

Understanding Textiles - from Artist to Spectator

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Abstract

The appearance of textiles, which by common perception is their main attribute, is shaped by many different factors, such as the raw material, ornamentation and structure, both as an external form and a manner of connecting fibers and other elements of textiles. It is not always realised by contemporary artists and designers that the same factors also determine the durability, conservation and storage methods. The paper briefly describes the main factors constituting textiles, showing how important the awareness of their role is to all who deal with textiles, from artists and designers, conservators and critics, to visitors to a gallery and museum exhibitions. It also shows that historical textiles, contemporary textile art and industrial textile products only appear to constitute separate independent worlds and in fact influence each other.

Key words: textile structures, textile art, textiles history, novelties in textiles, museum education, museum exposition.

■ Introduction

Unlike other objects of art, the appearance of textiles is a very specific phenomenon. It results from the multilayer and sometimes very complex, diversified structure, different types of technologies, and from the variety of materials applied in one object. Textiles require profound interdisciplinary knowledge from all who deal with them – from the artist or designer, who must consciously choose by what means the idea of a future work will be realised, the conservator, who preserves them for future generations, to the viewer, who should be able to fully appreciate their merits.

How to teach artists or historians of art all difficult technical aspects of textiles, how to introduce an unprepared visitor at an exhibition to the arcana of an artist's practices?

There are three main factors constituting textiles: material, structure and pattern. However, when reading most of the books on the history of art one can have an impression only the last one - the pattern- is really interesting. Historical textiles are treated in the same way as paintings or sculptures; however, in contrast to objects of pure art, one can hardly mention the designers and craftsmen who created them. The fact that in the traditional history of art the significance of textiles, with the exception of historical tapestries, which actually proves the rule, has not been fully recognized yet and that even now being overshadowed by painting and sculpture is typical for the cult of "purely iconographic" art, thus disregarding or ignoring applied art. It has been the result of a false paradigm of historiography that recognises mimesis

as a prerequisite of real art, which is not supposedly fulfilled by arts & crafts. For this reason the cult of big names, which is a medium of the traditional history of art, does not include the masters of weaving, embroidery, goldsmithing and other artisan crafts [8]. In our time the situation of the designers of textiles is not much different. We often know the name of the designer of a chair but not the designer of upholstery. This can be most vividly seen in the fashion industry with its famous fashion houses and fashion designers and, in most cases, completely unknown designers of even the most sophisticated and splendid fabrics they use.

An even more important thing is that the education of contemporary historians of art does not provide a conceptual apparatus sufficient to analyse and describe textiles taking into account any of the technical aspects of these objects, simply because lectures concerning crafts are very rare. For this reason historians or critics of art often cannot really evaluate the skills of an author of a work of art and thus evaluate the work itself.

On the other hand, when reading the notes in catalogues of exhibitions of contemporary textiles, one can rarely find a detailed description of the technique the artist used. Sometimes it is not correct or called a "wall hanging", which does not mean the technique but function, or named "own technique", even if the technique is well known and can be described by a name [4]. This means the same lack of conceptual apparatus and lack of language in which textiles should be described. It also indicates that some materials or techniques have been used only intuitively. But it can also be con-

cluded that the authors cannot fully control their works of art nor anticipate their future life including such prosaic aspects as storage, exposition or conservation.

■ Consciousness of the material

The material used for textiles gives them both quality and appearance. In the fashion industry these two aspects are close to each other. The same concerns historical textiles, where the most luxury objects are made from the highest quality and the most precious materials - the finest silk, decorated with gold, silver and precious stones. However, in contemporary textile art, appearance is always more important than the quality of a material, and thus artists often use some experimental materials just to achieve the effect desired. But even the most extravagant and inconvenient materials were actually used in the past, sometimes in a different form. Paper has been used for centuries as so-called Chinese and Japanese gold – threads in the form of paper strips covered by gold. Paper twisted threads were used to produce woven fabrics often applied as material giving stiffness, used, among others, as a filling in liturgical vestments. Paper was also used in Japan for apparels, such as the waterproof coat from the collection of Kew Garden [16].

