KENYATTA UNIVERSITY

FACULTY OF ARTS, DEPARTMENT OF FINE ART

UTILIZATION OF SELECTED WEAVING TECHNIQUESTO DESIGN AND CREATE FINE HAND WOVEN FABRICS

A CREATIVE PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE DEGREE OF MASTER OF ARTS IN FINE ART, KENYATTA UNIVERSITY.

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DECLARATION

This M.A (Fine Art) creative project is my original work except where acknowledged by reference or by citation and has not been presented either wholly or in part, for a degree in this or any other university.

Nguku Everlyn Kamene

This creative project work has been submitted for examination with the approval of Mr. G. Vikiru and Mr. P Kasana as the university supervisors.

Mr. G. Vikiru

Mr. P. Kasana

ACKNOWLEDGEMENT

I sincerely thank all those who encouraged me in one way or another

I would like to thank Prof. E. O. Mazrui for supervising the initial stages of this project for her guidance, encouragement and inspiration.

I would like to also thank Mr. G. Vikiru and Mr. P. Kasana for supervising this project to completion. I would not have done it without them.

Special thanks to Prof. S.K. Raina, Mega project leader commercial insects ICIPE, and his staff for all the assistance they provided in various ways in this project.

I wish to thank members of staff – Fine Art Department who assisted me throughout the project.

DEDICATION

To Mum,

In whom I found the strength to go on and in whose undying support, encouragement and love I dwelt

To Christine and Janice, for there selflessness and encouragement.

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1.0 BACKGROUND OF STUDY

Looking at hand –woven fabrics in showrooms the researcher noticed that they had a similar look in terms of the design and the techniques employed. This drew the researcher to examine the fabric garments more closely. From this initial observation the researcher was able to observe that there lacked good designs and aesthetically pleasing fine fabric for apparel. This thus became the basis of this creative project.

Through the exploration of several weaving techniques this researcher felt that aesthetic fabrics could be produced, which if compared to those already in the market would be superior in design. Those in the market were of the most basic weave structure, and very limited in design, as evidenced in the pilot study carried out. On the other hand, the researcher wanted to show that a wide range of aesthetic fabric could be produced with the utilization of various weaving techniques. In so doing these fabric would stimulate interest in hand woven fabric and could even compete in the world of fashion. It would also be possible for handloom weavers to produce fabrics to client requirement.

2.0 OBJECTIVES

The objectives of this creative project were then formulated. These were to:

i. Study the range of fabrics produced by a number of selected weaving workshops.

ii. Identify various techniques used in weaving and employ selected ones in production of apparel fabric.

iii. Derive motifs from the material culture of the Kamba, Luo, and Somali communities in Kenya as an inspiration of design, so as to integrate these into the weave structure or apply on the weave surface.

iv. Design and produce fine fabrics using selected weaving techniques to produce a range of garments for ladies, gents and children.

3.0 SCOPE AND LIMITATION

i. **Yarn;** this project was confined to the use of cotton and silk yarn. The choice of these two was due to their availability. They could be purchased readily for use, as there was no time for the researcher to spin yarn of her own.

ii. **Weaving Techniques:** Four techniques were selected for use in this creative project namely:

(a) Woven design.

(b) Warp-Printing.

(c) Ikat

(d) Inlay

The choice of these four was due to the time factor, which did not allow for more techniques to be explored. The researcher felt that these four were representative of the variety of techniques used for apparel fabrics.

iii. **Equipment:** A wide range of design could be produced with the availability of an eight-harness loom. However, due to the unavailability, the researcher was able to only use a four-harness loom, which limited the design exploration.

iv. **Fabric:** A minimum of five fabrics, in cotton, of at least three meters each were woven and would be exhibited in their full length. However other fabrics in cotton were made but cut into garments to show utilization of the fabrics. Another set of five fabrics was woven in silk. These were of various lengths determined by their uses

3.1 DEFINITION OF TERMS

{as per this creative project}

Accessory: Something which is not a necessary part of something larger but which makes it more beautiful

Aesthetic: The sense of beauty especially in a work of Art.

Aesthetically pleasing fabric:

Fabrics beautiful to look at in terms of design.

Chine/Chene:

Fabrics in which a design or pattern appears that has been printed upon the warp prior to the weaving also warp printing.

Denier: A unit used for identifying yarn thickness or number

Duppion silk: Raw silk reeled from double cocoons making an uneven thread.

Fine: Of reduced thread or yarn, not necessarily smooth (like silk) but light in weight. **NOT** to be compared with machine woven fabrics.

Ikat: Colour pattern displaced on the warp before weaving by dyeing the warp. Also refered to as Kasuri.

Inlay: An independent weft is inserted in a weave during weaving to create a pattern similar to embroidery.

4.0 METHODOLOGY

4.1 FIELD WORK

The field work was carried out in the following phases :

4.11 Pilot study

A pilot study was carried out in which a questionnaire was used in selected weaving workshops and showrooms. These included Woodley Weavers, Trio crafts, Mbeki weavers and Spinners, Spinners Web and the African Heritage. The pilot study was aimed at establishing products made using man made and natural fibres, the designs of fabrics produced, the fineness of these fabrics, the techniques used to produce the fabrics and the dyes used to dye the fibers and fabrics.

4.12 National Museum of Kenya.

A visit to the Museum of Kenya was made. It was mainly to find out the sort of fabrics woven in the past and to establish the techniques used in the past. After a search in the museum archives, no woven fabrics were found. However sketches of the material culture of various ethnic groups were drawn. These were used in design work for this project.

4.13 Research Institutes

The researcher visited research institutes which included International Centre of Insect Physiology and Ecology (I.C.I.P.E), Kenya Industrial Research and Development Institute (K.I.R.D.I), Kenya Agricultural Research Institute (K.A.R.I) , and Kenya Bureau of Standards (K.B.S).

In these institutions, the researcher wanted to establish the kind of tests carried out on fibres, yarns and fabrics. At ICIPE, the researcher wanted to find out how silk is reared and woven.

In these institutes the researcher was able to familiarize herself with various tests done to control yarn and fabric quality, and found the necessary equipment for weaving silk fabric. This information helped the researcher design and weave fine fabrics, through the use of yarns of small denier. The researcher was able to find equipment suitable for weaving silk at I.C.I.P.E.

4.14 Textile Shops

Textile shops in Nairobi were visited at random. The researcher wanted to establish the design aspects of the apparel fabrics, the weight of various fabrics, yarns used for various fabrics and the techniques employed to produce these fabrics.

4.2 STUDIO WORK

Studio work was carried out both at Kenyatta University for cotton weaving and I.C.P.E for silk weaving. This was carried out as follows;

4.21 Sample making:

Samples of the various techniques were made. These samples tested suitability of the chosen techniques, as well as the motifs designed for screen printing and inlaying.

The weight of fabrics was tested by the use of yarns of different denier. Dyes and fabric textures were tested at this stage.

4.22 Designing:

This stage involved the designing of patterns for:

i. Integrating into the weave structure; point paper draft were made for various designs, both created by the researcher and others adapted from those created by other weavers.

ii. Applying on weave structure: These included deriving motifs from material culture of the Kamba, Luo and Somali communities. These motifs were applied onto the fabric by:

(a) Screen printing the warp ends before weaving for the creation of a chene/chine effect.

(b) Inlaying the design onto the weave .

4.23 Dyeing:

In this stage, the warps and the wefts were dyed into required colours. In cases where the Ikat effect was required on the warps or the wefts, they were tied and dyed in the required colours.

4.24 Warp Design:

Preparation of the warp was done as follows:

i Arranging different coloured warp ends according to the required colour arrangement.

ii Screen printing the warp before weaving with the required motif for chene/chine effect

4.25 Weaving:

Fabrics were woven according to the selected patterns. This was done on a floor loom. Four techniques were used to weave the various fabrics in this project. Namely woven design, warp printing, Inlay and Ikat.

4.26 Garment Making:

After all the weaving was done some fabrics were stitched into garments. These garments were designed for ladies, gents and children. It should be note that other fabrics purchased from shops were used together with the woven ones to make the garments.

4.3 EXHIBITION

At the end, an exhibition was held to display the projects done by this researcher in this creative project.

5.0 RESULTS AND ANALYSIS

A total of 22 weavers from five weaving workshops responded to the questionnaires given to them during the pilot study carried out. Following are the tabulated responses to the questions in the questionnaire. (see Table 1)

i. Textile yarns: In these workshops, 59% of the 22 respondents use wool for weaving. Compared with cotton and silk it is more readily available and cheaper, as the weavers spin and dye it themselves. On the other hand cotton is purchased ready for use and is more expensive thus its' low use

Plate 1 ***Textile yarns***

TEXTILE YARN				DYES		TECHNIQUES				LOOMS					PRODUCT	
Cotton	Wool	Silk	Other	Natural	Synthetic	Tapestry	Plain Weave	Twill Weave	Other	Frame	Floor	Power	Other Power	Fineness	Apparel	Furnishing
	✓				✓	✓				✓						Carpets
					✓	✓				✓	✓			V		Rug
✓					✓		✓				✓			III	Kikoi Shirt	
✓					✓		✓							III	Kikoi; shirt	
	✓				✓				✓				✓	IV	Mittens,	
✓ Sc					✓						✓			IV		Bedcover
✓					✓		✓	✓			✓			III	Shirts,	
	✓				✓	✓				✓				V		Carpets
	✓				✓	✓				✓				V		mats
	✓				✓	✓				✓				V		mats
✓					✓		✓				✓			III	Kikoi;	
	✓				✓	✓				✓				IV		Carpets ;
	✓				✓	✓				✓				III		mats
			✓				✓				✓			III	scarf	
			✓					✓			✓			III	Shawls;	
	✓				✓	✓				✓				V		rugs
	✓				✓	✓				✓				V		Carpets
	✓				✓								✓	III	hat	
	✓				✓	✓			✓	✓				V		carpet
	✓				✓								✓	III	mittens	
		✓			✓		✓		✓		✓			I	shirt	
		✓			✓		✓					✓		I	scarf	
5	13	2	2	-	20	10	7	2	3	10	8	1	3		11	11
23	59	09	09	-	91	45	32	09	14	45	36	5	1		50	50

KEY

I- very fine II – fine III - medium IV- heavy V- very heavy

Table 1 ***Questionaire results by weavers***

ii Dyes: In all 22 workshops synthetic dyes were used. Natural dyes were not used, as their dyeing procedure is long and not economical. On the other hand, the dyers did not have sufficient knowledge on natural dyes as only 2 of the 22 had prior formal training on the use of natural dyes.

Plate 2 *dyes*

iii Techniques: A large percentage, 45% of the 22 respondents, used the tapestry knots, which was used in the production of carpets, floor rugs an mats. The weavers were more competent with this technique as one could easily learn it on the job.

Other techniques employed were the plain weave on the floor loom. Only 4 weavers of the 22 respondents had received formal training and this explained their lack of knowledge of other weaving techniques. Weavers to a relatively large extent used the Ikat technique. At least 1 weaver in each weaving workshop could do it Below is a fabric in woven technique.

Plate 3 ***Fabric in woven design***

iii Equipment: Tools and equipment used ranged from spinning wheels, frame loom to knitting needles.36% of the respondents used the floor loom with a fly shuttle. Below is a picture of a loom used by this researcher.

