A COMPARATIVE ANALYSIS OF CREATIVE WORKFLOWS IN WOVEN, KNITTED, AND PRINTED TEXTILE DESIGN

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ABSTRACT: *In all design disciplines, textile design encompasses the generation of creative ideas for specific purposes followed by their structured realization through defined processes. Core techniques such as knitting, weaving, and printing—or hybrid combinations of these-are employed to create textile surfaces. The initial stages of the design process-concept development, exploration of sources of inspiration, and the generation of creative ideas-are common across all design fields. However, the implementation phase varies depending on the production technologies and surface design techniques employed. This study adopts a cognitive perspective to comparatively examine the creative workflows of textile designers working in the weaving, knitting, and printing sectors. It aims to highlight the differences in the activities, inspirational styles, and the creative idea generation and reflection processes of textile designers, depending on the sector in which they operate. Utilizing ethnographic methodology, the study analyzes the experiences and perspectives of 30 textile designers-10 from each sector-employed in leading textile companies in Türkiye. Through a systematic coding process, emergent concepts, patterns, and expressions were identified, leading to the categorization of key thematic areas. A decoding process was applied to uncover the meanings attributed by participants to various concepts, leading to the categorization of emerging themes, concepts, patterns, and meaningful expressions. The findings reveal that textile designers adapt their creative workflows in response to the aesthetic, technical, and commercial demands of their respective sectors. In the sub-theme of sector-specific definitions of textile design, it was found that each sector conceptualizes textile design differently: for weaving designers, textile design involves creating fabrics according to customer demands; for knitting designers, it focuses on developing value-added designs; and for printing designers, it is about designing fabrics in alignment with current fashion trends. In the sub-theme of sources of inspiration, all participants reported drawing inspiration from nature. However, sector-specific differences were observed in the frequency of using other sources, such as culture, architecture, art, social events, current issues, design, and technology. Regarding methods of reflecting inspiration in design, all participants employed techniques such as simplification, modification, and addition. However, differences*

emerged across sectors in the use of methods such as direct reflection, abstraction, and relating to other sources.

Keywords: *Textile design, Woven fabric design, Knit fabric design, Printed fabric design.*

UPOREDNA ANALIZA KREATIVNIH RADNIH TOKOVA U DIZAJNU TKANOG, PLETENOG I ŠTAMPANOG TEKSTILA

APSTRAKT: *U svim dizajnerskim disciplinama, dizajn tekstila obuhvata generisanje kreativnih ideja za određene svrhe, nakon čega sledi njihova strukturirana realizacija kroz definisane procese. Osnovne tehnike poput pletenja, tkanja i štampe – ili hibridne kombinacije ovih – koriste se za kreiranje tekstilnih površina. Početne faze procesa dizajniranja – razvoj koncepta, istraživanje izvora inspiracije i generisanje kreativnih ideja – zajedničke su u svim oblastima dizajna. Međutim, faza implementacije varira u zavisnosti od proizvodnih tehnologija i korišćenih tehnika dizajniranja površina. Ova studija usvaja kognitivnu perspektivu kako bi uporedno ispitala kreativne tokove rada dizajnera tekstila koji rade u sektorima tkanja, pletenja i štampe. Cilj joj je da istakne razlike u aktivnostima, inspirativnim stilovima i procesima generisanja kreativnih ideja i refleksije dizajnera tekstila, u zavisnosti od sektora u kojem posluju. Koristeći etnografsku metodologiju, studija analizira iskustva i perspektive 30 dizajnera tekstila – po 10 iz svakog sektora – zaposlenih u vodećim tekstilnim kompanijama u Turskoj. Kroz sistematski proces kodiranja identifikovani su novi koncepti, obrasci i izrazi, što je dovelo do kategorizacije ključnih tematskih oblasti. Primenjen je proces dekodiranja kako bi se otkrila značenja koja učesnici pripisuju različitim konceptima, što je dovelo do kategorizacije novih tema, koncepata, obrazaca i značajnih izraza. Rezultati otkrivaju da dizajneri tekstila prilagođavaju svoje kreativne tokove rada kao odgovor na estetske, tehničke i komercijalne zahteve svojih sektora. U podtemi sektorskih definicija dizajna tekstila, utvrđeno je da svaki sektor drugačije konceptualizuje dizajn tekstila: za dizajnere tkanja, dizajn tekstila podrazumeva kreiranje tkanina prema zahtevima kupaca; za dizajnere pletenja, fokusira se na razvoj dizajna sa dodatom vrednošću; a za dizajnere štampe, radi se o dizajniranju tkanina u skladu sa aktuelnim modnim trendovima. U podtemi izvora inspiracije, svi učesnici su izjavili da crpe inspiraciju iz prirode. Međutim, primećene su razlike specifične za sektor u učestalosti korišćenja drugih izvora, kao što su kultura, arhitektura, umetnost, društveni događaji, aktuelna pitanja, dizajn i tehnologija. Što se tiče metoda odražavanja inspiracije u dizajnu, svi učesnici su koristili tehnike kao što su pojednostavljivanje, modifikacija i dodavanje. Međutim, pojavile su se razlike među sektorima u korišćenju metoda kao što su direktna refleksija, apstrakcija i povezivanje sa drugim izvorima.*