Feathers were used in textiles in ancient Egypt and pre-Columbian Peru thousands of years ago. Metal wires and strips, single and plied, wrapped around different materials, sometimes in very fancy forms, have been used in lace-making, weaving and embroidery also for thousands of years. The same concerns precious and semi-precious stones, ceramic and glass, with the last being

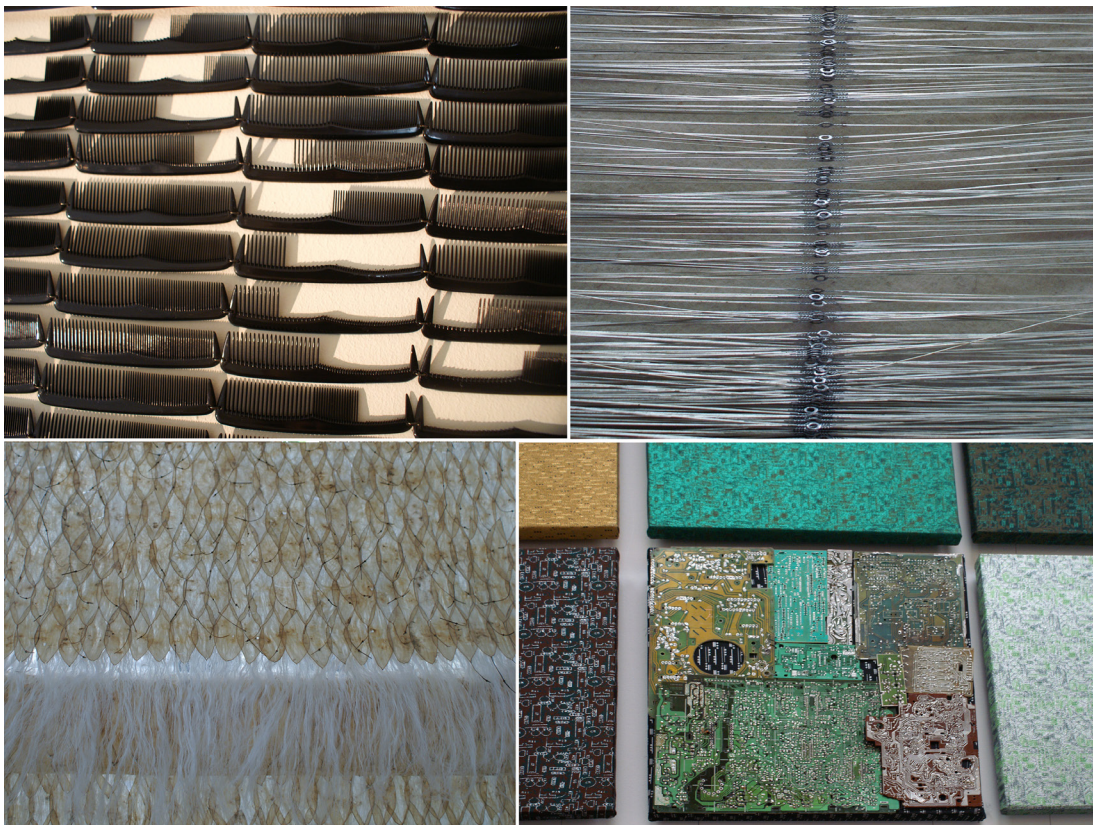


Figure 1. Experimental materials used by contemporary artists: combs, heddles, plants, integrated circuits. From the exhibitions “Trans-tapestry. Visages of tapestry” [14] and “New Material World: Rethreading Technology” [7]. Top left: Sonya Clark, Ashe, detail (combs); top right: Joanna Pasaj, *Sekwencje* (Sequences), detail (heddles); bottom left: Elżbieta Piórecka, *Perłowe Papyruse* (Pearl papyruses), detail (seedpods of the *Lunaria annua*); bottom right: Karolina Matyjaszkiewicz, *Układy scalone* (Integrated Circuits), detail (jacquard fabric, integrated circuits). Photos by Maria Cybulska.

used not only as small decorative beads in embroidery, but also experimentally in the form of fibres for weaving decorative fabrics or even in fashion [8].

Because of the relatively high stiffness of these fibres, which results in fibre breakage and causes a hazard for the user, they are no longer used for apparel; however, they are used only for industrial textiles and in textile art. Such is the fate of many experimental applications of some novelties in textiles. In the case of glass it was because of hazardous properties, and for Cyprus gold, popular in the 11th and 12th centuries, in thread from gilt leather or animal gut, which was to be a cheap and light imitation of gold thread, it was the durability of the thread. Due to the fragility of the gold layer and its susceptibility to abrasion, its life was rather short and its importance had declined by the 16th century. Today these threads are in a poor condition, with only residues of the layer of gold, usually in brown colour, and no shine [6]. Contemporary “gold threads” are made in a similar way – a plastic membrane is covered with aluminium or other metal, whose durability is as uncertain as that of its predecessor.