Plate 4 ***Loom used by the researcher***

iv 91% of the items woven ranged from medium to very heavy in weight. This could have been a direct result of the textile yarns used.

v Products: 50% of the items woven are for apparel, while the remaining 50% are for furnishing purposes. This is evident that apparel fabrics are woven but are not fine Below is a picture of a variety of items produced.

Plate 5 ***Products of the workshops***

5.1 National Museum of Kenya

After a search in the museum's archives, no woven fabrics were found. However sketches of the material culture various ethnic groups were drawn. These were used in the design areas. Below are some sketches done.

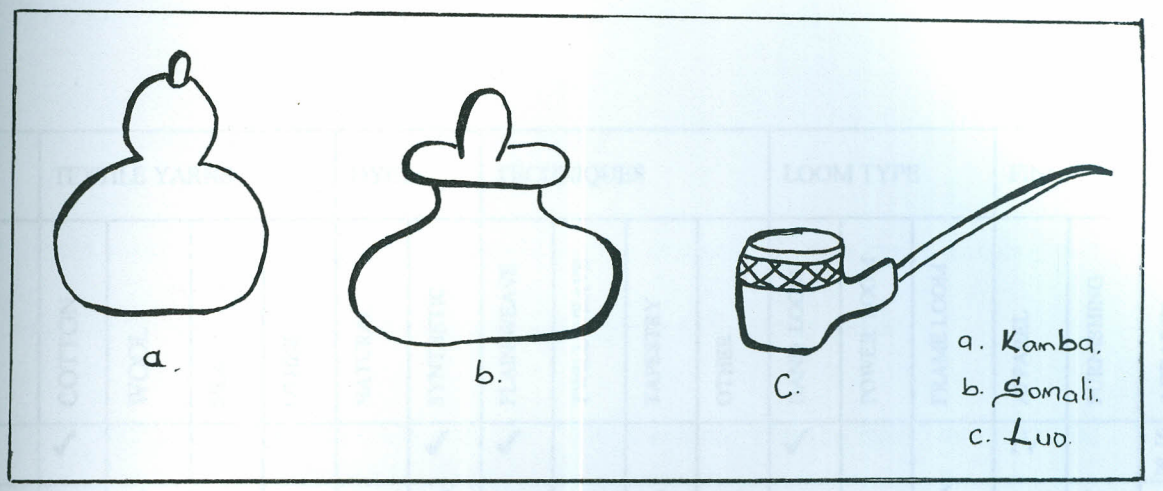


Plate 6 ***Sketches of material culture***

5.2 Research Institutes

In the institutes named earlier the researcher was able to familiarize with various tests done to control yarn and fabric quality. This information helped the researcher design and weave fine fabrics. Suitable equipment for weaving silk was found at I.C.I.P.E and these were used to weave silk

5.3 Textile shops

In the textile shops,. The researcher was able to observe the fabrics available. This was done using a number of set questions for the researcher. (see Table 2).

	TEXTILE YARNS				DYES		TECHNIQUES				LOOM TYPE			FINENESS		PRODUCT	
SHOP NO	COTTON	WOOL	SILK	OTHER	NATURAL	SYNTHETIC	PLAIN WEAVE	TWILL WEAVE	TAPESTRY	OTHER	HAND LOOM	POWER LOOM	FRAME LOOM	APPAREL	FURNISHING	APPAREL	FURNISHING
1	✓					✓	✓				✓			IV		Sh K	
2		✓				✓			✓				✓		V		C T/M
3	✓	✓				✓			✓		✓		✓		IV		C B/D
4		✓				✓			✓				✓		V		C F/M
5	✓					✓		✓						IV		K Sk Sc	
6		✓				✓	✓				✓			IV		M H Sc	
7			✓			✓	✓					✓	I			Sh Sc	
TOTAL	3	4	1	-	-	7	3	1	3		3	1	3			4	3
%	43	57	14			100	43	14	43		43	14	43			57	43

Key

I - very fine
II - fine
III -medium
IV –heavy
V –very heavy

B –bed cover
C – carpet
F/M- floor mat
K- kikoi
M - mitten

Sh- shirt
Sk- skirt
Sc -scarf
T/M- table mat

Table 2 ***results of the textile shops survey***

Below is the analysis of the results tabulated above:

(i.) Textile yarns: 57% of the shops had fabric woven in wool. Wool is cheap and easily available for handloom weavers. Cotton was seen in 43% of the shops.

(ii.)Dyes: Synthetic dyes were used in all the 7 shops visited. Natural dyes were not used on any of the fabrics.

(iii.)Techniques: 43% of the shops had fabrics woven in plain weave and tapestry knots respectively.

(iv.)Loom type: From the fabrics seen, the researcher observed that the frame loom and handloom were used. 43% of shops had fabrics woven in handloom and another 43% on frame loom.

(v.)Fineness: Fabrics and garments were found to be heavy. The yarns used contributed to their weight

(vi.)Products: 57% of the shops stocked apparel fabrics as they sold faster than furnishing.

6.0 RECOMMENDATIONS

As indicated by the analysis of the questionnaires (page 10) techniques were not explored extensively. After doing sample tests, this researcher found that selected weaving techniques could produce aesthetically pleasing fabrics and these could be done on large fabrics for apparel purposes.

This researcher recommends the use of the use of the following weaving techniques among others like leno weaving, crochet, knitting and lace weaving.

6.1 Woven design

The weave structure and form determine the design in a fabric. Thus in woven design, there are various weave structures employed. This researcher used the structures discussed below.

(a) Plain weave:

The plain weave is the most important of all because more fabrics are made in it than any other weave. It is the simplest as illustrated in the picture below.

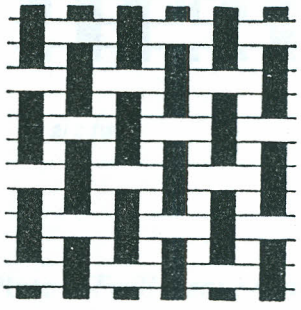


Plate 7 ***Plain weave draft***

The researcher used this weave structure for the following reasons:

(i.) Fabrics were light in weight.

(ii.)It produced firm and strong fabrics.

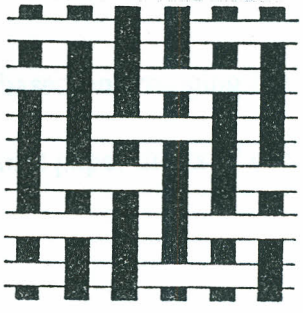
(iii.) The plain weave works best in the production of chine /chene fabrics.

(iv.) Colour could be used successfully to enhance a fabric's aesthetic beauty

The researcher was able to use colour to enhance the beauty of the fabric. This was achieved by use of coloured warp ends, screen-printing the warp and use of coloured weft.

(b) Twill weave

This is the second group of weave. The twill order of interlacing causes diagonal lines to be formed in the cloth as seen below:



2/2 twill

Plate 8 ***Twill weave draft***

Regular twills are capable of considerable degree of modification, and serve frequently as the basis for the construction of new designs that superficially may appear to possess little

in common with the original base. One of this weave's advantage as Ponting (1982:32) puts it is its ability to lend itself better than any other, to the use of colour as a means of making an attractive fabric. However there are also possibilities of using the weave in various combinations for special effects.

The researcher used this weave structure, and it was noted that it had:

(i.) Greater Cloth weight

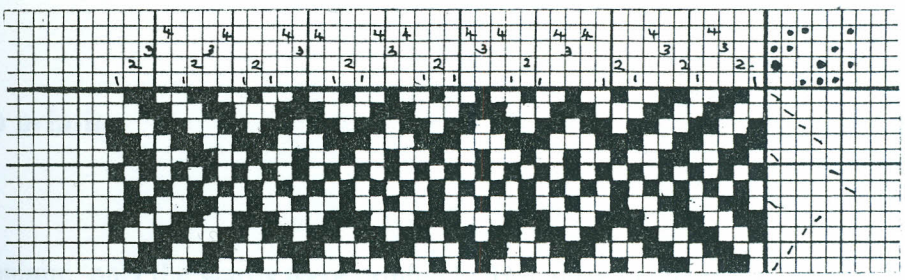
(ii.) Closer setting

(iii.) Better draping quality

(a) Pattern weaves

Patterns are tools for designing. They widen the scope of possibilities rather than confining or limiting the weaver. Several pattern weaves were used by this research to weave various fabrics.

The structure of pattern weaves is based on arranging the warp threads into groups forming design units. Below are point paper drafts of different designs:



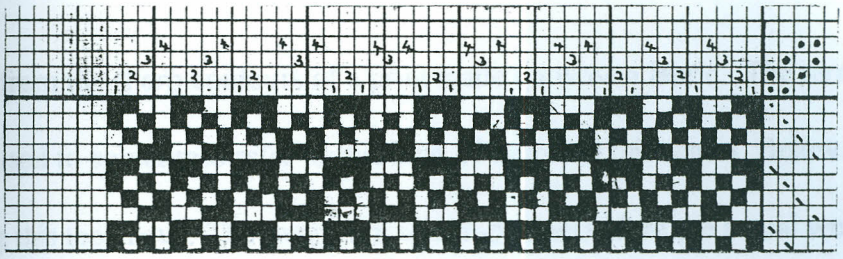


Plate 9 ***Different pattern drafts***

6.2 Screen-printing

Hand screen printing affords the creative and imaginative means of putting on cloth various ideas and effects. Basically screen-printing is a printing process where any shape is printable. In this creative project three methods of preparing screens were used:

(a) use of photo exposure

(b) use of solvent green film

(c) Use of paper stencils.

6.21 Warp printing

In this technique, only the warps were printed before weaving, as the name suggests. This is easily identifiable because the finished print is characterized by fuzzy outlines. This is

distinct from the sharp contours of a print made on woven fabric. The term chine or chene will be used to sometimes refer to this kind of weave in this report. Below is a photograph showing this technique. The warps are screen-printed before the actual weaving takes place. Weaving is the done to produce a subtle design. Below is a photograph of a fabric woven in this technique.

Plate 10 ***A warp printed fabric***

6.3 Ikat

It is sometimes referred as 'Kasuri'. This is one very special type of warping, where colour pattern was placed on the warp warping but before placing it on the loom. It involved the treatment of the whole warp, and not the arranging of colour in the warp during warping. The most famous treatment of this kind is where a tie and dye or some resist technique is applied to the warp yarn.

The warp ends are prepared accordingly, tied and then dyed depending on the required colours. Upon dyeing the warps are untied and the loom is dressed. Weaving is then done.

Below is a fabric woven in this technique.

Plate 10 ***A fabric in Ikat technique***

6.4 Inlay

Inlay is a technique where an independent weft was inserted during weaving to create an effect that looks similar to embroidery. There are various forms of inlay, which can be used. In this creative project, the two-faced technique was employed. The independent warp is passed through the sheds to produce an even design on both sides of the weave.

Plate 12 ***A fabric woven in Inlay technique***

7.0 CONCLUSION

32% of fabrics woven by handloom weavers were in the plain weave structures. This creative project has shown that simple weaving techniques can be used creatively in the production of aesthetically pleasing fabrics. Thus handloom weavers need to be educated on the great potential that lies in simple weaving techniques.