Ključne reči: *Dizajn tekstila, Dizajn tkanih materijala, Dizajn pletenih materijala, Dizajn štampanih materijala.*

1. INTRODUCTION

Design is a creative act that involves generating original ideas and transforming these ideas into concrete results through a planned process. According to Cross [1] design is one of the highest forms of human intelligence and a phenomenon related to the capabilities of the mind. The design process follows the same pattern whether it involves the design of a new oil refinery, the construction of a cathedral, or the writing of Dante's Divine Comedy. Design is concerned with creating things that people want with building patterns that have value. These things must be thought about and made. Design involves a thinking activity and an executive activity [2].

According to Ambrose and Harris [3] the design process consists of the stages of definition, research, idea generation, prototype creation, selection, implementation, and learning. Moreover Wilson [4] explains that the design process includes the stages of identifying needs, research, idea generation, design development, and final design. From a general perspective, design actions develop in a sequence that progresses from abstract mental processes to concrete physical events [5].

The design process, due to its creative nature, has always been subject to scrutiny and has been at the centre of efforts to systematize and to scientific it [6]. In his book ‘Design Methods: Seeds of Human Futures’ [7], Jones made significant contributions regarding design methods referring the intuitive and rational approaches as the black box and the glass box respectively [8].

Some theorists such as Osborn, Gordon, Matchett, and Broadband imply that the most valuable part of the design process goes inside the designer's head and partly out of reach of his conscious control [8]. These 'creativity' theorists place themselves in opposition to the rationalists of designing. This irrational approach is called the 'black box' approach. This approach to the design process is shaped by irrational, mystical, and subconscious elements. The designer interacts with images, intuitions, and emotions from the subconscious, beyond conscious thoughts.

In contrast, the majority of theorists line up with entirely explicable design process where externalized thinking and rationalized assumptions are used. This 'glass box' approach attempts to reveal what happens in the designer's mind using psychological research [5], through which the objectives, variables, and criteria are fixed in advance. In this case the designer has full knowledge of what he is doing and why he is doing it. The designer follows through a planned sequence of analytical, synthetic and evaluative steps and cycles until he recognizes the best of all possible solutions. As to sum up, it would not be wrong to say that the multifaceted nature of design requires the process to be approached not only through intuitive or rational methods but in a more holistic manner.

With the criticism that the decreasing role of the designer in the act of designing and the purely pragmatic approaches hinder creativity and originality, cognitive science, which was heavily debated especially in the 1970s, has greatly influenced design. In this context, a third approach, known as cognitive approaches, has emerged [8]. According to Uluoğlu [9] the vagueness of intuitive approaches and the excessive confidence of algorithmic approaches in the belief that everything can be explained were insufficient to describe the

design process. Cognitive models based on information theory were applied to this field to explain the design process.
The understanding of the textile design process and the improvement of design practices necessitate the adoption of cognitive approaches that allow for the externalization of designers' mental processes. In this study, by adopting a cognitive approach and based on the data obtained from interviews conducted with textile designers, the question of whether there are differences in the activities/styles of inspiration, creative idea generation, and reflection depending on the sector in which textile designers work has been explored.