Uncertainty regarding the durability of material is also covered in the paper, as well as seeds, leaves and other botanical components of contemporary textiles, in

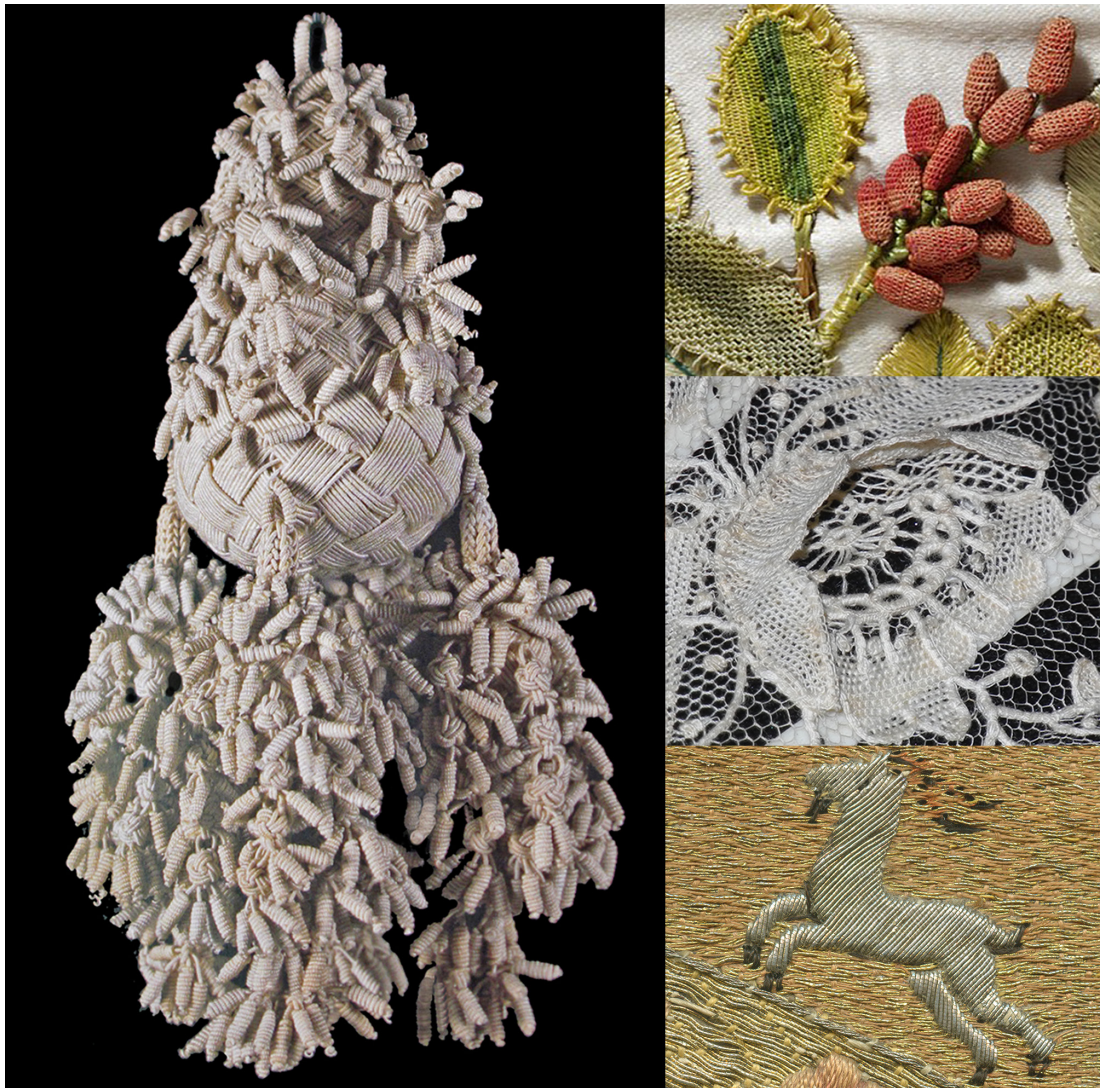
addition to new materials widely used. Sometimes new materials are designed by engineers working in material science and engineering simply to be easily biodegraded, thus applying them in art work is rather risky if the artist wants their work to last for years. If the object is sold or given to or bought for a museum collection then there is the problem of conservation, which can be difficult and very costly, but sometimes just impossible.