14 of the 22 handloom weavers interviewed preferred to weave furnishing fabrics. This project has demonstrated that, aesthetic apparel fabrics can be woven in cotton and silk yarns. On the other hand, these same techniques can be used to weave some furnishing fabrics.

It would be useful if regular workshops and seminars were held to share and educate the local hand loom weavers on new methods and techniques of weaving. Through this interaction, the quality of fabrics produced by these weavers would reflect the new knowledge they will have acquired.

8.0 PROJECT

The aim of this research was to show that employing simple weaving techniques could produce aesthetic hand woven apparel fabrics.

A total of sixteen projects were woven. The projects were broken down into garments for:

(a) Ladies-5

(b) Gents-5

(c) Girls-3

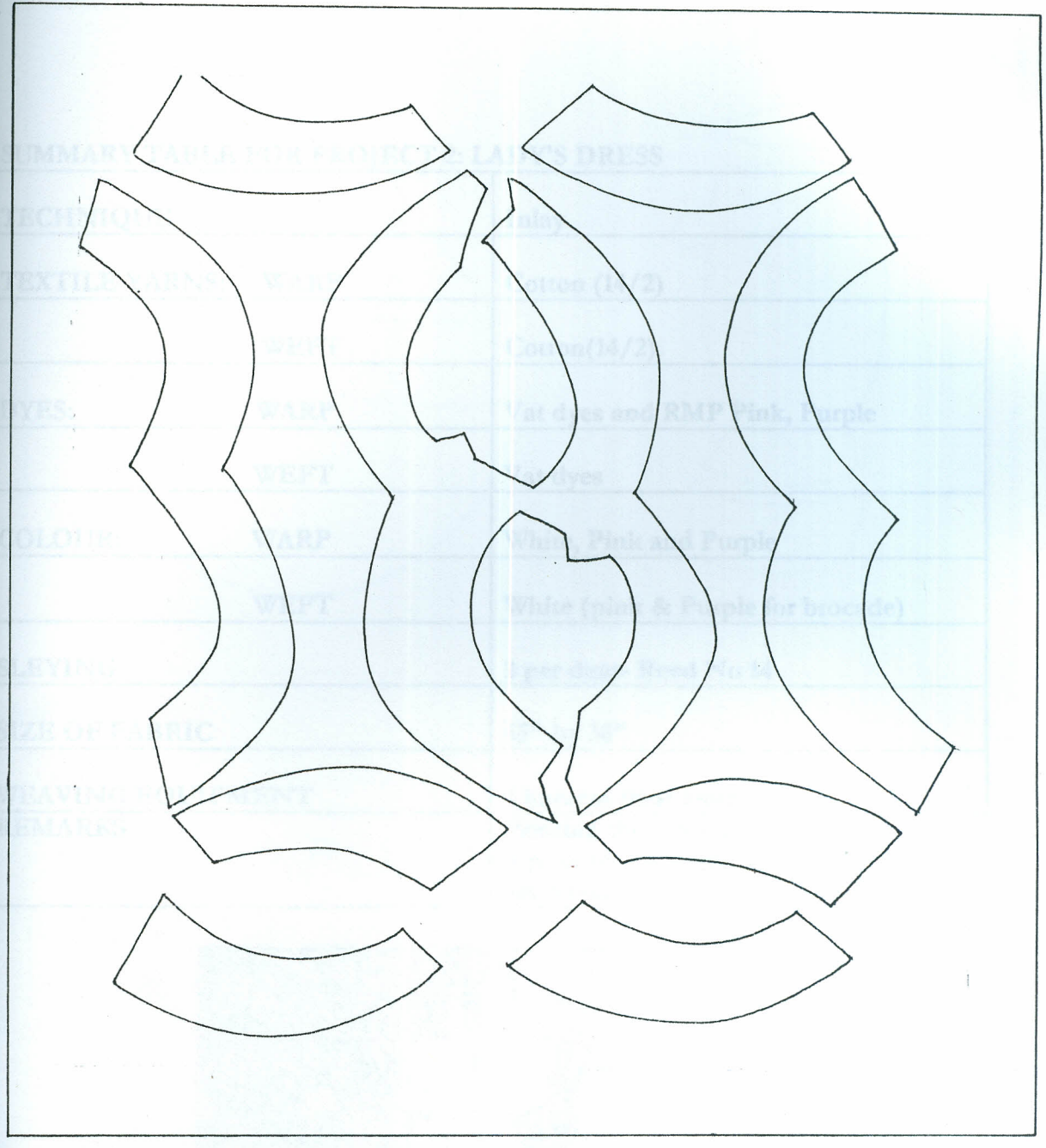
(d) Boys-3

Following is a detailed breakdown of the procedures followed in weaving all the above fabrics.

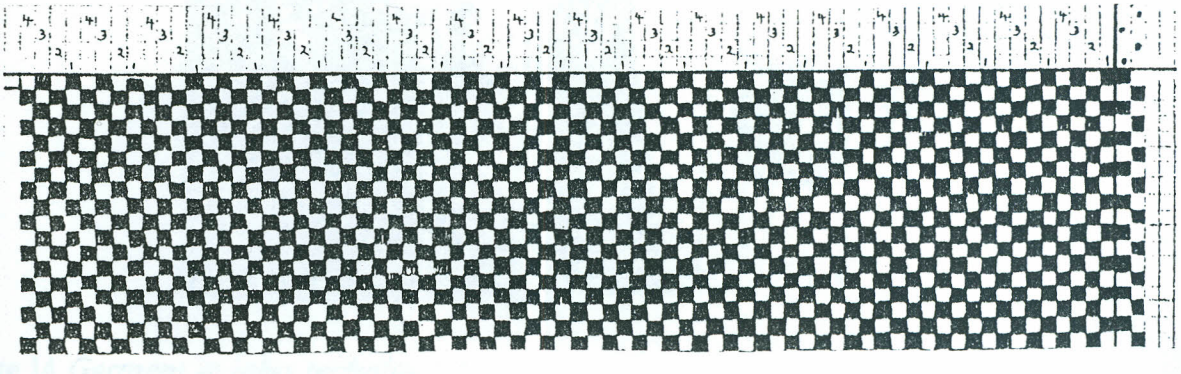
SUMMARY TABLE FOR PROJECT 1: LADY'S DRESS

TECHNIQUE		Warp printing (paper stencil)
TEXTILE YARNS:	WARP	Cotton (42/2)
	WEFT	Cotton (42/2)
DYES:	WARP	RMP Blue and Pink
	WEFT	None
COLOUR:	WARP	White (Blue and Pink print)
	WEFT	White
SLEYING		2 per dent- Reed No 14
SIZE OF FABRIC		75" by 36"
WEAVING EQUIPMENT		4 harness floor loom
REMARKS		plain weave worked well with screen printing , the fabric was light in weight.