2. TEXTILE DESIGN PROCESS

Textile design, in its context, refers to the process of creating a product through concrete design decisions after abstracting mental processes which are conducted with a specific purpose in mind. Here, design decisions are made at every stage of the process, from the identification of a need/requirement to the generation of initial design ideas, design development, and the final product. Questions such as which fibres should be used in yarn, which yarns should be used in fabric, what weight of fabric should be produced, what colours should the yarn or fabric be produced in, what fabric structures should be used, and what finishes should be applied need to be reviewed and planning should be done in the design process [4].
The textile-design process typically begins with a concept development phase in which creative ideas are transformed into tangible products. During this phase, designers create a theme based on the target audience, intended use, and current trends. Sources of inspiration can come from a wide range of areas such as nature, art, cultural motifs, or technological advancements. At this stage, the designer outlines the basic elements of the design by selecting colour palettes, textures, and materials. A good start is the key to a successful final product, both aesthetically and functionally. Once the concept is determined, the technical applications of the design are initiated. During this phase, processes such as hand drawings, digital design tools, and material selection progress together. The types of fabrics and weaving or knitting techniques define the character of the design, while colour choices and pattern placement are also integrated into this process. Prototyping is a critical stage in bringing the design to life; here, the aesthetic and technical details of the design are tested. After evaluating the prototypes, necessary revisions are made, and the final design is prepared for production. In textile design, fabrics are created using weaving, knitting, printing, and mixed techniques. At the beginning of the design process, concept determination, research of sources of inspiration, and creative idea generation are common processes. However, in the application phase, the process varies according to the production technology and patterning techniques used.
In woven design, jacquard weaving machines, which operate with a power system, and frame-based twill and eccentric machines are utilized. With weaving design, it is possible to obtain complex and creative woven surfaces with different structural characteristics (simple and compound), and various weaving structures (plain weave, twill, satin basic weaves, and derivative weaves).

In knit design, aesthetic and functional fabrics can be produced using different patterning techniques on weft and warp knitting machines. Coloured patterned fabrics are created with Jacquard systems; different derivative weaves with loop, hanger, and skip combinations; structural patterns through loop transfer; pile or loop surfaces with extra yarn usage; Fully-Fashion surfaces by increasing and decreasing the width of the fabric; and Intarsia surfaces with the use of different coloured threads in different areas of the fabric.
While structural solutions are developed in woven and knit design, in textile printing design, creative solutions applied to the surface are developed according to the fabric's raw material, texture, and intended use. Various printing techniques (direct printing, discharge printing, reserve printing, transfer printing, rotary printing, film printing, screen printing, and special printing effects) can be used to aesthetically and technically enhance the surface of woven or knit fabrics.

3. METHODOLOGY

This study employs an ethnographic research design, one of the qualitative research methods, to investigate the design behaviours of textile designers. Data were collected through semi-structured interviews, participant observation, and document analysis. The data collection was conducted between December 7, 2023, and May 13, 2024, in the textile companies where the participants were employed. A total of 22 companies located in Kahramanmaraş, Tekirdağ, Kırklareli, Bursa, and Istanbul were included in the study.
Since textile design encompasses the process of fabric design using weaving, knitting, and/or printing techniques, maximum variation sampling—one of the purposive sampling strategies—was deemed appropriate for this research. The study group consisted of 30 textile designers working in Turkey, with expertise in either printing (n=10), weaving (n=10), or knitting (n=10). Efforts were made to ensure a balanced distribution of participants in terms of areas of expertise and gender. Among the participants specializing in printing, four focused solely on digital printing, while six were involved in both digital and rotary printing design. Of the weaving designers, four specialized in dobby weaving, three in jacquard weaving, and three in both techniques. Among the knitting designers, three specialized in flat knitting, three in raschel knitting, and four in circular knitting.
Ethical approval for the study was obtained from the Ethics Committee of Ankara Hacı Bayram Veli University. An informed consent form was prepared to ensure participants' voluntary and conscious participation in the study. This form provided clear and comprehensible information regarding the purpose, duration, methods, potential risks, benefits, and alternatives of the research. It also informed participants of their right to withdraw from the study at any time without any negative consequences.
Using ethnographic methods, the collected data were examined in depth based on the participants’ experiences and perspectives. To reveal the meanings participants attributed to various concepts, a coding process was implemented. During this process, themes, concepts, patterns, and meaningful expressions were analyzed and categorized. The coded data were described within context and presented as coherent wholes. To enhance the credibility of the interpretations, direct quotations from participants’ narratives were

included and presented in italics and quotation marks. NVivo 15 software was used to support the data analysis process. Based on the identified themes, conceptual explanations were made in relation to the cultural and social context of the participants.