In the history of textiles it has happened many times that experimentally used novelties simply did not work. As an example, one can mention new single-step synthetic dyes at the end of the 19th and beginning of the 20th century. Many artists and craftsman decided to use this novelty in their works, however the dyes were not always as permanent as contemporary ones and colours occurred to be very unstable. The textiles faded over time to become almost monochrome, and now they are in different shades of grayish brown. In Poland in the twenties of the 20th century, under the influence of ‘Krakow Workshops’ (Cracow 1913 - 1926), very popular was the batik technique with use of plant dyes. However some artists used new synthetic dyes and today their works have completely lost their colour [11].

What can a contemporary artist or designer do if he is not thought about the material properties and sometimes is even not aware of a potential risk associated with the material, especially if critics and the public expect them to show something new and surprising? Therefore artists look for and apply new materials and techniques more and more often, with some solutions being, despite all the remarks concerning durability, really interesting. I would like to mention two exhibitions organised just to show these novelties in textile art. The first one, “Trans-tapestry. Visages of tapestry”, took place in Lodz in 2007 and presented textile art from the circle of the Strzeński Academy of Fine Arts in Lodz. The second one under the significant title “New Material World: Rethreading Technology” took place in 2010 at the Sheldon Museum of Art in Lincoln, Ne, in the USA. These two exhibitions showed a new approach to textile art, with more emphasis put on the search for new materials and new forms [7, 14]. One could see at both of them a variety of materials which are not usually associated with textiles, such as plants, heddles, wood panels, pocket combs or integrated circuits, combined with traditional textile materials (**Figure 1**).

Another trend in textile art exploiting unusual materials is related to recycling.

Figure 2. On the left: 17th century Italian tassel (wool and linen, length 24 cm) [9]; on the right from the top: British Casket, 1670's, detail (silk and metal thread, seed pearls, embroidery, 3 × 3.5 cm) [17]; 19th century fan, detail (bobbin lace, linen, 3 × 3.5 cm), Szembek family coat of arms from 18th century chasuble, detail (silk and metal thread, embroidery, 3 × 3.5 cm). **Photos** by Maria Cybulska.



However, these trends can be seen in industrial textiles too. Textiles with integrated circuits and other electronic equipment, called “smart textiles” by engineers, has been one of the main areas of textile science and engineering for a dozen years or so, just like recycling. The same concerns composite materials, where traditional textiles such as woven or knitted fabrics are only one of the elements. It seems that these two worlds, art and engineering, are parallel in the area of textiles, although they seem to be so far from each other.

Consciousness of structure and technique

Both exhibitions showed the efforts contemporary artists make in search of new forms and techniques. Among the objects of art presented one could find large sculptural forms and installation works, but also traditional embroidered, knitted, jacquard and harness loom woven fabrics; however, in most cases the

objects represented a mixture of different techniques. In the last case, the artist usually described it as “own technique”, suggesting it is something absolutely unique. However, mixing different techniques has taken place for thousands of years. Coptic textiles are an example of mixing harness and tapestry weaving. There are numerous examples of decoratively woven and then embroidered textiles, often decorated with appliqué from even or patterned silks, laces and so on. A closer look at even a small tassel allows us to see a twisted and plaited structure which, when magnified, looks like an interesting object of art (Figure 2).

When comparing some details from historical and contemporary textiles, we can see many similarities. In most cases they are purely accidental but sometimes they are proof of the designer’s knowledge and experience of traditional techniques (Figure 3).

Why do contemporary artists not use the historical names of textile structures and techniques or contemporary ones, as they are used in industry, for instance, mechanically and chemically bonded or spunlaid nonwovens, 3D and multiaxial weaving or knitting, texturing, composite, etc. It can be a lack of knowledge or interest being to the detriment of both art and engineering, which can really provide inspiration to each other (Figure 4).

The exhibitions of contemporary textile art proved that the traditional definition of textiles has been expanded to new forms and techniques. The question arises why fewer and fewer artists use traditional techniques, such as tapestry weaving. Does it mean this technique has become used up and one cannot do anything new, or maybe it is too difficult and time-consuming in our time where artists are pushed to present new works which are supposed to surprise rather than be admired?

