

الاستفادة من آليات تعاشق اللحمة غير الممتدة في إيجاد صياغات تصميمية جديدة لقلادات منسوجة لإثراء مكملات زي المرأة العربية

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Utilizing the Unextended Weft Interlace Mechanisms in Devising New Design Formulations of Enriching Woven Necklaces for the Arab women's Dress Accessories

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Abstract

Unextended weft fabric is a technique that allows clear artistic effects as it is characterized by the colorful weft yarns over the design, and in control over the design, and the ornaments in the unextended weft fabric being perfectly identical in both surfaces of the woven fabric with complete disappearance of warp yarn. bringing an easy and detail expressing drawing of yarns.

The unextended weft fabric is characterized by the multiplicity and diversity of interlacing weft mechanisms that can be utilized in developing design formulations of women's woven necklaces. The design of accessories is so crucial as it beautifies women's dresses. Design of accessories is an inseparable part of the art of design, responsible for a woman's elegant looks. There is a gradual increase in the personal needs for accessories because of the development and diversity in the use of clothes and designs.

Neck accessories (necklaces) contribute to the increase in women's dress appearance and functional value. So, the present research aims at devising a new technique for designing and producing a range of developed fine formulations for woven necklaces. It takes into account the aesthetic and functional dimensions of the Arab women's necklace to enrich the Arab women's accessories and seeks for integrated industries that can compete with foreign products that invade the Arab market.

The researcher utilizes multiple

الملخص

نسيج اللحمة غير الممتدة من التقنيات التي أتاحت تأثيرات فنية واضحة، حيث يتميز بسيطرة خيوط اللحمة الملونة على التصميم، والزخرفة في نسيج اللحمة غير الممتدة تماثل بعضها البعض تماماً في كل من سطحي المنسوج مع اختفاء خيوط السداء اختفاء تاماً وبذلك يصبح الرسم بالخيوط سهلاً ومعبراً عن أدق التفاصيل، ويتميز نسيج اللحمة غير الممتدة بتعدد وتنوع آليات تعاشق اللحمة التي يمكن الاستفادة منها في إيجاد صياغات تشكيلية مستحدثة لقلادات نسائية منسوجة.

ويعتبر تصميم مكملات الأزياء من الفنون التي تحتل مركزاً هاماً في ميدان التصميم؛ لما لها من أثر كبير في إظهار جمال ملابس المرأة، والمكمل جزء من التصميم الملبسي الذي لا ينفصل عن الإطلالة العامة للأناقة. وقد تدرجت الزيادة في الاحتياجات الشخصية لمكملات الأزياء من خلال تطور وتباين الأنماط الاستخدامية للملابس وتنوع تصميماتها، وتعتبر قطع الحلى الخاصة بالرقبة (القلادات) من المكملات التي تساهم في زيادة القيمة الشكلية والوظيفية لملابس المرأة.

لذا اهتم البحث الحالي بابتكار أسلوب جديد لتصميم وإنتاج مجموعة من الصياغات التشكيلية المستحدثة لقلادات منسوجة مع مراعاة الأبعاد الجمالية والوظيفية للقلادة النسائية لإثراء مكملات زي المرأة العربية سعياً لإيجاد صناعات متكاملة تستطيع منافسة المنتجات الأجنبية التي تغزو السوق العربية، وذلك بالاستعانة بالآليات التعاشق المتعددة لإسلوب اللحمة الغير ممتدة من خلال جماليات ألوان الخيوط النسجية، حيث أن للألوان دور مباشر وفعال، بل دور أساسي لجذب المستهلك في مجال الأزياء والموضة والاتجاهات الملبسية المعاصرة، ومن خلال تطبيقات البحث تم إنتاج مجموعة من القلادات النسائية التي استخدم فيها الدرجات اللونية بثراء بالاستعانة بالخامات النسجية المتنوعة مع تطعيمها بمجموعة من الفصوص والخرز.

unextended weft interlacing mechanisms of the textile yarn aesthetics where the colors have not only a direct and effective role, but also an essential one to attract consumers in the field of clothes fashion. Research applications have produced a range of women's necklaces, using different degrees of colors with the help of diverse textile materials vaccinated with a set of lobes and beads.