Plate 13 *Garment in screen printing technique*



Motif for project 1

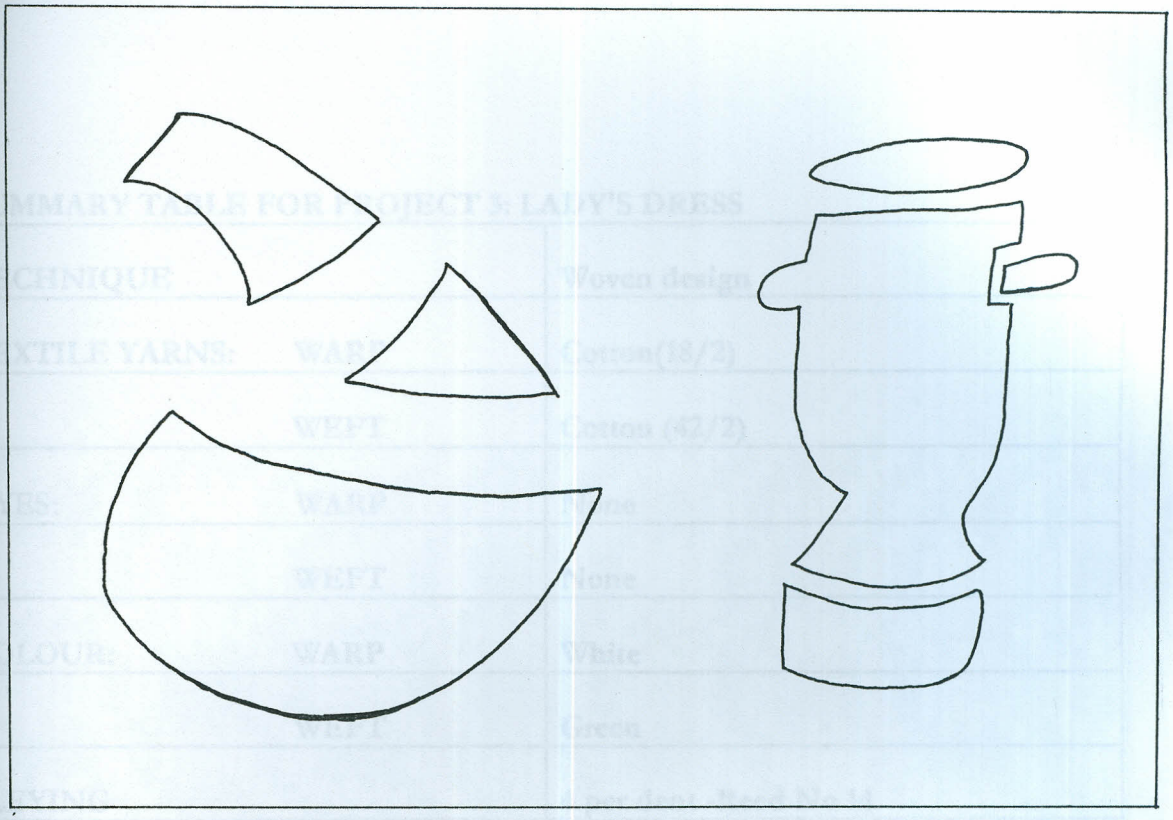


Point paper draft for project 1

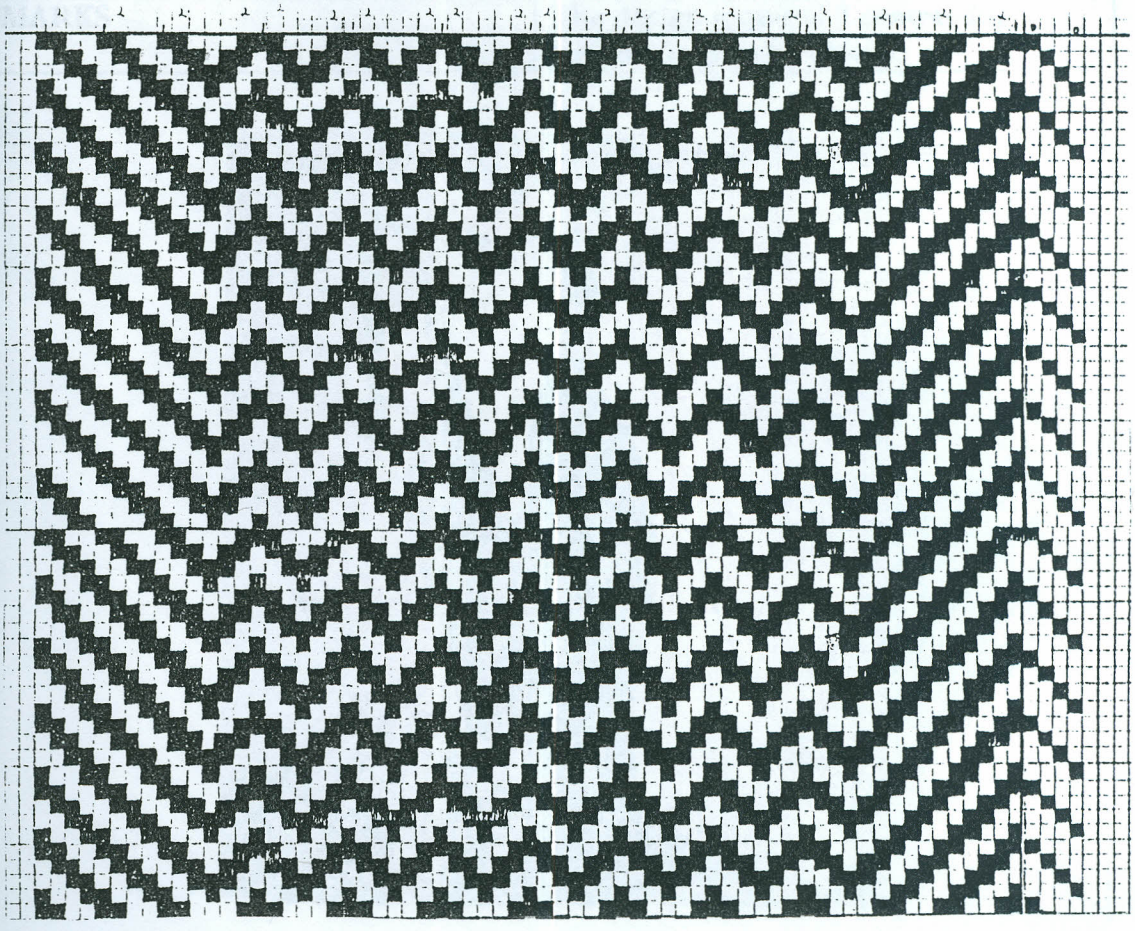
SUMMARY TABLE FOR PROJECT 2: LADY'S DRESS

TECHNIQUE		Inlay
TEXTILE YARNS:	WARP	Cotton (14/2)
	WEFT	Cotton(14/2)
DYES:	WARP	Vat dyes and RMP Pink, Purple
	WEFT	Vat dyes
COLOUR:	WARP	White, Pink and Purple
	WEFT	White (pink & Purple for brocade)
SLEYING		2 per dent- Reed No 14
SIZE OF FABRIC		55" by 38"
WEAVING EQUIPMENT		4 harness floor loom
REMARKS		Printing the motif before inlaying made it possible to weave the image accurately.

Plate 14 *Garment in inlay technique*



Motif for project 2

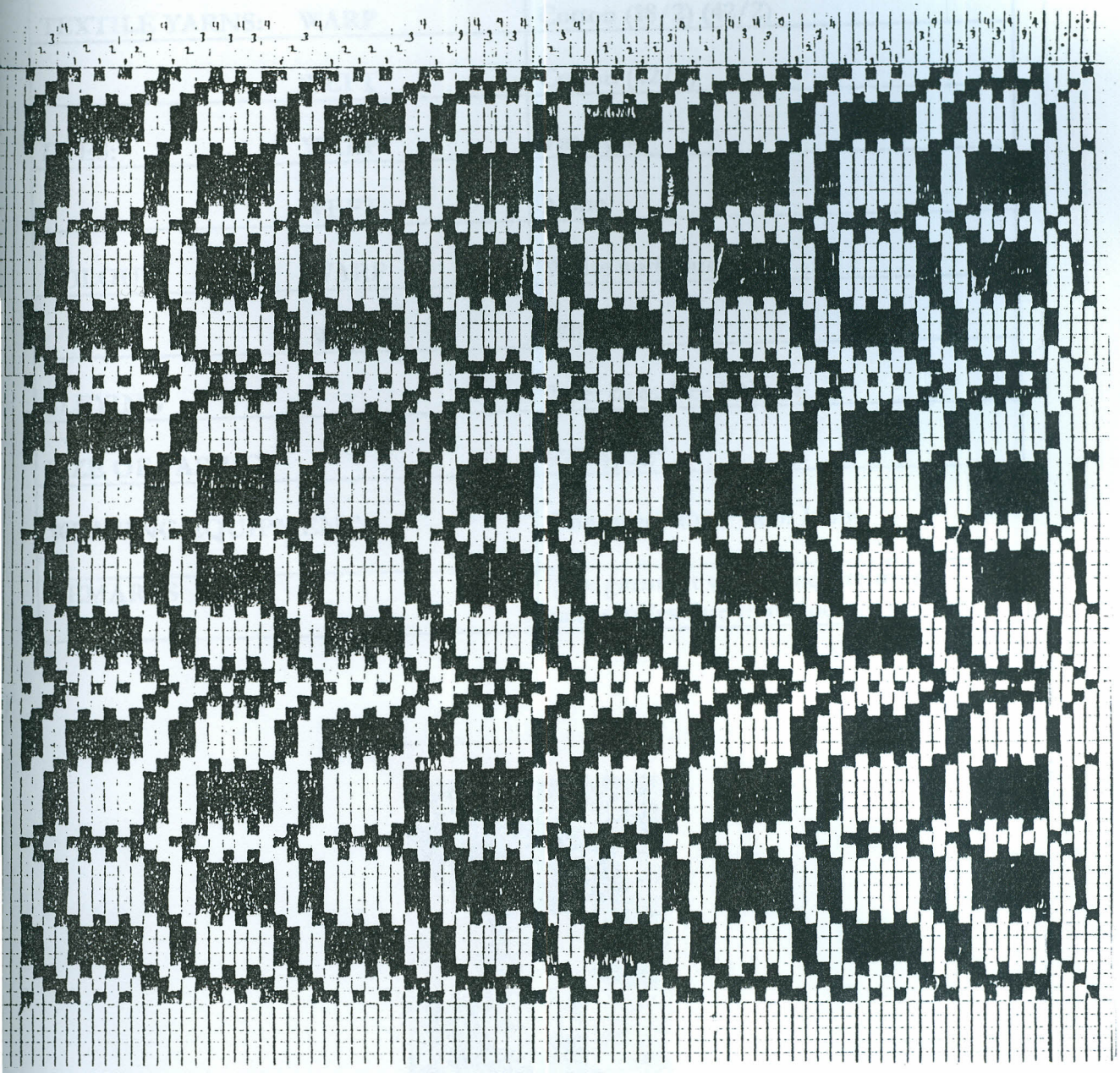


Point paper draft for project 2

SUMMARY TABLE FOR PROJECT 3: LADY'S DRESS

TECHNIQUE		Woven design
TEXTILE YARNS:	WARP	Cotton(18/2)
	WEFT	Cotton (42/2)
DYES:	WARP	None
	WEFT	None
COLOUR:	WARP	White
	WEFT	Green
SLEYING		4 per dent -Reed No 14
SIZE OF FABRIC		75" by 12"
WEAVING EQUIPMENT		4 harness table/floor loom
REMARKS		The design required 2 contrasting colours for it to be visible.

Plate 15 *Garment in woven design technique*

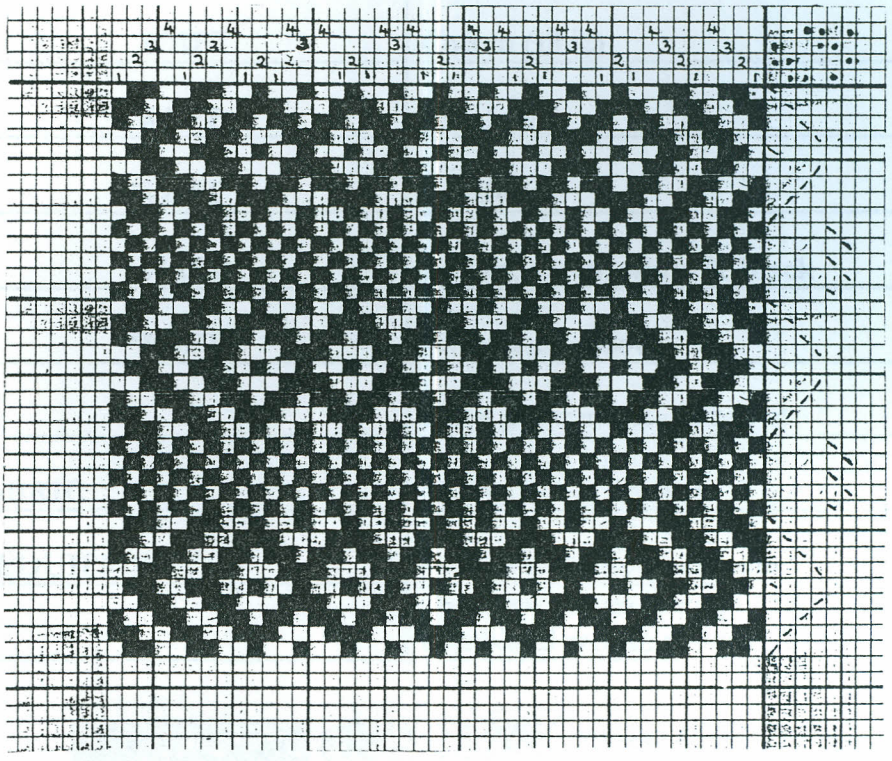


Point paper draft for project 3

SUMMARY TABLE FOR PROJECT 4: LADY'S DRESS

TECHNIQUE		Ikat
TEXTILE YARNS:	WARP	Cotton (18/2) (42/2)
	WEFT	Cotton (42/2)
DYES:	WARP	Vat dyes
	WEFT	None
COLOUR:	WARP	White and blue Ikat
	WEFT	White
SLEYING		2 per dent Reed No 14
SIZE OF FABRIC		97" by 22"
WEAVING EQUIPMENT		4 harness table/ floor loom
REMARKS		The garment would require most accessories due to its look of monotony.

