

EXPERIMENTATION BETWEEN COLOR DYES ON THE WARP AND TEXTILE STRUCTURES AND THEIR IMPACT ON THE PLASTIC FORMULATION VARIABLES ON BUILDING THE HANGING TEXTILE

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Abstract

Artwork in general is a set of innovations accumulated that build on top of each other. This development that we see in the arts of the modern world and containing interference in the arts heritage and techniques and trends and philosophical theories and artistic. Whole fused to become their productions new innovation every day formulate artist in the form of a work of art. As well as in the art of textiles built on the same pattern of heritage and traditions and technical and philosophical direction then the modern theory then attempts to reach workout what we see of Modern Art today.

Keywords: Experimental, Dyeing, Plastic Formation

Research Problem: How can the development of new plastic formulations through experimentation between color dyes on the warp and textile structures to enrich hanging textile?

Research Objective: Correlation through experimentation between the effect of color dyes on textile warp and structures leads to the development of new plastic formation that enriches hanging textile.

The current research presents training module that has many practical applications of the relations of reciprocity between color dyes on the warp and textile structures, compositions, techniques and methods of textile used method abstract designs in textile to be implemented in practice - and limited sample experiment on fourth year students - Faculty of Specific Education - Alexandria University.

Research background: Artwork in general is a collection of accumulated innovations that build on top of each other , This development that we see in the world of modern art , with what it revive from interference in traditional arts , the technical ways , philosophical trends and all the artistic theories melts that its production become a new innovation every day , the artist form in every artwork – also in the textile art build on the same pattern heritage , traditions and technique then philosophical direction then modern theory then attempts and experiment to reach what we see of modern art today.

“Artist in the modern era depends on research Method (development and experimentation) to keep up with the civilization ride and launch to modernity to achieve balance in creativity between joy and art “**(Ali Syed**

Ahmed ,2002,p.3).

And the artist shapes the ideas and visions to find new novel relations depend on many tests and alternatives forms until it shows how strong the idea and the new morphological engagements – whereas artwork designing Process is mixed by Planning and experimentation and that is through using several entrances to benefit by the raw materials, colors and sense datum in creating new Plastic Formations for the Textile hangs.

The artist permanent experimentation, putting datum and solutions alternatives leads to reach the recognition of new formative relations created out of permutations and combinations between multiple arts through the design and technique. "And Art education considered as a laboratory in fine art which helps the development of creative thinking "**(Ali Syed Ahmed, 2002,p.3).**

Experimentation in art is the thinking method that offers different alternatives and solutions in the form of new dangling figuration includes unfamiliar indications and meanings; it is also the method which explains and displays various aspects of the single Item **(Hoda Ahmed Zaki,1979,p. 15).**"And the dyeing of warp weaving is one of the artistic practices in handmade textile and this method is distinguished by joining warp, printing and dyeing as one of the manual artistic fields too "**(Ghada Abdel Moneim Fathi, 2002,p. 237).** and this technique is defined to be the drawing of the design directly on the warp strings before weaving process by one of the Dyeing or Printing or Painting on the warp and for that it is called Warp Printing falls below Warp Printing or Dyeing **(Ghada Abdel Moneim Fathi, 1998,p.14).** And this technique was known in ancient times as IKAT which is an Indonesian word means nodes and linkage or warping. And the dyeing of the warp or the weft or both as well "**(Wanda warming &Michael Gaworski,1981,p.14).**

But in the modern era dyeing variables assorted for Warp Dyeing and now has an aesthetic role beside its functional role in woven and the textile compositions turn out to be an aesthetically role player showing the aesthetics of Warp strings on the Woven surface , so the researcher see that plastic Wordings for Belding Textile outstanding in this research, carried out through a number of variables which are :

1. The Structure and its impact on the formation of textile
2. Textile technologies and their impact on the composition of textile
3. Histological methods and their impact on the composition of textile
4. Dyeing of the warp and their impact on the composition of textile

Chart No.1 Clarifies the role of the structure textile that helps on showing the aesthetics of Warp Dyeing.