Introduction

The unextended weft fabric is the first and oldest technique used to get a textile ornament composed of two or more colors. It is considered a simple means of making ornamented fabrics and is named differently in different cultures: tapestry in Europe, kilims in Egypt, and Goblin and Aubison in France. Unextended weft fabric requires a great deal of practical skills and proficiency on the part of the maker as it is a fabric that can not be manufactured mechanically. Ornaments in the fabric of unextended weft are identical on both sides of the textile with full disappearance of the warp yarns, and are characterized with their varied interlacing weft mechanisms. Recently, the unextended weft fabric (Tapestry) has come to be used in the world of decoration to add a touch of heritage and warmth to modern homes. Actually, there can be a shadow of beauty, tradition and excellence when tapestry is placed on the walls of the reception room as hangings or when it is used as cushions or sheets to decorate a couch..

(Shaker 2012).

The present research is an attempt to give new dimensions of form, content and philosophical concepts to the unextended weft. It is a contribution to the development of traditional industries of textile heritage. It opens new horizons before them to compete with the accessories in both local and Arab markets. This can be achieved by innovating a group of women's necklaces based on the unextended weft weaving style.(Ahmed et al 2007). (Alyamani 2008)

Accessories design is an art, with an important role to play in the field of design due to its significant impact on promoting beauty, elegance and the always renewed appearance of the dress.(Elsaiad 2008) It has to do with the economic dimensions as accessories are among the means of rationalization. Women's dress accessories are part of a dress design which is inseparable from the general look-elegance, so, they should be properly matching when chosen by women.(Abdin 2008). (Nasrallah 2008). Pieces of jewelry for the neck (necklaces) are considered accessories that help increase the value of women's clothes and enhance their function and appearance.(Lebad 2008). Arab women always seek everything that makes their appearance elegant and creative, motivated by the love of glamour and an innate desire to get the admiration of others.The cloak is a charming dress for the Arab woman; it gives her privacy and uniqueness on every occasion, and brings her the heroine's chic and a sense of movement freedom. That the present

research tries to achieve something of the sort through innovating women's necklaces fitting with the time and consistent with the tastes of the Arab woman.

The research problem can be stated in the following points:

- 1- The unavailability of related literature on women's woven accessories of the neck (necklaces).
- 2- The invasion of Arab markets by foreign accessories for women's dresses with no competition.
- 3- Society needs to open new doors for the establishment of small-scale projects in order to develop traditional crafts and preserve them from extinction.
- 4-The Arab woman's desire for permanent change and update in her clothes and accessories.

The research problem can be stated in the following question:

How can mechanisms of the unextended weft be utilized to find new design formulations for woven necklaces that enrich the Arab women's dress accessories?

Research Objectives:

- 1- Analyzing the methods and mechanisms of the unextended weft interlacing.
- 2- Designing innovative forms for women's woven necklaces (neck accessories), which keep pace with the modern age.
- 3- Devising a new method for the manufacture and production of fine formulations developed for the proposed women's necklaces carrying values of aesthetics and function through utilizing the interlacing methods and mechanisms of the multiple unextended wefts.
- 4- Promoting the aesthetic and functional values of the unextended weft fabric through taking advantage of textile yarns of different colors and vaccinating them with a set of lobes and colored beads.
- 5- Experimentation associated with creativity in the field of textile heritage industries.
- 6- Developing small scale textile industries and opening new horizons before them through the application of the new method for the manufacture and production of woven necklaces accessories.
- 7- Competing with foreign products accessories that invade the Arab markets through producing textiles with aesthetic and functional value.

Research Hypotheses:

- 1- The study of the aesthetic and functional values of the unextended weft interlacing offers new formulation designs for women's woven necklaces.
- 2- Innovative women's necklaces (neck accessories) keep pace with modern age, match and distinguish the Arab women's cloak.
- 3- Using the unextended weft fabric achieves technical and functional compatibility with the woven necklace and contributes to the increase in the shape value of the Arab women's dress accessories.
- 4- Methods of manufacture and production of innovative fine formulations for the woven necklaces open new horizons before small textile industries interested in accessories and provide work opportunities for youth.

Limitation:

The present research is limited to the following areas:

- 1- The use of the unextended weft method.
- 2- The use of simple cardboard loom in a new and innovative way.
- 3- The use of textile yarns of different colors in addition to beads and lobes of various sizes.
- 4- The design and production of some women's neck accessories (necklaces).