Plate 15 *Garment in Ikat technique*

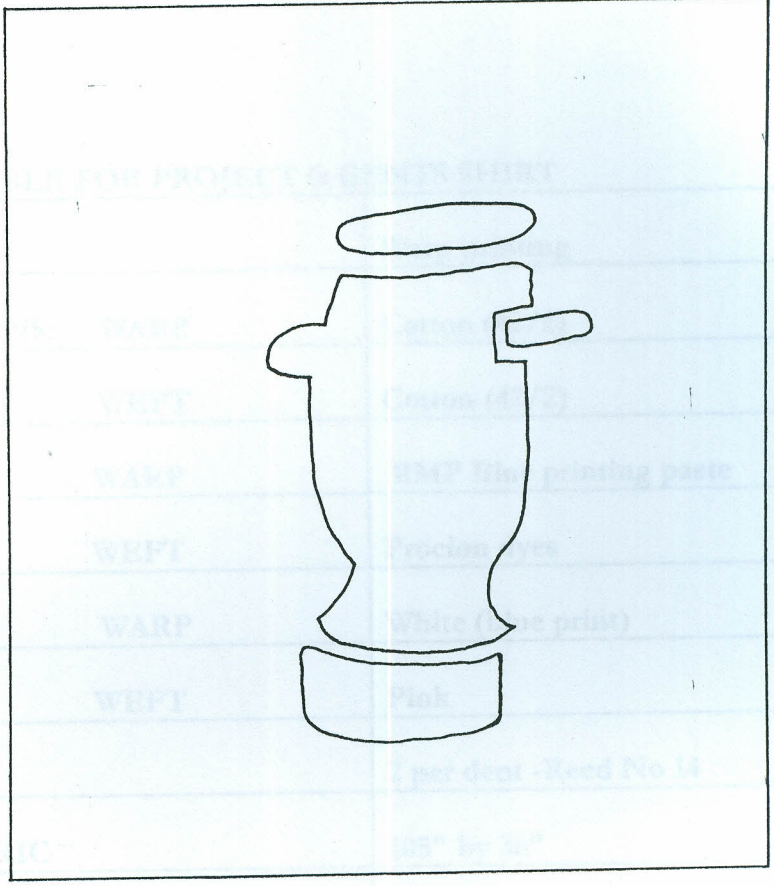


Point paper draft for project 4

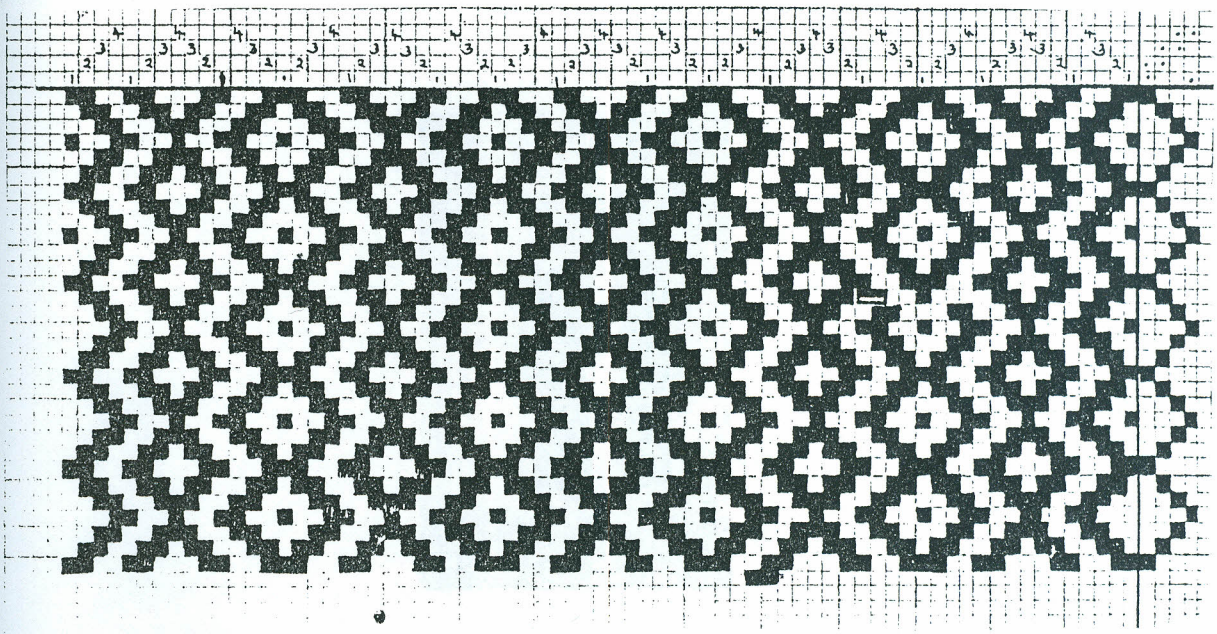
SUMMARY TABLE FOR PROJECT 5: LADY'S DRESS

TECHNIQUE		Mixed techniques (woven design & warp printing)
TEXTILE YARNS:	WARP	Cotton (18/2) (18/3) (42/2)
	WEFT	Cotton (18/2)
DYES:	WARP	Vat dyes
	WEFT	Vat dyes
COLOUR:	WARP	Yellow, green, white & Black
	WEFT	White and yellow
SLEYING		2 & 4 per dent, Reed No 14
SIZE OF FABRIC		15" by 30" (4 pieces)
WEAVING EQUIPMENT		4 harness table/floor loom
REMARKS		Different pieces were put together are combined well to produce one garment.

Plate 16 *Garment in mixed techniques*



Motif for project 5

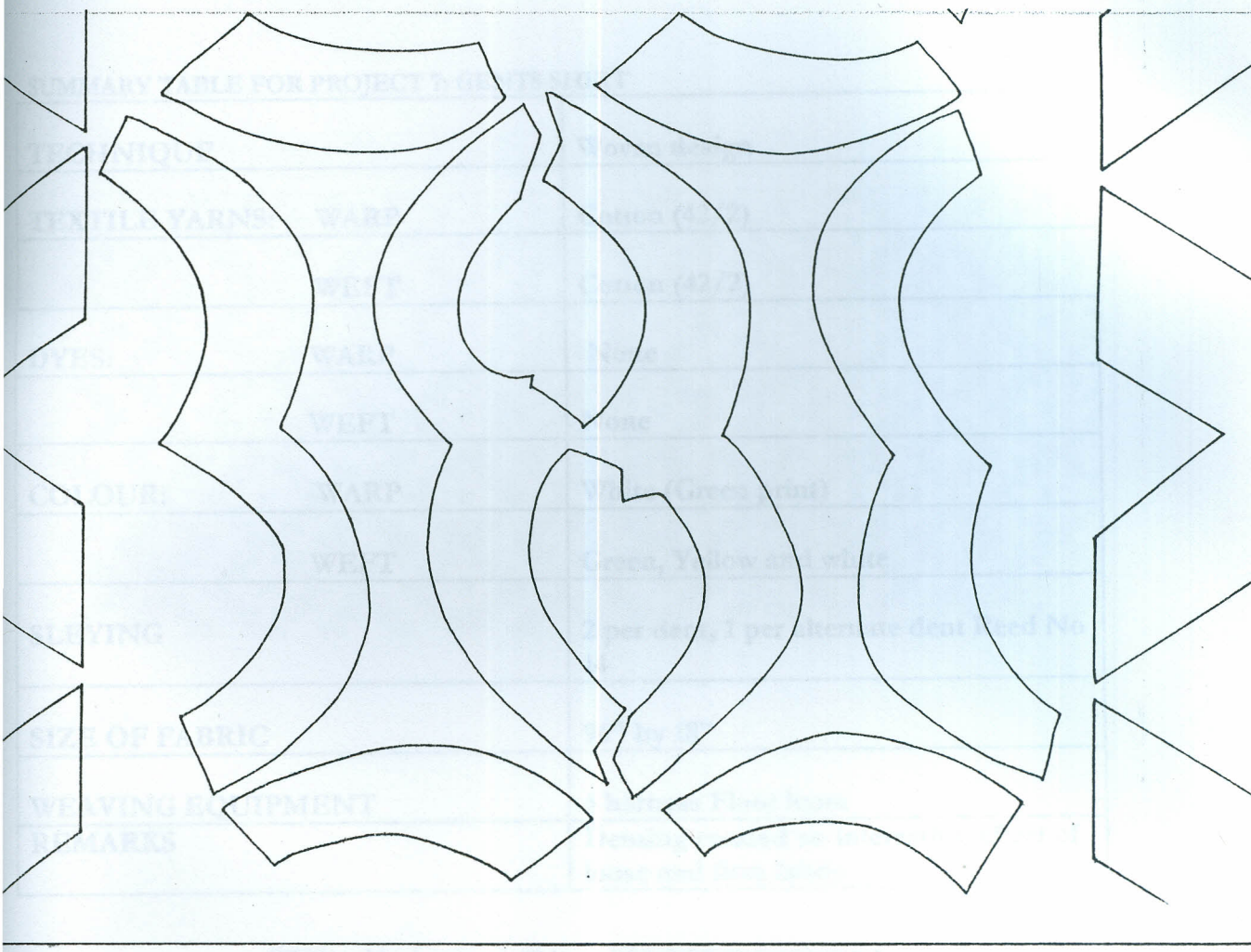


Point paper draft for project 5

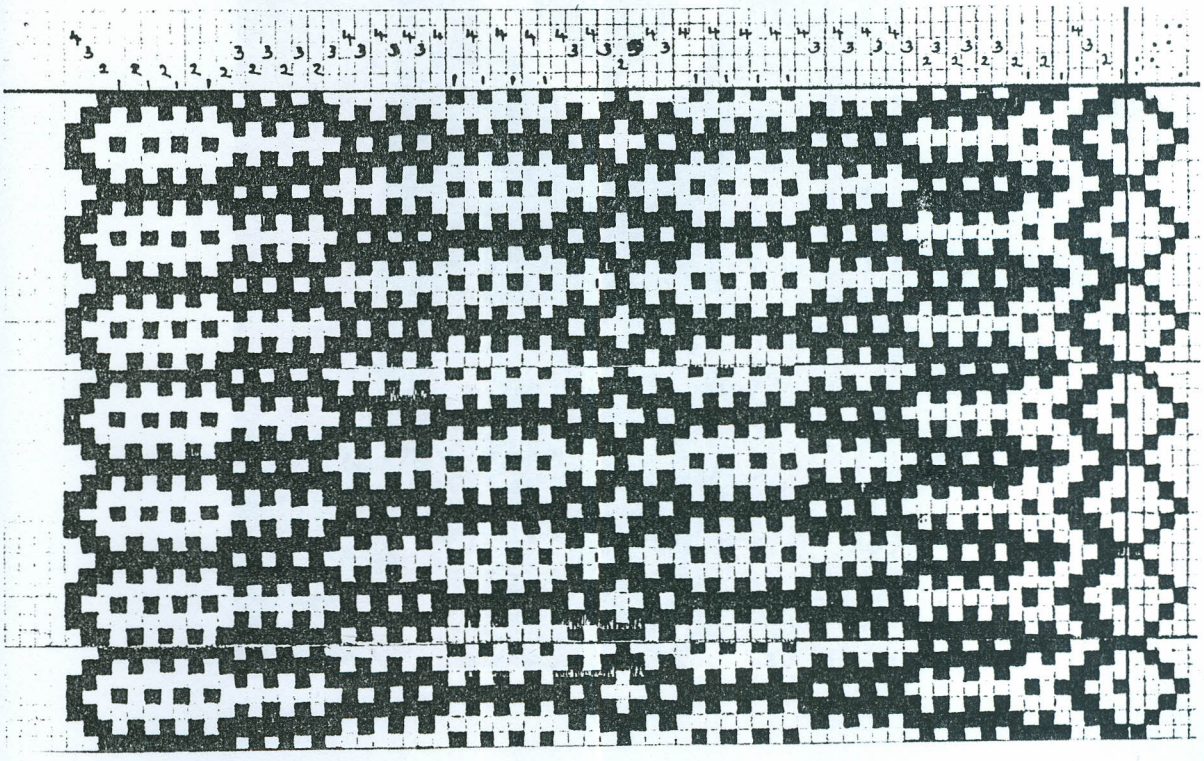
SUMMARY TABLE FOR PROJECT 6: GENTS SHIRT

TECHNIQUE		Warp printing
TEXTILE YARNS:	WARP	Cotton (42/2)
	WEFT	Cotton (42/2)
DYES:	WARP	RMP Blue printing paste
	WEFT	Procion dyes
COLOUR:	WARP	White (blue print)
	WEFT	Pink
SLEYING		2 per dent -Reed No 14
SIZE OF FABRIC		105" by 36"
WEAVING EQUIPMENT		4 harness Floor loom
REMARKS		Using over shot weave made the bold print subtle.