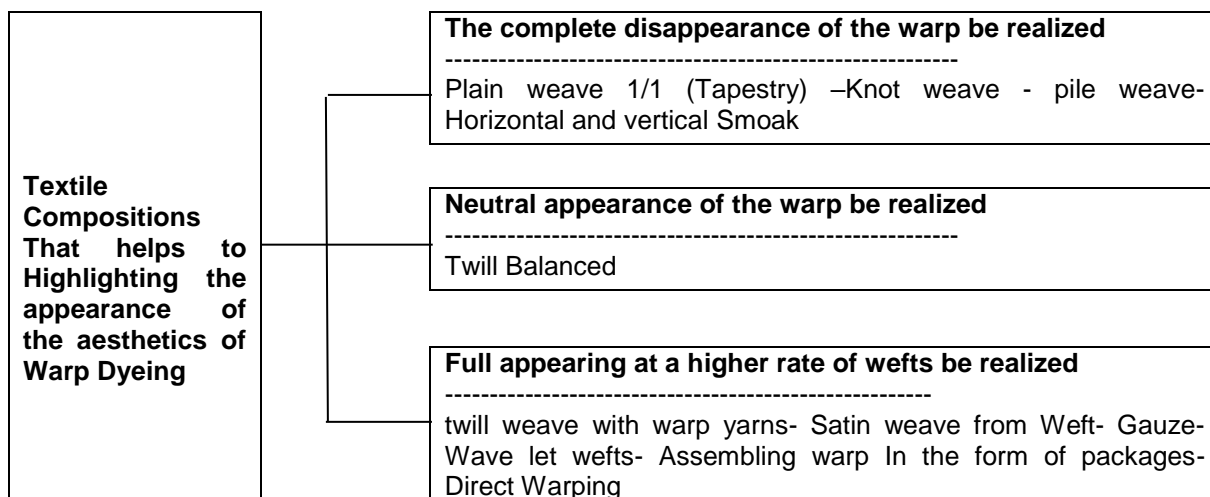


Chart No.1 Textile structures used in the research which helps to highlighting the appearance of the aesthetics of Warp Dyeing – is the researcher work.

As the researcher expose the Textile Structures and that can be used to help the emergence of the aesthetics of the Warp Dyeing

1st :- The complete disappearance of the warp be realized:

This kind helps to cohesion for Textile hangs and the most examples clarify that Tapestry weaving or the Egyptian Coptic Weaving known by Plain weave 1/1 or the Weft Face and the warp weaving part become more functionally than aesthetically – and the manual techniques like buttonholes and Hyraxes it also don't show the warp as much as wanted in the pastiness of the Textile hangs. And the horizontal and vertical Somak is considered as one of the important methods that showed up the warp and even the warp part become more functionally than aesthetically. And the present research does not incur such kind as much as pointing at the important of the Textile hangs cohesion.

2nd : Neutral appearance of the warp be realized:

And this type of compositions makes a balance and equivalent in showing both of warp and Weft which is found in Twill Balanced, distinguished by with a pattern of diagonal parallel ribs. Examples 2/2 ,3/3 ,4/4..... (Mai Ahmed Mohammed Mustafa, 2009,p.54).

3rd : Full appearing at a higher rate of wefts be realized:

Some textile compositions like twill weave with warp yarns like twill weave 3/1 ,4/1 ,5/1 ,6/1....ext. , also Satin weave from Weft and characterized by its regular repetition and the ribs in the Weft or the warp .

"Gauze is one of the decorative methods that is controlled by the hand fingers and has the well to more expressions and diversification , and the warp thread are moved in Pairs and sets also the all sheet can be weaved by Gauze method and different moves "(Mona Mohammed Anwar, 1984,p.125).

Gathering the warp twine in bundles is considered one of the easiest perforated textile method where the warp twine are gathered and tying them in bundles and it can perform reciprocal relations giving beautiful artistic rhythm "(Mona Mohammed Anwar, 1984,p.128).

One of the free styles is the Weft wavelet the weft moves in front and behind a chosen group of warp twine with Plain weave 1/1 or unexpended method and it is intended selection "(Mona Mohammed Anwar, 1984, p. 127).