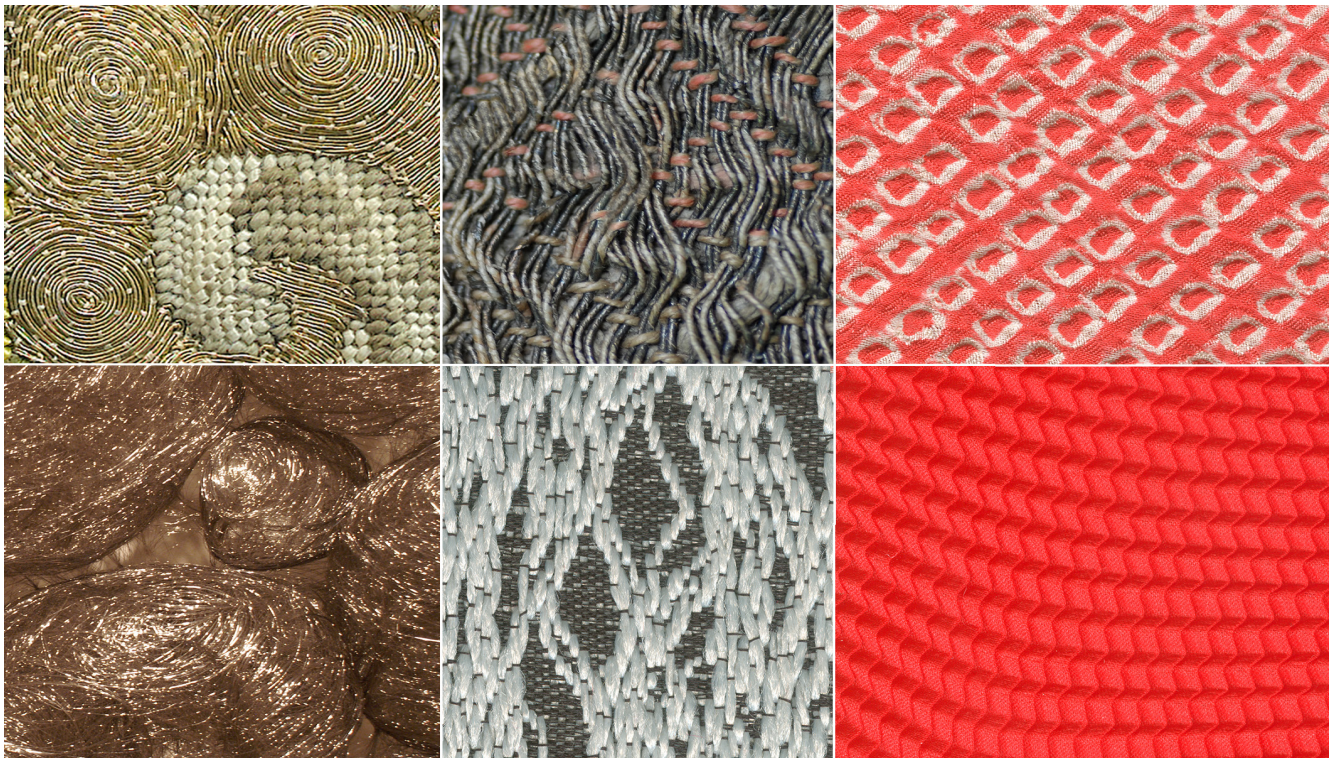


Figure 3. Upper row from the left: 17th century chasuble, detail of embroidery (4.9 × 5.2 cm; silk and gold threads) [2]; fragment of archaeological embroidered textile from the beginning of 16th century (1.5 × 2.2 cm, silk and metal thread, couched work); traditional shibori fabric (5.8 × 6.2 cm; silk). Lower row from the left: Sen Man Na Yu Ta, *Kyoko Kumai*, detail (31 × 36 cm; stainless steel filaments), *New Material World: Rethreading Technology*, The Sheldon Museum of Art., Lincoln, Ne, USA, 2010; woven fabric *Foessa* by Kobe Interior Design (4.7 × 3.7 cm; poliester), *Pleats Please* by Issey Miyake, detail (5.2 × 5.4 cm; poliester). **Photos** by Maria Cybulska.

I would like to present two artist who prove that knowledge about historical techniques and sensitivity combined with scientific exploration and skills can result in innovations developing traditional

textile concepts into new techniques and forms.

Włodzimierz Cygan, renowned Polish artist, developed his own technique based

on classical tapestry weaving. Warps traditionally treated as a simple construction covered by wefts creating patterns play a more important role in his works. His unique system of warping consists in giving the warps different direction and density, curvature and 3-dimensional path [5]. This way the warp is not only to support the weft but more to guide it and together create the patterns. Somehow it is the warp which gives Cygan's works their final form; but still we can call them tapestries (**Figure 5**).