Plate 18 *Garment in warp printing techniques*



Motif for project 6

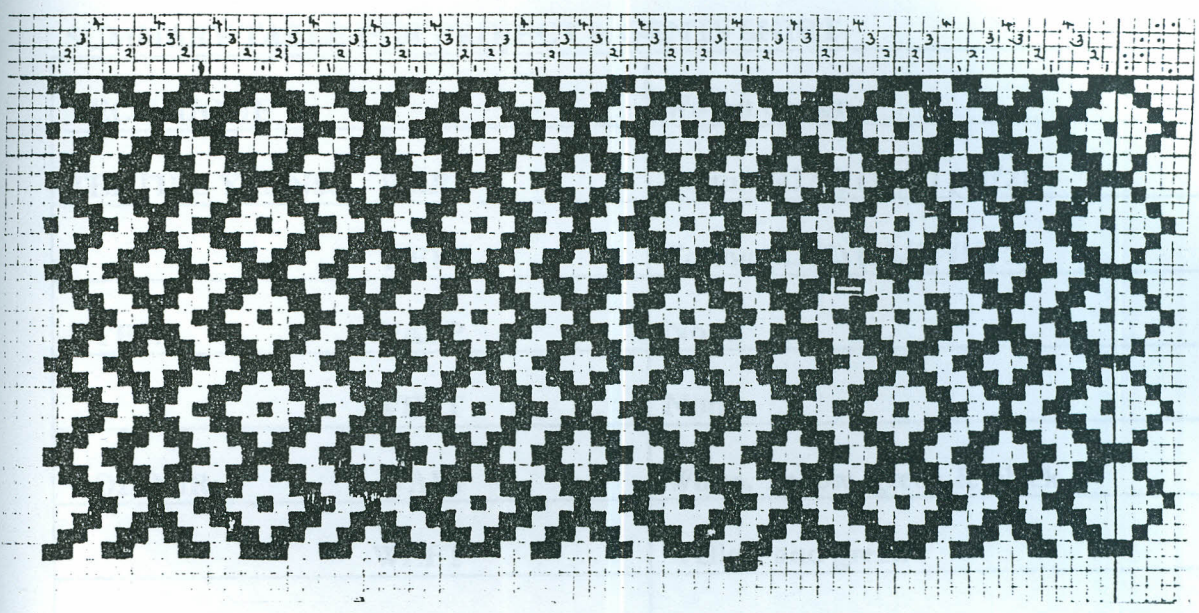


Point paper draft for project 6

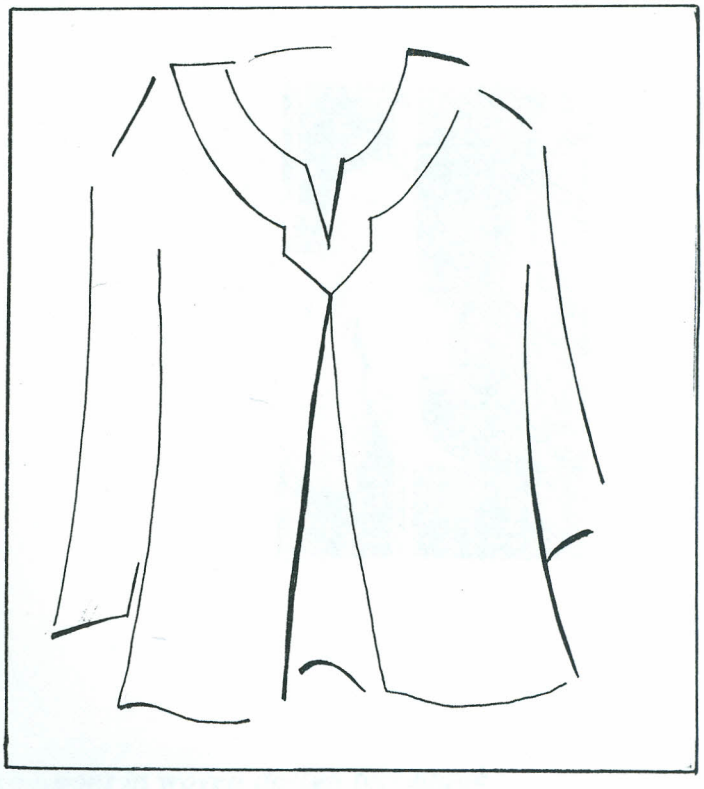
SUMMARY TABLE FOR PROJECT 7: GENTS SHIRT

TECHNIQUE		Woven design
TEXTILE YARNS:	WARP	Cotton (42/2)
	WEFT	Cotton (42/2)
DYES:	WARP	None
	WEFT	None
COLOUR:	WARP	White (Green print)
	WEFT	Green, Yellow and white
SLEYING		2 per dent, 1 per alternate dent Reed No 14
SIZE OF FABRIC		96" by 18"
WEAVING EQUIPMENT		4 harness Floor loom
REMARKS		Denting created an interesting effect of loose and firm fabric

Plate 19 *Garment in woven design technique*



Point paper draft for project 7

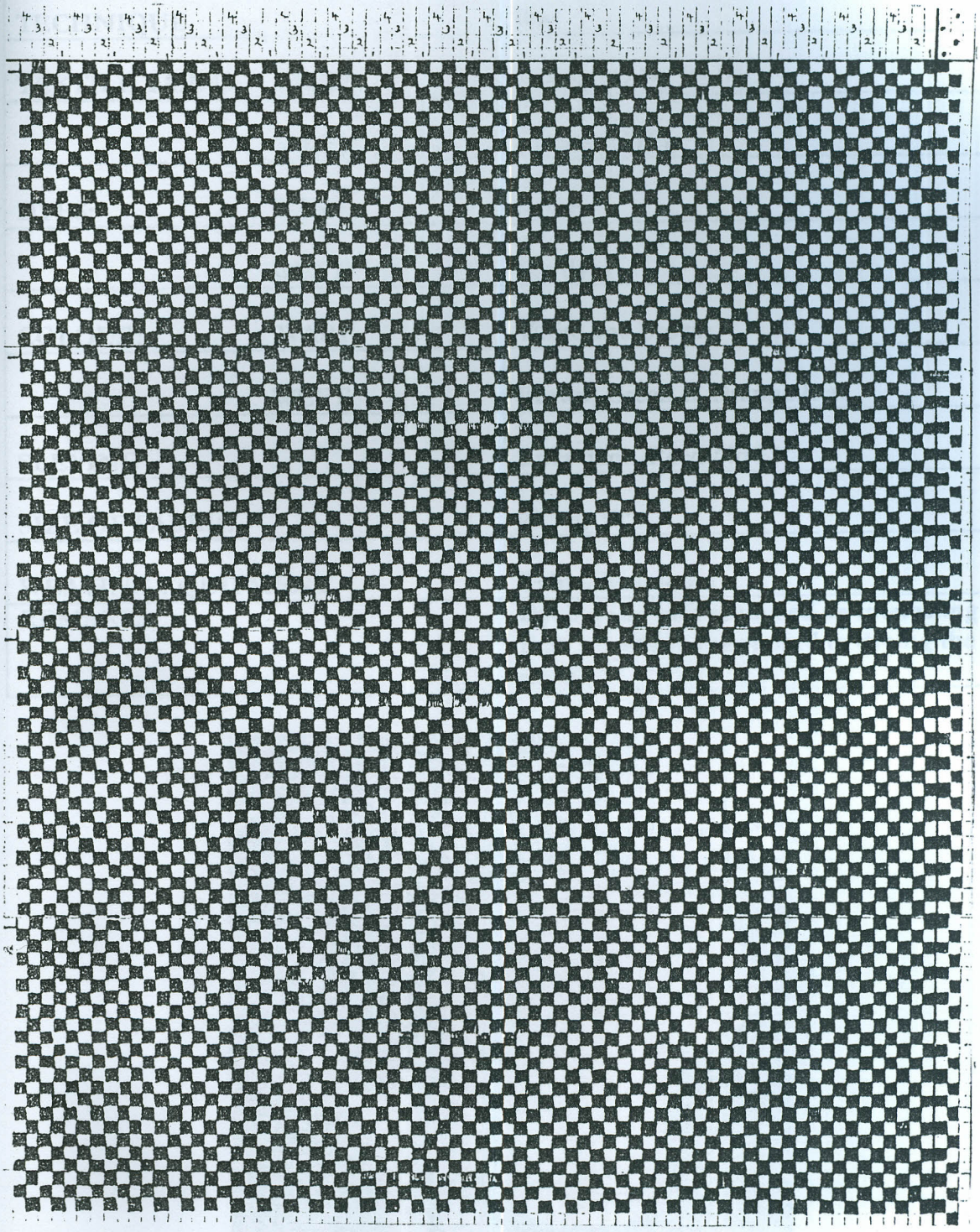


Shirt design

SUMMARY TABLE FOR PROJECT 8: GENTS SHIRT

TECHNIQUE		Woven design
TEXTILE YARNS:	WARP	Cotton (42/2) (18/3) (18/2)
	WEFT	Cotton (42/2) (18/3) (18/2)
DYES:	WARP	None
	WEFT	None
COLOUR:	WARP	White, Yellow, green & black
	WEFT	Yellow and green
SLEYING		2 per dent Reed No 14
SIZE OF FABRIC		40" by 36"
WEAVING EQUIPMENT		4 harness floor loom
REMARKS		Checks were by colour combination