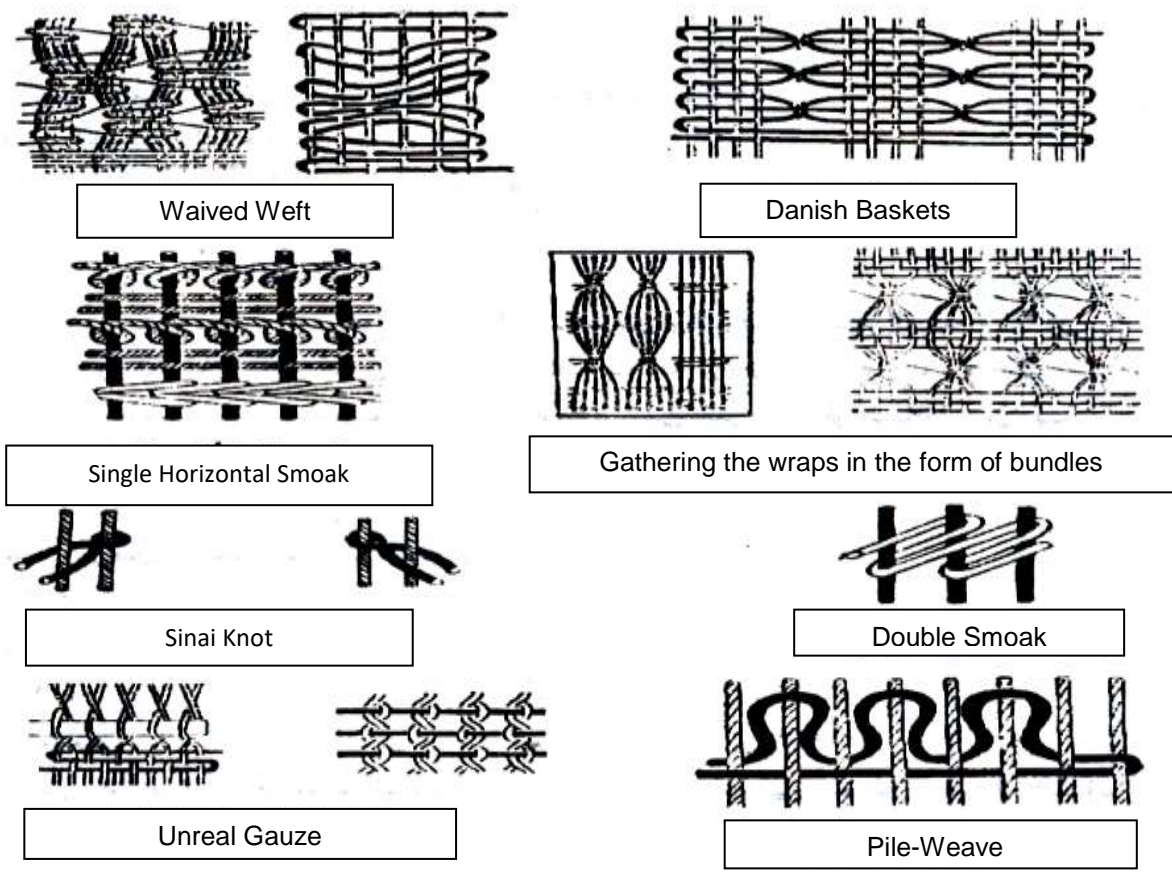


Fig.(1):It illustrates some of the compositions, techniques and methods of textile

Research Problem:

Based on what has already been determined by the research problem in the following question:

How can the development of new plastic formulations through experimentation between color dyes on the warp and textile structures to enrich hanging textile?

Research Hypotheses:

-We can develop new Plastic Formation by testing Dyes of color on the warp and textile compositions to enrich the Textile hangs.

- There is a positive relation between developed Plastic Formation of the students in experiment and the richness of the textile hangs for the Specific Education College students.

Research Objective:

The Interrelationship by testing Dyes of color on the warp and textile compositions to enrich the Textile hangs.

Research Importance:

-Enrich the field of handmade textiles by finding experimental entrance for The formation of textile by testing Dyes of color on warp and structures of textile.