In accordance with ethical principles, the data collected from the study group were anonymized and coded as “W” for weaving designers, “K” for knitting designers, and “P” for printing designers, followed by participant numbers (e.g., W1, K2, P3). The demographic information of the participants is presented in Table 1.

The research findings are based on data collected within the scope of the doctoral thesis titled "A Research on Defining the Process of Inspiration, Idea Generation, and Reflection Ideas in Textile Design."

Table 1: Demographic information of the participants

Participant Code	Demographic Information				
	Gender	Age	Education	Specialization	Experience
W1	Male	36	High School	Weaving	15 years
W2	Female	28	Master’s Degree	Weaving	2 years
W3	Female	39	Associate’s Degree	Weaving	20 years
W4	Female	41	Bachelor’s Degree	Weaving	21 years
W5	Female	22	Bachelor’s Degree	Weaving	5 months
W6	Female	35	Bachelor’s Degree	Weaving	10 years
W7	Male	58	Bachelor’s Degree	Weaving	36 years
W8	Male	52	High School	Weaving	24 years
W9	Male	47	High School	Weaving	20 years
W10	Female	40	High School	Weaving	25 years
K1	Female	21	High School	Knitting	2 years
K2	Male	54	Primary School	Knitting	38 years
K3	Male	55	High School	Knitting	32 years
K4	Male	47	Bachelor’s Degree	Knitting	22 years
K5	Female	34	High School	Knitting	11 years
K6	Female	30	Bachelor’s Degree	Knitting	8 years
K7	Male	53	High School	Knitting	30 years
K8	Male	55	Bachelor’s Degree	Knitting	33 years
K9	Male	54	Master’s Degree	Knitting	33 years
K10	Female	45	Bachelor’s Degree	Knitting	15 years
P1	Female	32	Bachelor’s Degree	Printing	7 years
P2	Female	33	Bachelor’s Degree	Printing	5 years
P3	Male	42	Bachelor’s Degree	Printing	20 years
P4	Female	44	Bachelor’s Degree	Printing	11 years
P5	Female	30	Associate’s Degree	Printing	10 years
P6	Female	32	Bachelor’s Degree	Printing	10 years
P7	Female	50	High School	Printing	30 years
P8	Female	39	Bachelor’s Degree	Printing	6 years
P9	Female	33	Master’s Degree	Printing	7 years
P10	Male	37	Bachelor’s Degree	Printing	12 years

4. FINDINGS

4.1. Definitions of Textile Design Based on Areas of Specialization

For the purpose of defining textile design, participants were asked the following questions: "What do you think textile design is?" and "Can you describe the work you do every day in the field of textiles?" The codes and frequency counts derived from the data obtained from three working groups are presented in Table 2.

Table 2: Definitions of textile design based on areas of specialization

Code	Specialization			Total (n=30)
	Weaving (n=10)	Knitting (n=10)	Printing (n=10)	
Customer	5	2	2	9
Fashion	0	2	4	5
Innovation	3	2	1	5
Adding value	0	3	0	3
Imagining	0	1	2	3
Touching life	1	0	2	3
Appealing to tastes	0	2	1	3
Reflecting ideas	1	0	1	2
Creating	1	0	0	1

According to Table 2, weaving designers defined textile design within the framework of the codes customer, innovation, touching life, reflecting ideas, and creating. Among these, the customer code has the highest frequency in this group. In relation to this code, the definition of "designing fabrics in accordance with customer demands" emerges.

Knitting designers defined textile design within the framework of the codes adding value, customer, appealing to tastes, fashion, innovation, and imagining. Among these, the code with the highest frequency is adding value. In relation to this code, the definition of “developing designs by adding value” emerges.

Printing designers defined textile design within the framework of the codes fashion, customer, imagining, touching life, innovation, appealing to tastes, and reflecting ideas. Among these, the code with the highest frequency is fashion. In relation to this code, the definition of “designing fabrics in line with fashion trends” emerges.

The following are selected statements from some of the participants.

"*In my point of view, textile design is about creating designs that align with the goals of the client. In other words, it involves designing in accordance with the intended use and the specific needs of the* ***customer***" (W6 – Recording 00:29).