Plate 20 *Garment in woven design technique*

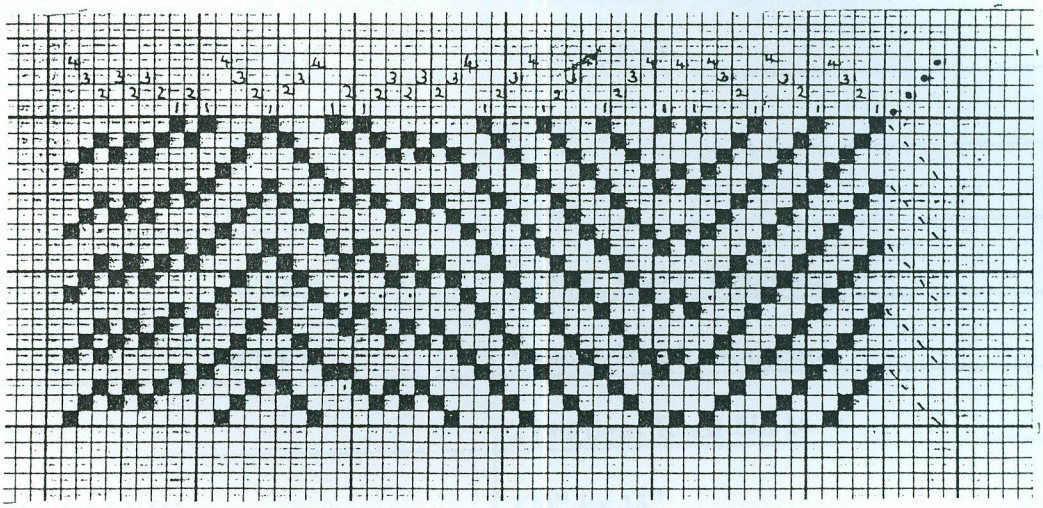


Point paper draft for project 8

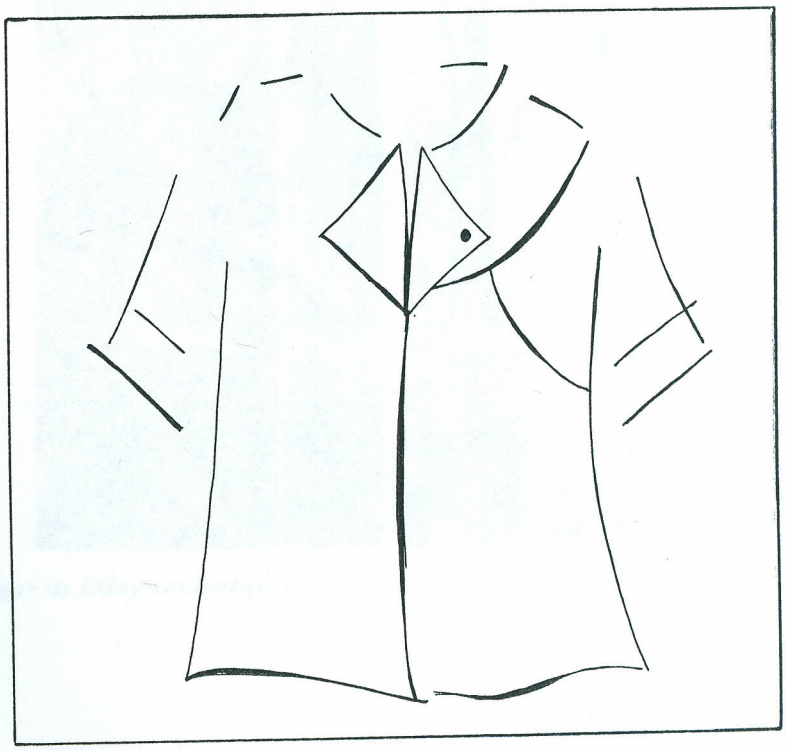
SUMMARY TABLE FOR PROJECT 9: GENTS SHIRT

TECHNIQUE	Ikat
TEXTILE YARNS: WARP	Cotton (42/2) (18/3)
WEFT	Cotton (42/2)
DYES: WARP	None
WEFT	Vat dyes
COLOUR: WARP	White and brown
WEFT	Brown, Green & Orange Ikat
SLEYING	2 per dent -Reed No 14
SIZE OF FABRIC	40" by 30"
WEAVING EQUIPMENT	Table/floor loom
REMARKS	Dyeing the weft produced an interesting Ikat effect as opposed to dyeing the warp.

Plate 21 *Garment in Ikat technique*



Point paper draft for project 9

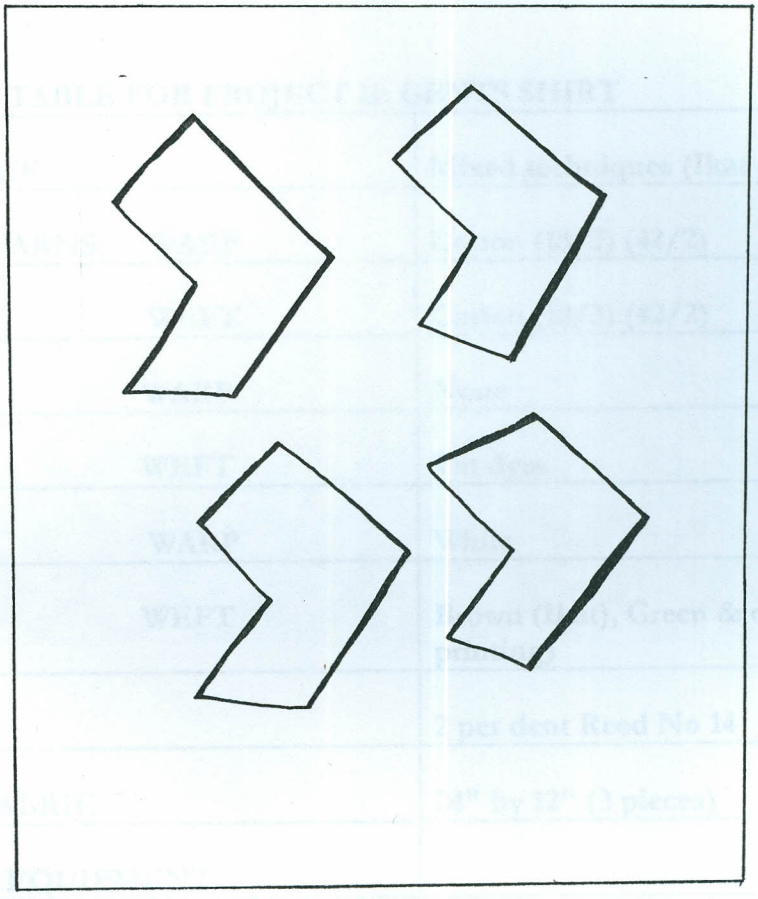


Shirt design

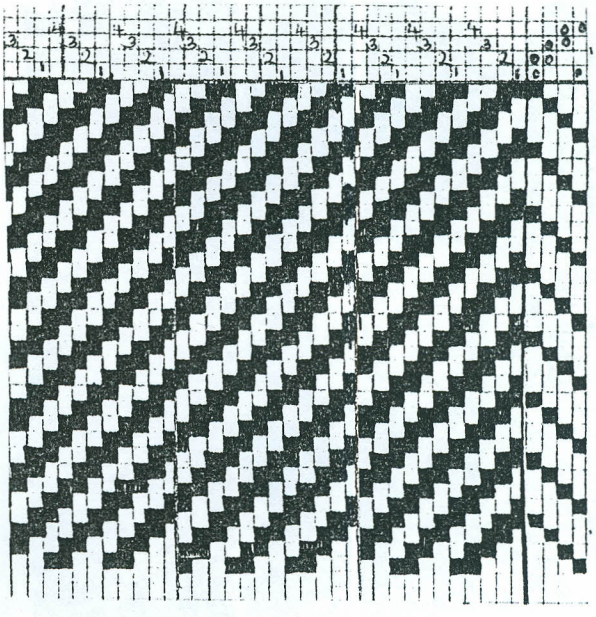
SUMMARY TABLE FOR PROJECT 10: GENTS SHIRT

TECHNIQUE		Inlay
TEXTILE YARNS:	WARP	Cotton(18/3)
	WEFT	Cotton(18/3)
DYES:	WARP	None
	WEFT	None
COLOUR:	WARP	Yellow, Black, Magenta
	WEFT	Yellow, Black, Magenta
SLEYING		2 per dent Reed No 14
SIZE OF FABRIC		120" by 15"
WEAVING EQUIPMENT		Table loom
REMARKS		This is the heaviest of all weaves owing to the denier of yarn used.

Plate 22 *Garment in inlay technique*



Motif for project 10

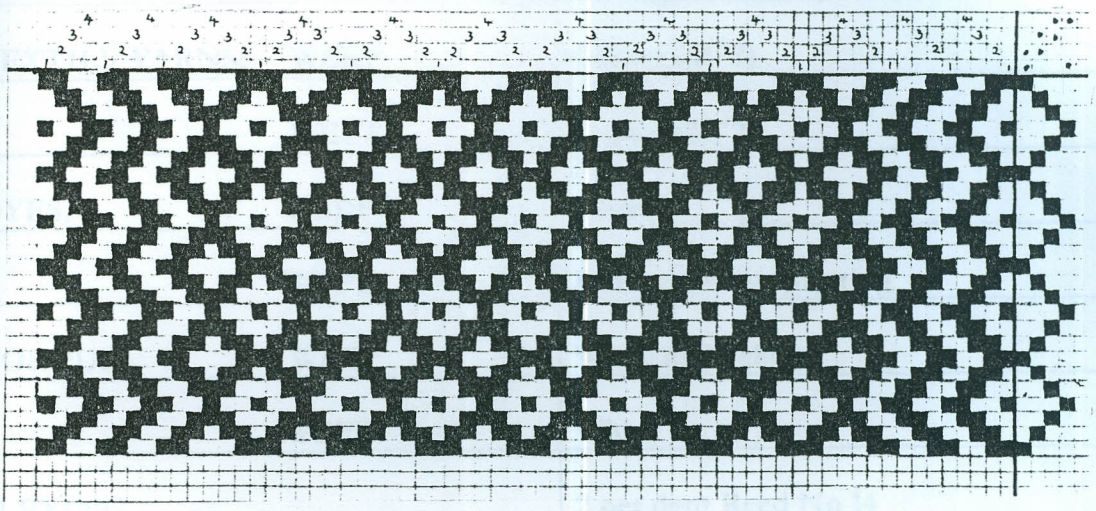


Point paper draft for project 10

SUMMARY TABLE FOR PROJECT 11: GENTS SHIRT

TECHNIQUE		Mixed techniques (Ikat & warp printing
TEXTILE YARNS:	WARP	Cotton (18/3) (42/2)
	WEFT	Cotton (18/3) (42/2)
DYES:	WARP	None
	WEFT	Vat dyes
COLOUR:	WARP	White
	WEFT	Brown (Ikat), Green & orange (screen printing)
SLEYING		2 per dent Reed No 14
SIZE OF FABRIC		24" by 12" (3 pieces)
WEAVING EQUIPMENT		
REMARKS		Combining different techniques made the garment more interesting