-Support the creation of experimentation with materials, colors, technique to enrich the field of modern handmade Textiles.

- Find a new artistic entrance in teaching handmade Textiles to the Specific Education College students.

- This method fits the nature and the requirements of the teaching process and raise the artistic level of the product by the different Education phases (Technically and economically)

Research limitations:

Research is limited to the following:

- Suggested unit for teaching testing between Dyes of color on the warp and structures of textile
- Random sample of Students from grade four Specific Education College Alex University.
- Using 60 X 80 cm frame loom
- Execute textile hangs manually

Planning the teaching unite:

Unite title: Textile hangs executed by testing between dyes of color on the warp and textile structures

Unite field: Handmade Textiles.

Unite Philosophical basis: Experimentation to create new plastic formation on the warp and textile compositions to enrich the Textile hangs.

Unite Time: 60 hour.

Unite Steps: the unit should be taught in 15 lectures by 4 hours each .

Raw materials and tools: Cold color dyes – Yarns with different fabric and colors - 80×60cm frame loom – needle – a pair of scissors.

Methods and ways of teaching:

Group teaching

Evaluation:

- An interim after each Lecture.
- Final evaluation after the end of teaching unit.

Unite Title: Textile hangs executed by testing between Dyes of color on the warp and structures of

textile.

In view of the handmade weaving subject for fourth grade - bachelor's and previous studies stage

About the possibility of testing between dyes of color on the warp and textile compositions to enrich the Textile hangs. by confirmation on the important of knowledge, skills, and Plastic values aspects to achieve new plastic formulations Textile hangs.

The teaching unit takes the study of Ikat art and its roots and Warp Printing using modern ways and Kinds of natural, animal and mineral chemical dyes and the textile design concept, processing steps and the concept of experimentation. And then Practical experiment so the students can recognize the different plastic dimensions that can be achieved by considering foundations and bases of the design also considering the diversity of materials, compositions, Techniques and different textile methods,

Unite procedural targets: The researcher marked the procedural objectives for teaching the suggested point as shown:

1st: **Knowledge targets:** By the end of this study the student should be able to:

- Recognize the textile combinations, manual techniques and methods.
- List types of textile combinations and methods that show the beauty of manual.
- Knows the meaning of the various plastic formulations.
- Illustrate the drawing elements and bases and how to show the fine values by using dyeing colors on warp and textile combinations.

2nd: **Skill targets:**

- Master the synthesis of chromatic dyeing on warp and textile combinations.
- Mutates the design to fin variables suits the dyeing on needed warp and textile compositions.
- Show up the design role in the relation between warp dyeing and textile compositions.
- Distribute the textile techniques and warp dyeing on transparent dyeing before the execution.
- Puts a conception and solutions to the technical problems.

3rd: **Sentimental targets:**

- Respected and appreciate manual work.
- Consider the accuracy, tidiness in doing the textile hangs.
- Appreciate the artistic values of textile works by reaching out a creative work of art that develops the visual perception for the students.
- Taste the Artistic fine values (font- Texture-movement-rhythm) result of warp dyeing and textile compositions.
- Show his opinion in testing between warp dyeing and textile compositions and what it will add to the textile hangs.

Unite Concepts:

Experimental: It is the picking of a supposedly valid idea and state the experimentation with observing the gained results. "experimentation in art is not just art formation, as much as it is a way helps to grow creative thinking , performance and fine fluency through showing the different beauty sides of the Items and various solutions" (*Hoda Ahmed Zaki ,1979,p.19*).

'For the safety of the experiment it is conditioned to abide by some of the common concepts and without experimentation the artist becomes academic"(*Mahmoud Bassiouni, 1969, p.96*)..

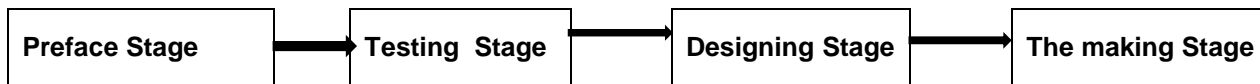
Dyeing: A word means giving the fabric stabile color, which means it could stand the washing Process and not be affected by light. "(*Hala Abdul Aziz Elkhwas,1976,p.169*).