Research Significance:

The present research is significant for the following reasons :

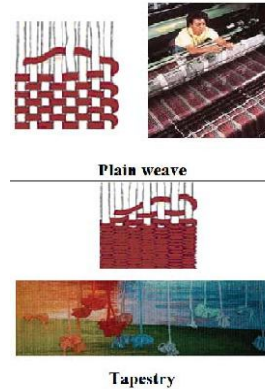
1. It opens new horizons before small textile industries that are close to extinction, which helps in preserving traditional crafts, intergenerational communication, the development of the aesthetic values and the improvement of the Arab community taste.
2. It provides new work opportunities for youth so it can compete with foreign women accessories products in the local and Arabic markets.
3. It introduces a new value of the unextended weft fabric and utilizes it in the manufacture of Arab women accessories.

Methodology:

The research follows the descriptive analytical design in the study of the unextended weft fabric, its aesthetic and functional values. It also follows the quasi experimental design to achieve innovative design formulations.

Unextended Weft “Tapestry”

Tapestry is a form of textile art, traditionally woven on a vertical loom. However, it can also be woven on a floor loom as well. It is composed of two sets of interlaced threads, those running parallel to the length (warp) and those parallel to the width (weft); the warp threads are set up under tension on a loom, and the weft thread is passed back and forth across part or all of the warps. Tapestry is weft-faced weaving, in which all the warp threads are hidden in the completed work, unlike cloth weaving where both the warp and the weft threads may be visible. (Kamel 1982) In tapestry weaving, weft yarns are typically discontinuous; the artisan interlaces each colored weft back and forth in its own small pattern area. It is a plain weft-faced weave having weft threads of different colors worked over portions of the warp to form the design. (Tapestry 2013). Most weavers use a naturally based warp thread such as linen or cotton. The weft threads are usually wool or cotton, but may include silk, gold, silver, or other alternatives. (Ammar 1974).



Basic Tapestry Weaving Technique:

Table 1: Basic Tapestry Weaving Technique. (Vermiro 2000)

<p>Cutting through a tapestry, the cut would show how the weft wraps around the warp and covers it.</p>	
<p>This means that the warp does not play any role in the making of the pattern. To achieve a good tension for the laid-in weft, the following technique can be used: laying the warp in to the shed and keeping the end of the weft yarn up, away from the fell line (the fell line is where weaving ends).</p>	
<p>Using tapestry bobbin to push down the weft about every 2.5 cm (1") to make arches. Then securing the edge of the shape (beating down the edge first).</p>	
<p>Starting at the other end of the shape and beating the weft down arch after arch until reaching the edge again. If the weft has been laid in too loose, it will make 'bubbles' by pushing the weft yarn too far out between the warps. If the weft has been laid in too tight, it will pull the next arch flat before it can be beaten down. This technique also ensures correct adjustment for weft tensions, when different weft yarns are used side by side.</p>	

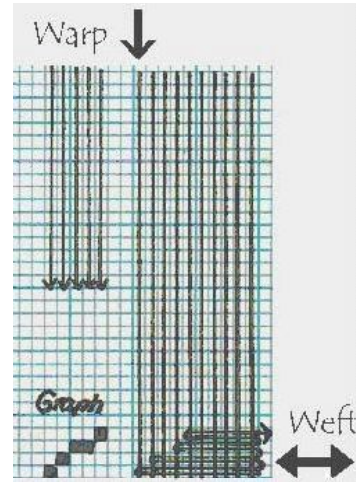
Tapestry Weaving

This drawing shows tapestry weaving on a graph paper. All vertical rows to be warps and all horizontal rows to be 2 wefts (2 picks). That means that one black square represents the crossing of 2 weft yarns (2 picks) over one warp.

Before starting weaving, a cardboard strip is laid in to each shed to give a weaving a base. The strips are ensured to be pushed down as far as possible (they will not move further down when starting beating the weft down) and that both strips are at perfect right angles to the warp at 45%.

First a strip of plain tapestry weaving is woven, usually 1.5 cm (1/2") high. at 12 epi, if a lower epi is used, it would be better to weave about 2.5 cm (1") high. (epi = warp ends per inch). These plain strips are woven at the start and end of each tapestry, even if they are ended with a knotted fringe. This establishes the weft tension and helps to make the finishing of the tapestry more easy and neat.

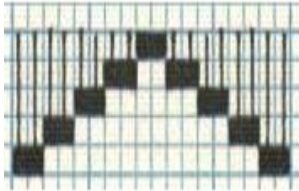

It is never a good idea to weave tapestry over the entire width as the weft would pull the warps too tightly together. The strip is divided into sections about 10 cm (4") wide. Starting is on the inside of the first section, so that the end of the weft yarn will not hang out at the selvedge. After every row (2 picks) one weft towards the edge of the tapestry and one weft back to where strating one, warp is missed. When starting the next section, the second section is overlapped, one warp over the first section in every row. This is repeated to the other edge of the tapestry. The weft ends are tucked to the back of the tapestry, leaving ends 5 cm (2") long.



