable in five weaves used in this study. Additionally, while weave bases were 1/1 plain weave, design characteristics such as lines, squares and panama were also observed. These design characteristics of the weaves used in the study demonstrate that Buldan Weaves can be reinterpreted for a contemporary setting.

The clothing designs done in this study on the basis of Buldan Weaves are hoped to contribute to a much deserved wide recognition of the centuries-old Buldan weaving culture. It is also hoped that utilization of similar approaches at an industrial scale will result in advancement of the regional economy.

#### 4. CONCLUSION AND SUGGESTIONS

This study performed regarding the utilization of Buldan Weaves in the fashion industry, preservation of cultural inheritance, transfer to universal dimensions, production of weaves without distortion of their characteristics, providing contributions in favour of the region's economy and contribution of modern views to clothing designs have been aimed, and for these purposes clothing designs have been prepared.

On the basis of findings obtained in this study, suggestions with respect to protection, encouragement and advancement of traditional weaving in the Buldan area are presented below:

- Historically authentic Buldan Weaves may be reclaimed, technical data concerning their weaving types and characteristic designs can be recorded and artistic values of weaves can be identified.

- Buldan Weaves constructed by materials such as wool, cotton, flax or silk may be named and classified as per international criteria, documented and patented.
- Local identity can be protected through continued production of Buldan Weaves faithful to its origins and by new designs befitting prevailing conditions of consumption.
- In particular, vocational handcrafted weaving courses may be organized and the younger generations can be encouraged to gainful participation.
- Buldan Weaves can be promoted in international cloth fairs and new export markets may be opened through extensive information provided.
- National and international projects can be organized to capture deep regional knowhow, accumulated experience and culture for survivability of local weaving, and priorities may be given for wider utility and use of Buldan Weaves in design and production.

Preservation of cultural inheritance created in the past and its transfer to the future can be the first priority of humanity. In terms of universality of cultural inheritance, it may be reached out of the land where it belongs and its utilization should be provided. Thus, continuity of culture might be provided by preservation of the cultural inheritance and the owned cultural identity may be maintained for the future.

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