Textile structures:The way by it the textile is belt on the loom by interleave the warp long yarn and the horizontal weft threads. "(*Abdel Moneim Sabri and Reda Saleh, 1975, p.56*)..

Plastic Formation:

It is an Organizing operation for formation relations in the art work and there is no well Known framing . distinguished by its uniqueness - as such it is responsible for the final Image of the art work (*Mahmoud Bassiouni, 1980, p. 68*).

Unite content: Is put through several main steps and thoughts in which it grades from whole to piece
Its path is determined by four main phases.



1-Preface Stage: The first lecturer: General and comprehensive presentation for the teaching unit ideas (4 hours):

The lecture aims: introduce the student to the nature, the goals and the steps of the idea

And each student part in the experiment range.

The lecture progress: Each student is asked about textile structures and methods taught at the college in the previous years to know there experts

- The students are shown some textile pieces made by different textile structures, and examined by students and observing what distinguish each.
- A group conversation exchange between the students to express their opinion and observation on textile pieces in front of them.

2-Testing Stage: From the second to the fifth lecture: the students experiment spray dyeing and the diversity of textile Structures on the sample loom 40×40 cm (16 hours)

The lecture aim: the students perfection in testing warp dyeing and well absorption of the dyes also ascertains the textile compositions made.

The lecture progress: the students know the meaning of dyeing and a historic brief about it and the kind of dyeing , Natural(Vegetal- animalism- Metallic) , chemical(Alkaline- Acidic- Sulphurous – Active- direct) and the direct dyeing that dissolve in cold water one of the easiest dye used by the students

- The students try to spray the warp on a small loom 40×40 cm.
 - The textile Compositions used can be determined and it is as follow:
 - Warp 1/1 and extensions. Twill and extensions. Pile weaves, horizontal and vertical Somak and Honeycomb Knitting – Also Gauze textile methods can be determined – collecting the warps in bundles- curved wefts show the beauty of warp dyeing as the researcher pointed before.
- Display a group of textile works for some artists illustrate the use of printing colors and dyes with textile structures Fig.(2-5)

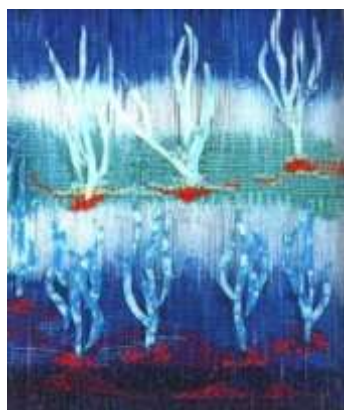


Fig. (2) Textile work by Artist/ Ghada Abdel Moneim



Fig. (3) Textile work by Artist/ Anna Keck



Fig. (4)Textile work by Artist/ Samia Sheikh



Fig. (5) Textile work by Artist/ Nahla El-Deeb

3- The designing Stage: Sixth lecture: Designing a textile hang by a combining style between dyeing on warps and textile compositions (4 hours)

The lecture aim:

- Master the distribution of textile compositions in the design.
- Consider showing the beauty of warp dyeing and what suites it from the textile compositions and methods.

The lecture progress: Through what already studied in the designing subject and studied its elements and basis of (font-color- Texture- motion- Rhythm) each student designs textile hang on transparent paper inspired by the abstract art size 80×60 cm considering the design basic elements and achieve the Fine values.

- Showing some textile hangs – images (1-4) and the fine processing for it as a decorative elements show the beauty of warp dyeing.
- Designs colored by wooden colored pencils with pointing the textile compositions and methods.
- Designs are displayed by the students to be criticized by each other and show the pros and cons.
- Find solutions to the problems faced by students during the design drawing

4- The making Stage: From lecture seven to lecture fifteen .Combining between colorimetric dyeing on warp and textile compositions.(32 hours)

Lecture aims:

- The student ability to make a textile hang
- Appreciate the important of produce the textile hang perfectly
- Feel the importance of result from the art of weaving

The lecture procession:The students puts the design behind the warp and make lines by pencil on the warp To determine the shape of the design.