1-To Weave Straight Lines

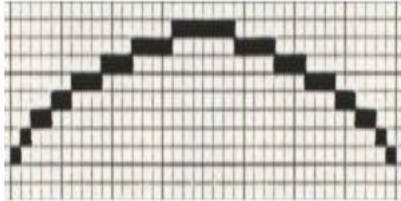
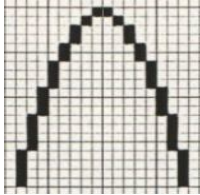
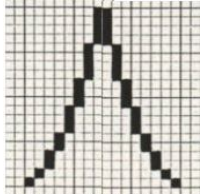
Table :2 how to weave straight lines

<p>Look at straight lines, to control how steep or flat a line will be.</p> <p>The weft creating little steps on which the next shape will rest. On the graph a line with 2 warp steps can be seen. For example, the weft in 14 warps is laid down from the left edge, (going from right to left) and is beaten down, the next weft is laid in (from the left to the right), but 2 warps are stopped earlier than where started, next weft is beaten down back to the edge, next weft is returned towards the middle and again the last 2 warps are missed. This continues till there are only 4 warps left from the edge</p>	
<p>This time starting is on the other side of the tapestry (the color of the weft is changed) 15 warps from the edge in exactly the same way as before, except the missing 3 warps on the first turn and every pick coming from the edge towards the middle. This is repeated until there are only 3 warps left from the edge.</p> <p>It should be noted that this line is flatter than the first line, but both are straight lines (unless a mistake has been made).</p> <p>"Unweaving" is as important as weaving. There should be precision for not doing mistakes until the matter gets right.</p>	
<p>In the remaining space, triangles are made. A different color is used for each shape. It will be better to use contrasting colors, which will make it easier to see how many warps there are to move in or out to follow the shape that has been woven first. For making a triangle two straight lines are needed. The warp is laid in, counting the number of warps needed, and is beaten down, the next weft is laid in, 2 warps are missed from the starting point and beaten down.</p> <p>The next warp is laid in and 2 warps are missed again. This continues on both sides to 'miss' 2 warps until having only 2 warps left on top.</p> <p>The difference is checked out in the next triangle (2). By mixing 3 warp steps and 2 warp steps the line goes flatter, but it is still straight. Graph 3 means staying on the same warp for 2 picks before</p>	<p style="text-align: center;">1</p> <p style="text-align: center;">2</p>

<p>'missing' one warp. This makes a much steeper line. (Vermiro 2000)</p>	 <p style="text-align: center;">3</p>
<p>Now that most of the space is taken up. Filling in the remaining space is needed before continuing weaving more new shapes.</p> <p>If an empty (unwoven) space is overlapped, getting underneath to weave is not possible, since the shed will not open anymore, being held closed by the weaving above. This is very important. It will also affect the decision as to which shape can be woven first, when work is from a cardboard. The weft is laid into the first space and the weft 'steps' are followed exactly as being made in the shapes on each side. There should be a stop when reaching the top of the shape which is lower than the other. Filling the empty spaces between shapes by weaving with different plain colors is a very good practice.</p>	 <p style="text-align: center;">Tapestry sampler (Shadur 2013).</p>