For Scottish artist Norma Starszakowna innovation is one of the most interesting fields in textile art. Her experiments with different printing media and techniques include heat-reactives which give embossed textural qualities, glazed translucent areas, oxidisations and patinations, as well as 'formed' silk pieces (**Figure 6**). One of the most interesting works are rust oxidised, double-bonded organza and tension-crush prints developed for Issey Miyake in 1990 - 92, utilising the high-pressure crush-shibori technique using a pigment print on a shibori base, which combined a Western technique with Japanese tradition [13].



Figure 4. On the left: *Między modą i urodą, studium portretowe* (Between fashion and beauty, portrait study), Joanna Tiele, exhibition *Trans-tapestry. Visages of tapestry*, [14], photo by Maria Cybulska; top right: fragment of figural embroidery from the orphey of 16th century chasuble (height of the head app. 6 cm) [3], photo by Ewa Mianowska; bottom right: nano fiber mask spun by Dr Darrell Reneker for Smithsonian Cooper-Hewitt National Design Museum's exhibition: "Extreme Textiles: Designing for High Performance" [10], Copyright Cary Wolinsky, Trillium Studios 2002, courtesy of the artist.

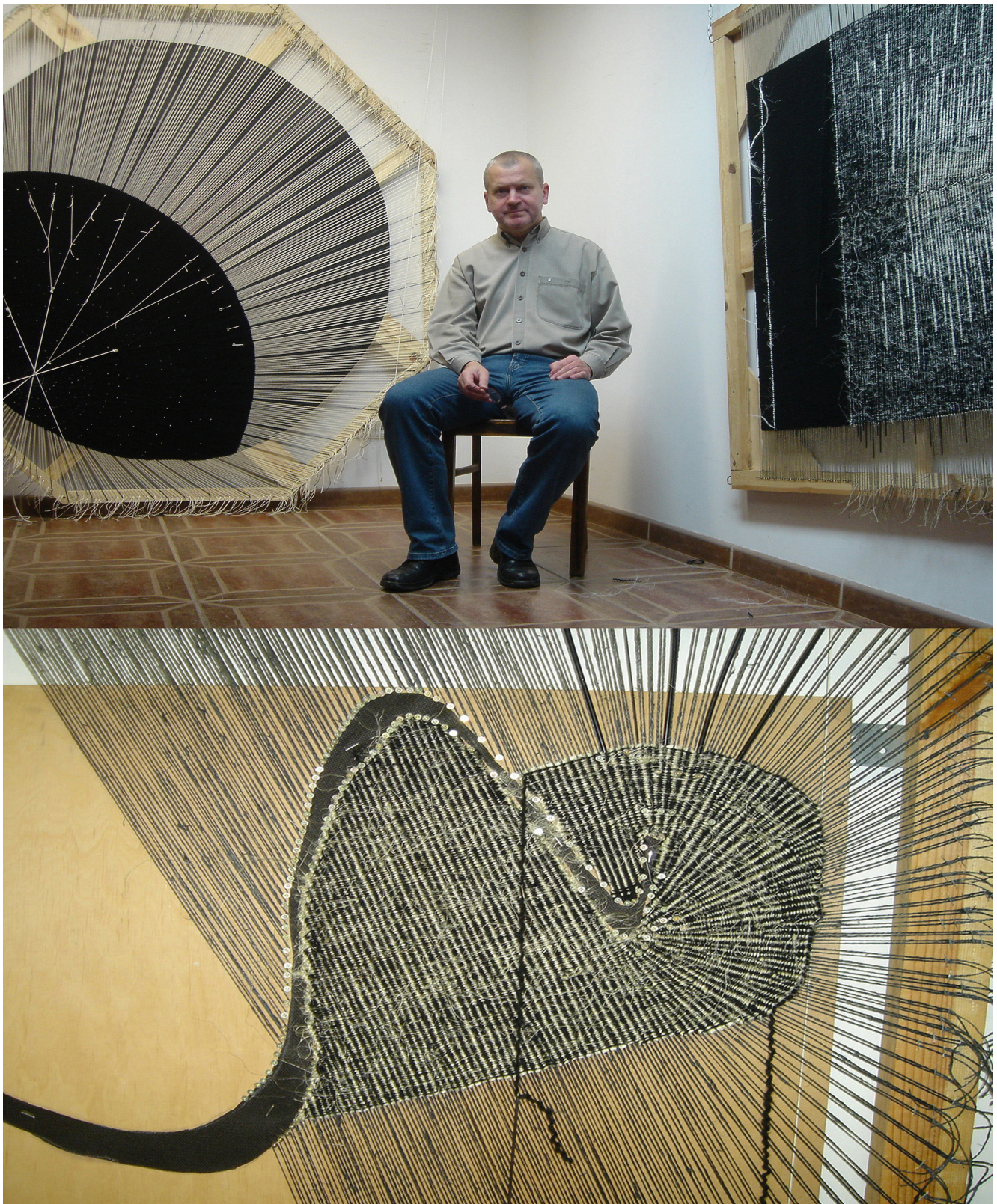


Figure 5. Włodzimierz Cygan in his workshop and his own way of warping. Courtesy of the artist.

■ Education

When thinking about textile education we should take into account not only future artists and critics of art but also the audience. People visiting museums often complain about the way the objects are

exhibited. Long distance from the object, darkness, and glass show-cases with blinks of external light do not allow even to clearly see the objects, let alone having direct contact, which prohibited by ubiquitous signs saying “do not touch”. The solutions to preserve works of art,

at the same time, really do not allow to appreciate them. Thus more and more often the exhibition of works of art are supported by multimedia presentations with easy access to knowledge concerning the objects (*Figure 7*). Using multimedia we can provide not only the text



Figure 6. Norma Straszakowna, Scarves for Shirin Guild Collection, crush-shibori. Courtesy of the artist.

and images of the objects as they look like now, we can show some details of the structure, we can present what is hidden because of indirect contact with the object or because the object is destroyed due to ageing. It is well known that the more we know, the more we can see and understand, and thus more appreciate the merits of what we can see. Textiles are a very good example of this, and they are often treated the same way as paintings. However a closer look at the complicated structures and variety of techniques and material used in one object make even indifferent or sceptical spectators really enchanted.

When teaching students of the history of art, archaeology or design, and even visitors at museums with no technical background at all, one must find a way to explain all technical aspects of textiles in an easy way. There are two main methods: the first one is experience- direct contact