"*In terms of raw materials, processes, yarns used, and construction, the fabrics are essentially the same. However, because a design and* ***added value*** *are incorporated and since there is no real competitor offering the same, they are able to sell a fabric worth 5*

dollars for 10 euros. Therefore, design is, in general, a highly influential and significant element in our lives" (K3 – Recording 03:08).
"*Designs are created in response to current fashion trends, desires, and preferences. I focus on designing women's outerwear. Typically, designs are developed according to the prevailing trends and preferences in* ***fashion***" (P4 – Recording 00:46).
It has been concluded that participants define mostly textile design as designing fabrics that meet customer demand. It has been evident that designers strongly focus on customer, added value, and fashion. However, in the literature, textile design is seen from different perspectives. Steed and Stevenson [7] emphasizing the techniques used, define the process of fabric design as the creation of fabrics using knitting, weaving, printing, and mixed techniques. Wilson [4] on the other hand, emphasizes the commercial aspect and defines it as the process of designing and producing a specified number of commercially viable fabrics according to a predetermined timeline.

4.2. Sector-Based Distribution of Sources of Inspiration

In order to identify the sources of inspiration used in the design process, participants were asked the question: “What sources of inspiration do you draw upon when creating your designs?” The distribution of the sources of inspiration used by the participants according to sector is presented in Table 3.

Table 3: Sector-based distribution of sources of inspiration

Utilized Sources of Inspiration	Specialization			Total (n=30)
	Weaving (n=10)	Knitting (n=10)	Printing (n=10)	
Nature	10	10	10	30
Culture	6	6	8	20
Architecture	6	7	5	18
Art	5	6	7	18
Social Events and Issues	3	3	1	7
Design	1	1	2	4
Technology	0	0	2	2

According to Table 3, it was found that participants from the weaving, knitting, and printing sectors all drew inspiration from nature in their design processes. It was also observed that culture, art, and design were more frequently utilized as sources of inspiration in the printing sector, while architecture was more commonly referenced in the knitwear sector. Social events and issues appeared to be more prominent in the weaving and knitting sectors compared to printing. Additionally, technology was identified as a source of inspiration exclusively in the printing sector.
The "Nature" code refers to drawing inspiration from natural elements such as flowers and animals; the "Culture" code refers to drawing inspiration from the cultures of various societies; the "Architecture" code refers to drawing inspiration from architectural structures; the "Art" code refers to drawing inspiration from works of art such as paintings

and sculptures; the "Social Events and Issues" code refers to drawing inspiration from events affecting society, such as pandemics and wars; the "Design" code refers to drawing inspiration from fields such as interior design, graphic design, textile, and fashion design; and the "Technology" code refers to drawing inspiration from technological elements such as artificial intelligence.

The sources of inspiration used by the participants were visualized as a word cloud in the NVivo program (See Figure 1).

Figure 1: Sources of inspiration used by textile designers

The following are selected statements from some of the participants.

"*I use **nature** more frequently in my designs. (...) Being in nature inherently makes people feel better. For this reason, we need to incorporate elements of nature into our designs for home living as well. (...) I have noticed that products with these elements tend to sell better, and as a result, I make a conscious effort to incorporate them more into my designs*" (W5 – Recording 16:48).

"*When dining at a restaurant or traveling abroad, one is often influenced by the **architecture**. In fact, one's perspective is crucial. Being able to possess a vision is something truly valuable. It is essential to be knowledgeable in all aspects. When you have knowledge, your ability to analyze takes on an entirely new dimension. (...) Architecture, of course, offers a wide variety of motifs. In historical structures, particularly in both Turkey and abroad, in Europe, etc., you can find very diverse motifs. You can draw inspiration from them and, for example, apply the design of a motif you admire onto fabric*"(K3 – Recording 25:53).

"*We draw inspiration from ethnic **cultures**. These include Turkish motifs, Indian motifs, and many others, each differing significantly. In particular, motifs with African origins serve as a source of inspiration for us*" (P7 – Recording 22:57).

It is possible to categorize the sources of inspiration used by designers into different categories. For example, Eckert [11] categorized the sources of inspiration used by designers in the textile industry as clothing, photographs of clothing, works of art, and natural objects. Additionally, he mentioned that many themes are inspired by nature, and that designers often collect portable physical objects such as leaves and seashells, use photographs, or work from memory.