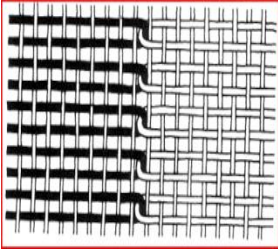

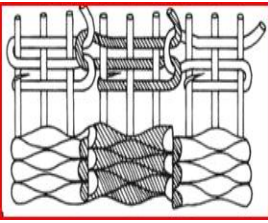

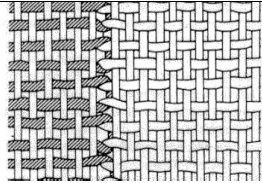

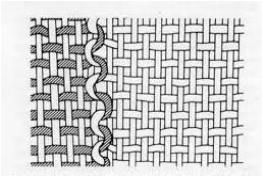

2-To Weave Curved Lines

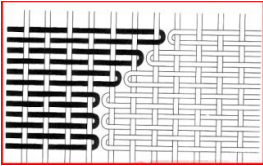

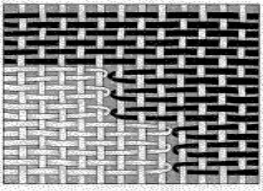

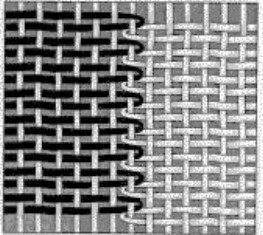

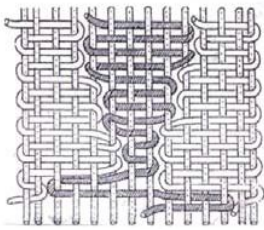

Table 3: how to weave curved lines

<p>To make a line curve, its direction needs to be changed. A gently curved shape is wanted. Starting is with missing one warp, then increasing to 2, 3 and so on. To make the shape curve wider, steps are repeated: like: 1,1,1,2,2,3,3,4 and so on.</p>	
<p>If a higher sloping curve is needed, say for a leaf, the 'stops' on the same warp are increased at each new pick (1). The same applies to an inverted curve (2). At this stage there should be some graph paper and a free hand shape; for example differently shaped leaves and the drawn outlines are followed by filling the squares which mark the spots where there should be a turn at each pick.</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>1</p> </div> <div style="text-align: center;">  <p>2</p> </div> </div>

Weft Interlace Mechanisms Tapestry Weaving:

Table 4 : weft interlace mechanisms tapestry weaving

Weft Interlace Mechanisms	Texture a textile	Simple
<p>If the interlocking is on alternate rows, it is called single interlock. (Shadur 2013).</p>		
<p>If it is practiced on each row, it is called double interlock. (What is The Tapestry 2010).</p>		
<p>Double interlocking wefts (A) front</p>	 <p>A</p>	
<p>Double interlocking wefts (B) back</p>	 <p>B</p>	

Weft Interlace Mechanisms	Texture a textile	Simple
<p>If there is no interlocking at color junction, this is called slit tapestry or Kilim.</p>		
<p>Tapestry weave with slit junctures</p>	 <p>.(Emery 2012)</p>	
<p>Tapestry weave with dovetailed join Sometimes called "comb-tooth " dovetailing or "shared-warp" tapestry</p>	 <p>.(Emery 2012)</p>	
<p>Dovetailed tapestry</p>		

Experimentation

1- The Design Stage

Some designs that fit the innovative necklaces were drawn and the very best of them were chosen for implementation.

2- The Materials Used

<p>The researcher used cotton yarn for both warp and weft; that is, for the known advantages of cotton Warp: cotton thread NO 8/3 Weft: cotton thread NO 16/2</p>	
<p>Weft yarn colors: various colors of different grades. Warp yarn color : white</p>	
<p>Beads and lobes in different colors</p>	

3- The Weaving Stage

Using the handloom (tapestry), 12 necklaces of Unextended Weft “Tapestry” were woven , taking into account the following- :

- A. Warping is on the outer frame of the design only to maintain the final shape of the necklace.
- B. Utilizing the unextended Weft “Tapestry” multiple interlacing mechanisms
- C. Adding beads and lobes while weaving the wefts
- D. Leaving some spaces without weaving according to the proposed design of each necklace

4- Experimentation Results:

Figure (1-12) below shows the woven necklaces.

The necklaces were utilized as accessories among a group of ladies wearing cloaks with the Adobe Photoshop CS5& Corel Draw Graphics suite X5. This is shown clearly in figure (13).

5- Experimentation Assessment

The necklaces were juried by (15) women from different Arab countries (Egypt, Saudi Arabia, United Arab Emirates, Kuwait, Bahrain, Qatar), asked to evaluate them according to 10 questionnaire items shown in table(5)

Table 5: the items questionnaire items:

	Evaluation Items	Necklace No.		
		Appropriate	Appropriate to some extent	Inappropriate
1	The necklace design match the modern Arab woman' s taste.			
2	Updating and innovation are available in the necklace design.			
3	The necklace weaving style is appropriate.			
4	The Arab woman cloak is an appropriate dress for using the necklace as an accessory.			
5	The necklace is an addition to the accessories of the Arab woman accessories.			
6	The necklace matches modern fashion.			
7	There is consistency and harmony in the necklace colors			
8	The color used is appropriate for the Arab woman			
9	The material used is appropriate for the function of the necklace.			

	Evaluation Items	Necklace No.		
		Appropriate	Appropriate to some extent	Inappropriate
10	A necklace can be used with more than one cloak.			