- Dyeing the warp by spray or brush so warp absorbs colors needed to the artistic work.
- Each student starts putting the warp 1/1and extensions textile compositions and also the Twill and its extensions and show the beauty of each composition used.
- The students show through some exercises on textile compositions and methods on the training loom 40×40 cm the discovering of the best performance of each and invest it in the textile hanging.
- The students invest the textile methods that shows the beauty of warp dyeing from Gauze or the weft

twist the warp or the crimped weft or and Honeycomb Knitting.

- Try to pick what suits his design best of textile compositions and methods and the lecturer participate his students in observing what is achieved and exchange the point of view, ideas and decoctions.
- The lecturer direct who needs from the students and explain the partial related to it.
- In the final lecture the hanging is prepared for display and evaluated and feel the importance of what is made from artistic work.

Unit evaluation: The hanging is displayed after preparation and the lecturer runs a discussion with the students around what they used from materials and textile compositions and its beauty effects and what each student achieved of fine values enriched the textile hanging artistically with confirming the Pros and Cons of each hanging and the image from (6-32) show the research experiment on the fourth grade students for the academic year 2011/2012 Faculty of Specific Education, Alexandria University.







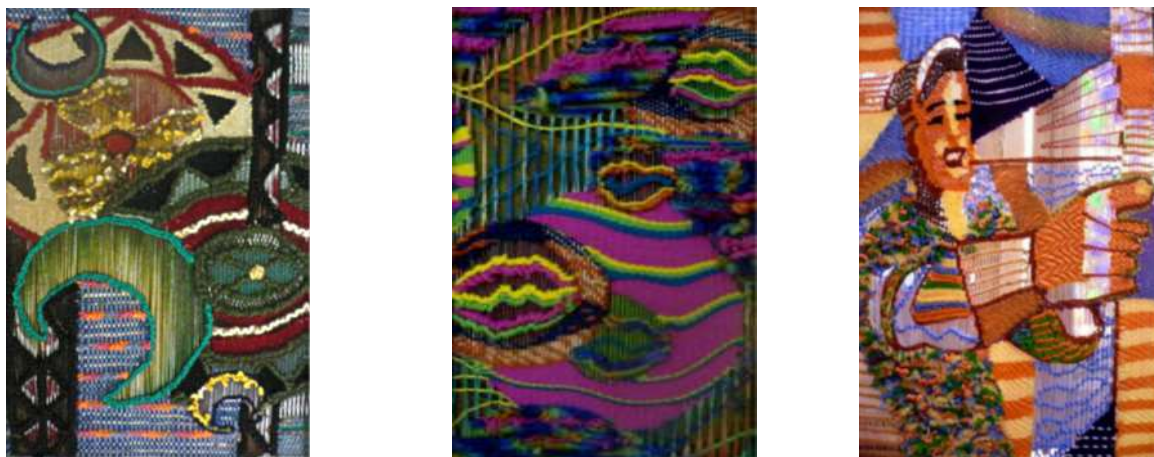


Fig. (6-32) Research experience for fourth-year students for the academic year 2011/2012

RESULTS

- 1- New Plastic Formation achieved for the textile hanging from its traditional known shape.
- 2- The research present creative fine solutions as an iterance to combine between art materials which enriches the education process to gain a distinguished performance from the students.
- 3- knowledge diversity and supporting the experimental direction achieved activity in thinking of the students which enrich the textile Hanging for milling.
- 4- Linking the students various expertise vertically through the mounted experts for the studying of the textile item from Compositions and methods shows the beauty of the dying colors in the warp and horizontally by linking weaving with printing.

RECOMMENDATIONS

- 1- Invest the modern art ideal directions in handmade textile art for the purpose of constant development and modernization in handmade textile.
- 2- And more testing, research and linking the fields of arts education each other to achieve a modern fine vision.
- 3- Update the handmade textile curriculum for the faculties of specific education students and not just only on traditional weaving Compositions and methods but the students have the chance to discover, test and present fin solutions that enrich the textile hanging.

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