4.3. Ways of Accessing Sources of Inspiration According to Sector

In order to determine the ways of accessing sources of inspiration, participants were asked the questions: “From which media do you obtain your sources of inspiration? Which media do you use, such as trend books, periodicals, various catalogues, trade fairs and seminars, websites, personal photo archives, etc.?” The distribution of the ways participants access sources of inspiration by sector is presented in Table 4.

Table 4: Ways of Accessing Sources of Inspiration According to Sector

Utilized Sources of Inspiration	Specialization			Total (n=30)
	Weaving (n=10)	Knitting (n=10)	Printing (n=10)	
Trade Fairs	6	8	7	21
Websites	6	5	10	21
Trend Books	6	4	8	18
Personal Photo Archives	6	4	4	14
Company's Design Archives	3	0	0	3
Physical Stores	1	1	1	3
Fashion Shows	0	1	2	3
Social Media	2	1	0	3
Fabric Catalogs	1	1	0	2
Fashion Magazines	1	1	0	2
Art Books	0	1	1	2
Nature Trips	0	0	1	1
Yarn Catalogs	1	0	0	1
Color Catalogs	1	0	0	1
Seminars	0	0	1	1
Exhibitions	0	0	1	1
Artificial Intelligence	0	0	1	1

According to Table 4, among the most preferred access methods based on areas of expertise, websites are the most prominent in the printing sector, while trade fairs are most favored in the knitwear sector. In the weaving sector, trade fairs, websites, trend books, and personal photo archives are used equally.

The following are selected statements from some of the participants.

"***Fairs*** *definitely have an impact. When you attend a fair, there are things that others have imagined before you, things that you may not have seen or conceived of yourself. These ideas serve as a source of inspiration for you*" (W8 – Recording 12:12).

"*Each year, we attend trade* ***fairs*** *such as Pitti Immagine Filati and Pitti Immagine Uomo held in Italy, participating as visitors. Pitti Immagine Filati, in particular, provides valuable insights, especially in terms of yarn and knitwear, and serves as a significant source of inspiration for us*" (K9 – Recording 32:45).

"*We often visit* ***stores*** *and attend* ***fairs****. The photos we take during these visits are collected in a shared archive, not for personal use but as a department resource. Everyone*

contributes photos, and sometimes we visit specific stores on our own. We primarily visit the stores of our clients, those we work with. Additionally, we participate in international fairs. As I mentioned, we always ***archive the photos*** *we take in one place. When we start working on a collection, we first refer to this archive. If it does not provide enough inspiration, we explore a few* ***websites*** *like WGSN, as I mentioned earlier. We conduct searches to see what we can gather and what could add value to our work*" (P1 – Recording 13:51).

Table 5: Methods of Reflecting Sources of Inspiration in Design by Sector

Reflection Methods		Specialization			Total (n=30)
		Weaving (n=10)	Knitting (n=10)	Printing (n=10)	
Realistic (One-to-one)	One-to-one reflection is applied.	7	9	7	23
	One-to-one reflection is not applied.	3	1	3	7
Simplification	Simplification is applied.	10	10	10	30
Abstraction	Abstraction is applied.	7	10	8	25
	Abstraction is not applied.	3	0	2	5
Changes and Additions	Changes and additions are applied.	10	10	10	30
Association with Different Sources	Association with a different source is applied.	10	7	10	27
	Different sources are not combined.	0	3	0	3

4.4. Methods of Reflecting Sources of Inspiration in Design by Sector

In order to determine how ideas derived from sources of inspiration are reflected in designs, participants were asked the following questions: "Do you ever directly translate the source into your designs without altering its elements? Do you simplify the elements of the source and reflect them in your designs? Do you abstract the source and reflect it in your designs? Do you modify, reorganize, or add new elements to the source and incorporate them into your designs? Do you combine a source of inspiration with other sources when creating a design?" The distribution of methods used by participants to reflect ideas from sources of inspiration into their designs according to sector is presented in Table 5.

According to Table 5, the methods of simplification and changes/additions were preferred by all participants a1 the weaving, knitting, and printing sectors. The one-to-one reflection method was found to be more commonly preferred in the knitting sector. The abstraction method was applied by all knitting designers, while some printing and weaving designers did not use this method. The method of associating different sources was applied by all printing and weaving designers, while some knitting designers did not apply this method. The following are selected statements that illustrate the use of the realistic (one-to-one) representation method.