N. Appropriate: 3 scores

Appropriate to some extent: 2 scores

Inappropriate: 1 score

Results and Discussion

The statistical analysis of the results showed the average of the 10- item evaluation scores for each necklace as calculated in table (6)

Table 6: the percentages to evaluate the woven necklaces

	Necklace No	The percentages of necklaces evaluation		
		Appropriate	Appropriate to some extent	Inappropriate
1	Necklace (1)	96%	4%	0
2	Necklace (2)	94%	6%	0
3	Necklace (3)	90%	10%	0
4	Necklace (4)	92%	8%	0
5	Necklace (5)	93%	7%	0
6	Necklace (6)	92%	8%	0
7	Necklace (7)	88%	12%	0
8	Necklace (8)	87%	13%	0
9	Necklace (9)	98%	2%	0
10	Necklace (10)	95%	5%	0
11	Necklace (11)	85%	15%	0
12	Necklace (12)	89%	11%	0

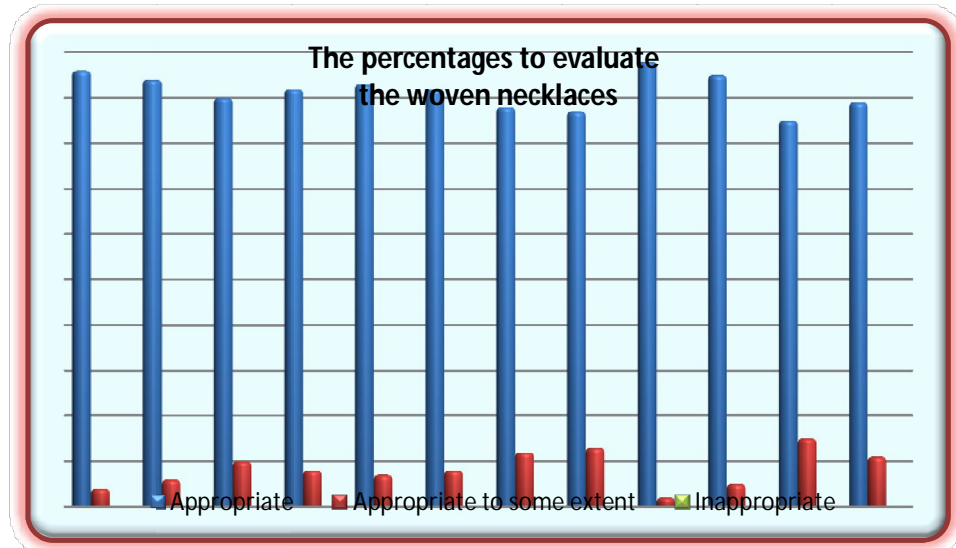


Chart 1: the percentage to calculate the average of evaluation of necklaces

Conclusions

Chart (10) shows that most produced woven necklaces showed high score percentages for their overall evaluation (the least 85%). This very high percentage indicates proving all the hypotheses.

Pactical Experiementation (Innovative Necklaces)



1

2



3

4

Figure (1-4): the woven necklaces



5



6



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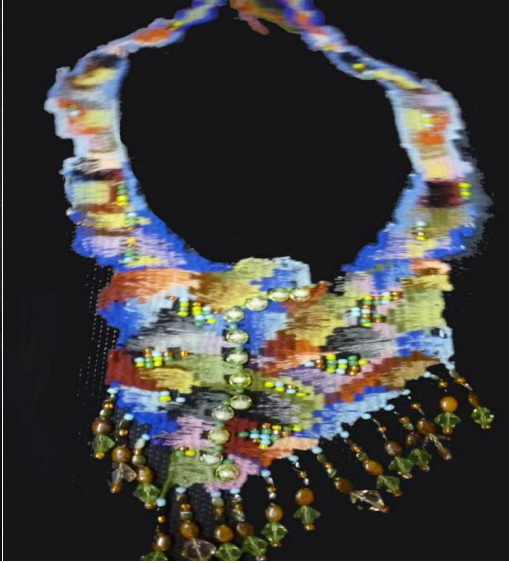


8

Figure (5-8): the woven necklaces



9



10



11



12

Figure (9-12): the woven necklaces



13



14

Figure 13: Arab women wearing innovative necklaces



15



16

Figure 14: Arab women wearing innovative necklaces



17



18

Figure 15: Arab women wearing innovative necklaces



19



20



21

Figure 16: Arab women wearing innovative necklaces

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