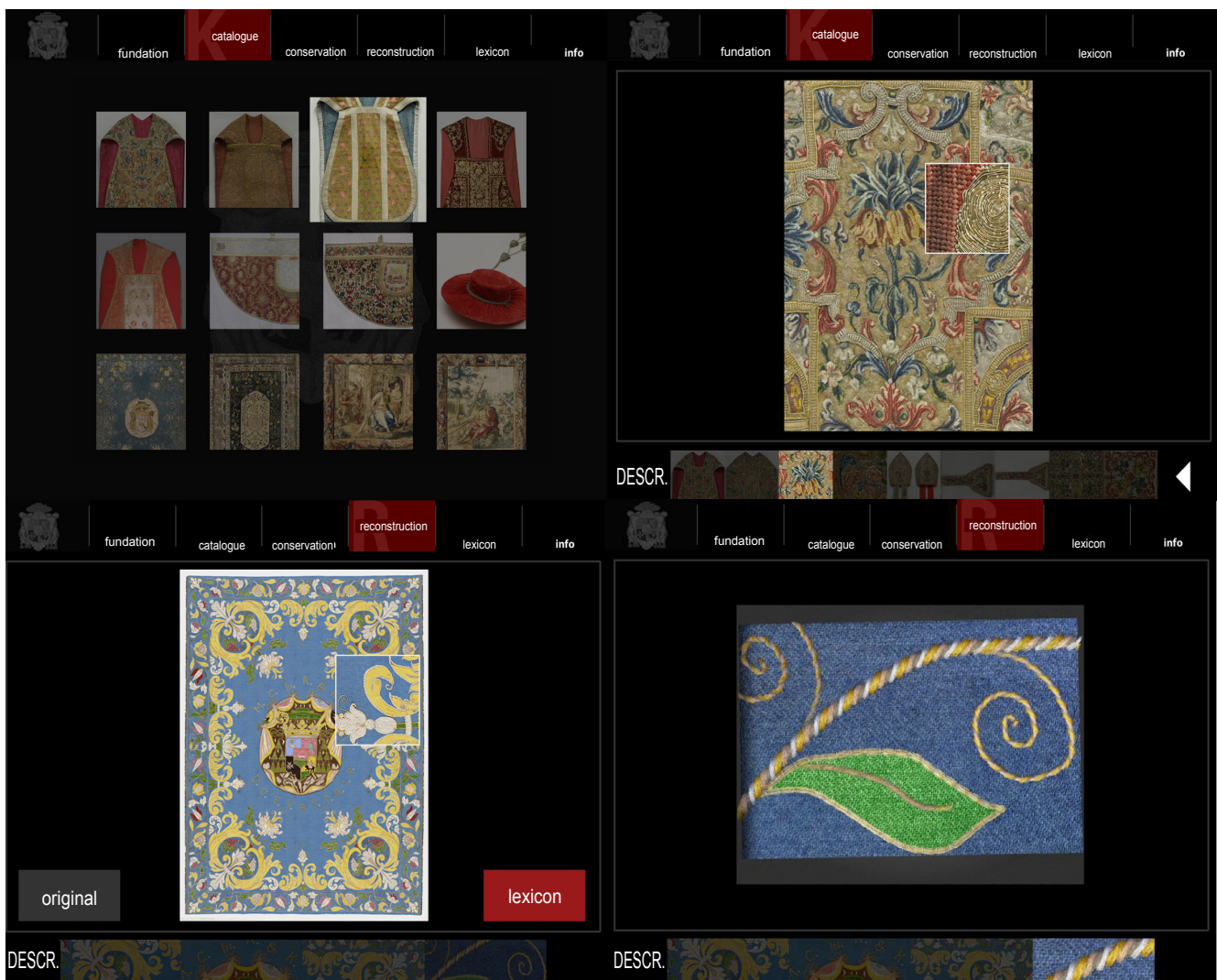


Figure 7. Screens from multimedia presentation for the exhibition “Celebration of Baroque. The Artistic Patronage of Primate Michal Siefert Radziejowski” [2].

with the object or its copy and teaching the techniques, and the second is visualisation. Our activities in this field include computer graphics, multimedia presentations and museum performances.

A good example of the application of computer graphics are reconstructions of archaeological textiles, which are usually in very poor condition due to ageing in extremely hostile conditions. They can supplement excavated finds and show their original appearance [1, 3]. This concerns also historical textiles whose original appearance is often quite different due to the fading of colours, past conservations or other physical damage (*Figure 8*).

Reconstruction by means of computer graphics can be one of the elements of a multimedia presentation, which can also offer a closer look at the details of an object which cannot be directly seen, present the conservation the object was treated with, as well as knowledge for visitors who want to know more in the form of on-line lexicons of technical and artistic terms (*Figure 7*) [2]. A good idea is to present replicas of the objects, especially cloths, that can be touched or even worn by the visitors, and in this way teach them simply by personal experience of history, as we can see in *Figure 9* in a photograph taken at an exhibition. On such occasions, it can be seen that old costumes change not only the appearance, but also attitude, way of moving, and even speech of young people. In a certain sense it means that this type of experience is deeper than one might think.

■ Summary