“That is related to the structure of the design. (...) The client may want it that way, so I cannot add anything there and I need to depict the leaf exactly as it is, for example. However, if the client grants me that freedom, I can transform the leaf in such a way that something entirely different emerges” (P9 – Recording 28:18).
"*I don't believe that one-to-one representation is the true purpose of design. For instance, incorporating a heart motif into a design with a love theme feels cliché to me. It's not what I would consider genuine design*" (W2 – Recording 34:04).
"*Yes, I focus on direct representations of nature. (...) I consider myself more of a realist artist, like Michelangelo or Leonardo. I don’t feel like a surrealist like Miró or Kandinsky. I am a perfectionist in my designs, meaning that it is important to me for them to resemble reality and to be natural*" (K9 – Recording 46:52) (See Figure 2).

Figure 2: A design example applying the Realistic method (K9 – Visual document)

The following are selected statements that illustrate the use of the simplification method.
"*If my source of inspiration is, for example, a digital design or image, and I am requested to create a rotation print, I am compelled to adapt it accordingly. This involves reducing the colors, simplifying the design, and minimizing the coverage to create a more streamlined output. Essentially, I have to adjust the design to fit the requirements of the printing unit*" (P1 – Recording 26:41).
"*Cost is an important factor, so we need to simplify it. The production technique, the yarn, and the weaving time, all of these aspects must be considered. Everything actually points towards simplification. The customer's style also directs this process*" (K10 – Recording 33:15).
"*For example, clients may present highly complex pattern references, or the images or colors we initially base our designs on can be quite intricate. If necessary, we simplify these elements, either to meet the client's request or to align with the specific group we are incorporating into that season's collection*" (W1 – Recording 27:30) (See Figure 3).

Figure 3: An example of a woven design applying the Simplification method (W1)

The following are selected statements that illustrate the use of the abstraction method.
"*I generally enjoy creating abstract works by using geometry. (...) For instance, if our theme is a human face, I always choose to focus on a well-known and iconic subject. I often work with geometric interpretations of figures such as the Mona Lisa, Marilyn Monroe, or James Dean. In other words, I have typically explored the geometric representations of famous artists' portraits*" (K9-Kayıt 49:23).
"*In general, I don't think I tend to approach my work in this way. (...) For example, if I am trying to convey something happy, I wouldn't simply draw a square. I don't do that*" (W5-Kayıt 26:51).
"*Abstraction is possible, but it is generally not highly supported. (...) I believe that few people are able to understand abstraction. Perhaps my colleagues can grasp it, but when it reaches the outside world, when it enters the lives of ordinary people, those who do not work in this field, it can often be perceived as excessive or, for some, even meaningless. (...) First, I immerse myself in the visual I observe, thoroughly examining its details through a careful process of scrutiny. Then, I combine it with my own style. When transforming it into an abstract form, it is crucial that my work remains recognizable. I believe I can abstract it by interpreting it in a unique style that I conceive in my mind* "(P2-Kayıt 31:45) (See Figure 4).

Figure 4: An example of a print design that applies the Abstraction method (P2)
The following are selected statements that illustrate the use of the changes and additions method.

"*I can change the color, modify the pattern, or alter the materials used* " (W2- Kayıt 41:08).
"*I can add elements to the flower. In other words, I try to create different motifs while the flower is present. (...) The crochet patterns can be altered. The design can be different; in other words, the design elements can be changed. New motifs can be added*" (K8- Kayıt 19:26).
"*For example, if I start with a flower design, I may remove the flower's petal and replace it with a finer flower or perhaps add a geometric shape to give the design a different touch, changing it in that way. (...) Design elements certainly change. First, I examine its size, appropriateness in terms of scale. Then, I proceed with the design process. As I mentioned, I might remove or add elements like petals or flowers, or incorporate something different, such as geometric, animal, or ethnic motifs. (...) I make such changes. Finally, I move on to the variation and coloring stage, where I apply colors that are in line with current fashion trends or suit the customer's style*" (P5- Kayıt 34:40) (See Figure 5).

Figure 5: A print design using the Changes and Additions method (P5)

The following are selected statements that illustrate the use of the association with different sources method.
"*Absolutely. As I mentioned at the beginning of our conversation, we consume so much now, and everything has already been done. As designers, we are not supernatural beings. Now, what we do is take something and match it with another, place one thing onto another, and sometimes it even becomes quite humorous. For example, it never would have occurred to me in the past to combine flowers with leopard print, but now I find myself creating a leopard design, and when you look closely, you realize that it's actually a leopard formed from flowers"* (P10-Kayıt 52:35).
"*Honestly, it doesn't work. When you draw from too many sources, it becomes very complex. (...) Incorporating too many actions or objects onto a fabric can create chaos in the design*" (K3-Kayıt 43:51).
"*Yes, we refer to them as patchwork fabrics. (...) The contrasts are more important. It depends on the customer's request. They may suggest, for example, that you can combine flowers with geometry, or even place a human figure alongside a flower. They guide you. And you design accordingly, in a way that can be appropriately applied and visible on the fabric*" (W9-Kayıt 28:12) (See Figure 6).

Figure 6: An example of a jacquard woven design employing the Association with Different Sources method (W9– Visual document)

Eckert and Stacey [12] examined the performance of knitwear designers, classifying their intentions and the relationship between their final designs and inspiration derived from Iranian carpets. The methods designers use to reflect their sources of inspiration are classified as: realistic (one-to-one) reflection, conscious simplification, abstraction, modifications and additions, and relating to a different source [12-13]. This classification has also been applied in the studies of Petre, Sharp, and Johnson [14] and Strickfaden, Stafiniak, and [15] where it is noted that designers applied at least one of these transformation methods.

5. CONCLUSION

As in all design disciplines, textile design involves the generation of creative ideas directed toward a specific purpose and the realization of these ideas through a structured process. In textile design, fabrics are created using knitting, weaving, printing, or mixed techniques. The initial stages of the design process include concept development, investigation of sources of inspiration, and the generation of creative ideas, which are common to all areas of specialization. The implementation phase, however, varies depending on the production technologies and surface design techniques used.

In this study, in response to the question “Do textile designers' activities/styles of inspiration, creative idea generation, and idea representation differ according to the sector they work in?”, data were collected under the sub-themes of sector-specific definitions of textile design, sources of inspiration, access routes to inspirational resources, and methods of representation. The findings indicate that textile designers adopt different approaches depending on the aesthetic, technical, and commercial requirements of the sector in which they operate.

Within the sub-theme of textile design definitions by sector, it was found that textile design is defined differently a1 weaving, knitting, and printing fields. According to weaving designers, textile design involves creating fabrics in line with customer demands; for

knitting designers, it is about developing designs that add value; and for printing designers, it means designing fabrics in accordance with fashion trends. These differing definitions indicate that designers approach the process from distinct perspectives, shaped by the specific nature and workflow of their own discipline.

In the sub-theme of sources of inspiration used by sector, it was found that all participants drew inspiration from nature. However, sector-specific differences were observed in the frequency of use of other sources such as culture, architecture, art, social events and issues, design, and technology. It was observed that culture, art, and design were more commonly utilized as sources of inspiration in the field of printing. Architectural sources were found to be more prominent in the field of knitting, which may be attributed to the structural and aesthetic characteristics of knitting techniques that parallel the forms found in architectural design. Social events and issues were more frequently emphasized in weaving and knitting compared to printing. Technological sources, on the other hand, were utilized exclusively in the field of printing.

In the sub-theme of access to sources of inspiration by sector, websites were found to be the most commonly used access channels in the field of printing. This finding indicates the sector's strong adaptation to digitalization. In the knitting field, trade fairs emerged as the most preferred access route. This can be explained by the opportunities fairs provide for physically experiencing the tactile qualities of knitted fabrics and establishing more effective connections through face-to-face interaction. In weaving, it was determined that trade fairs, websites, trend books, and personal photo archives were used equally. This suggests that the weaving field benefits from a balanced combination of traditional and innovative resources.

While striving to produce original designs, textile designers also take into account factors such as client expectations and production limitations. They apply their inspirational sources through various methods including realistic (one-to-one) representation, intentional simplification, abstraction, modification and addition, and association with other sources. Although these techniques, as categorized by Eckert and Stacey (2003), are implemented in practice, they are often applied in an intuitive or unconscious manner.

In the sub-theme of methods of reflecting sources of inspiration by sector, it was found that all participants employed the methods of simplification and making modifications and additions. The realistic (one-to-one) reflection method was predominantly preferred in the knitting field. All knitting designers applied the abstraction method, whereas some designers in printing and weaving did not. The method of associating different sources was employed by all designers in printing and weaving, while some knitting designers did not adopt this approach.

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