At the beginning of the paper the problem concerning the consciousness of textiles was stated in all their aspects – artistic, technological and social. It concerns both contemporary and historical textiles. Is knowledge and understanding necessary to create and appreciate them? I believe it is. Consciousness of the material allows to design and create works that are not only beautiful and innovative but also durable, easy to conserve and exhibit. Knowledge of modern and historical technologies make it easier to develop innovative techniques and structures which are not only a single experiment to create a throwaway work but can really change the textile world. At the end of the chain of people dealing with textiles are critics and visitors. It is a dream of every



Figure 8. Residues of a woollen coat from the Roman period, its virtual reconstruction [1]. Photo and visualisation by Maria Cybulska and Tomasz Florczak.



Figure 9. Visitors to museums – personal experience of textiles. On the left - replicas of Polish national costume by students of Design from the Lodz University of Technology made for the exhibition “Sarmatism. A Dream of Power” at the National Museum in Krakow in 2010; on the right – a young visitor at the exhibition. Photos by Maria Cybulska.

artist that his work and skills can be understood and appreciated.

When looking at the educational models and research areas, it seems there are three independent worlds of textiles: historical textiles, often ignored not only by artists and engineers but even by archaeologists working on textile finds, contemporary textile art and design, as well as industrial textiles, including advanced materials and technologies. Their isolation results largely from the fact that teachers, scientists and artists specialise in certain narrow areas of textiles. More and more widely undertaken interdisciplinary research on textiles may change this situation.



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