Plate 23 *Garment in mixed techniques*



Point paper draft for project 11

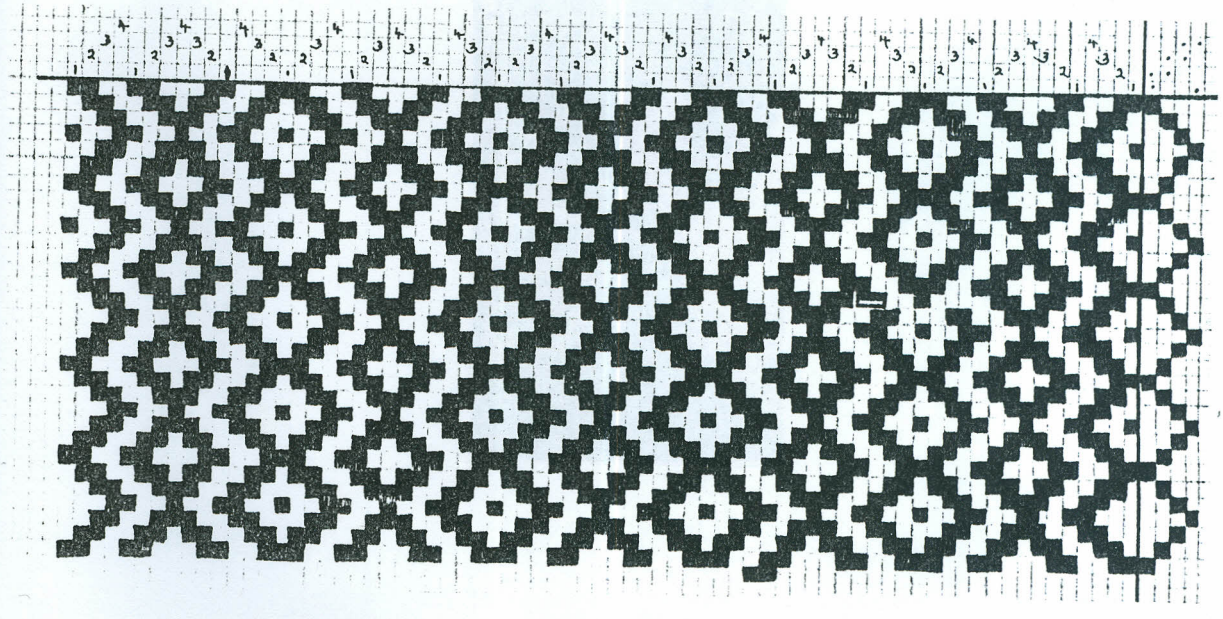
shirt design for project 11

SUMMARY TABLE FOR PROJECT 12: BABY GIRL'S DRESS

TECHNIQUE		Warp printing
TEXTILE YARNS:	WARP	Cotton (18/2)
	WEFT	Cotton (18/2)
DYES:	WARP	None
	WEFT	RMP green for printing
COLOUR:	WARP	White and yellow
	WEFT	White
SLEYING		2 per dent Reed No 14
SIZE OF FABRIC		60" by 36"
WEAVING EQUIPMENT		
REMARKS		Small prints on the warp in bold colours printed on pale background produced a subtle design

Plate 24 *Garment in warp printing technique*

Motif for project 12

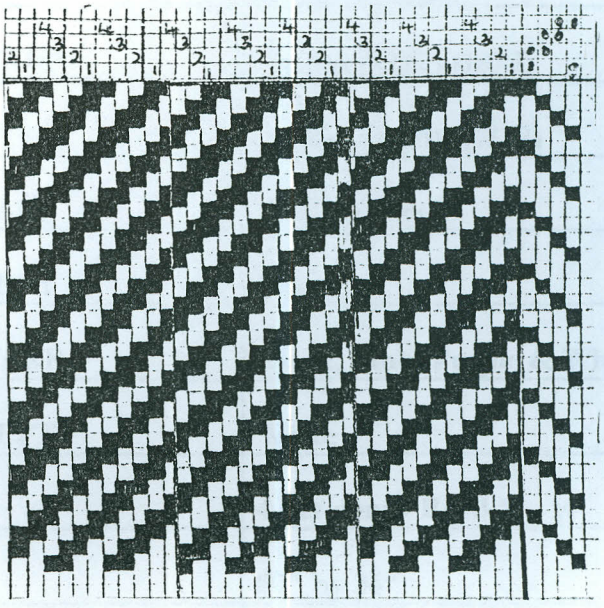


Point paper draft for project 12

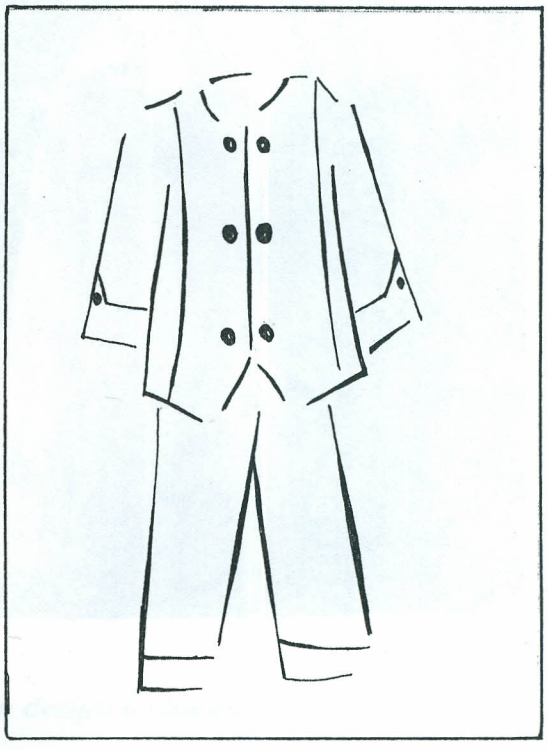
SUMMARY TABLE FOR PROJECT 13: GIRL'S TROUSER SUIT

TECHNIQUE		Ikat
TEXTILE YARNS:	WARP	Cotton (18/3) (18/2)
	WEFT	Cotton (18/3) (18/2)
DYES:	WARP	Procion dyes
	WEFT	Procion dyes
COLOUR:	WARP	Magenta, Pink, purple & White
	WEFT	Purple
SLEYING		2 per dent - Reed No 10
SIZE OF FABRIC		50" by 17"
WEAVING EQUIPMENT		4 Harness loom
REMARKS		Ikat technique was used with the plain weave to produce a simple unique fabric

Plate 25 *Garment in Ikat technique*



Point paper draft for project 13

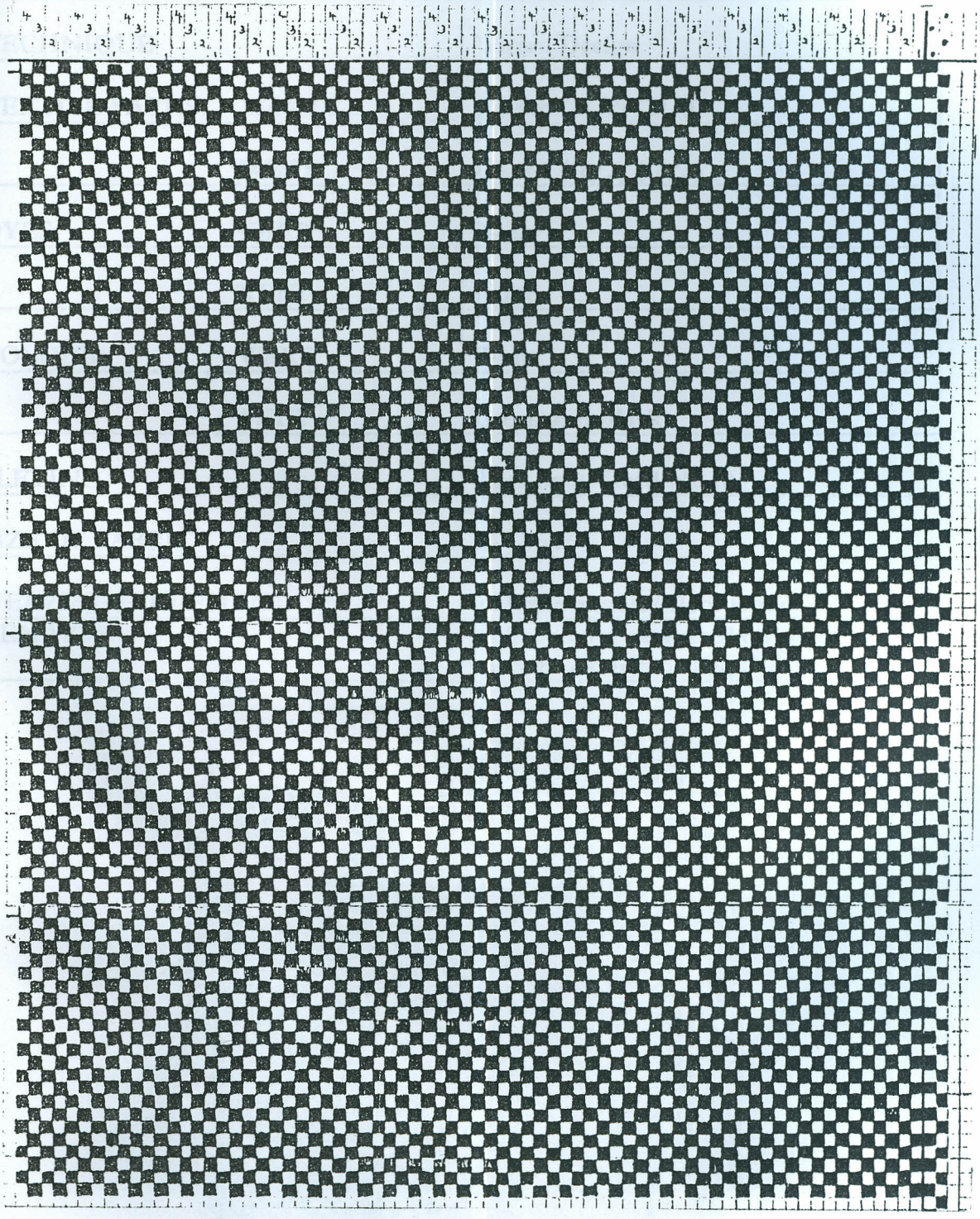


Garment design for project 13

SUMMARY TABLE FOR PROJECT 14: GIRL'S DRESS

TECHNIQUE		Woven Design
TEXTILE YARNS:	WARP	Cotton (42/2) (18/2)
	WEFT	Cotton (42/2) (18/2)
DYES:	WARP	Procion dyes
	WEFT	None
COLOUR:	WARP	Black, Pink, Purple & White
	WEFT	White
SLEYING		4 per dent - Reed No 14
SIZE OF FABRIC		80" by 36"
WEAVING EQUIPMENT		4 Harness floor loo
REMARKS		Stripes were produced by simple colour combinations

Plate 26 *Garment in woven design technique*

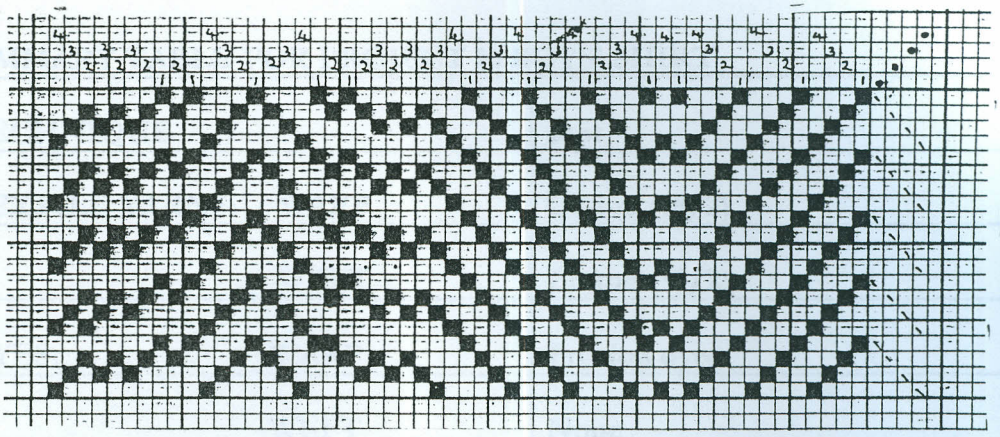


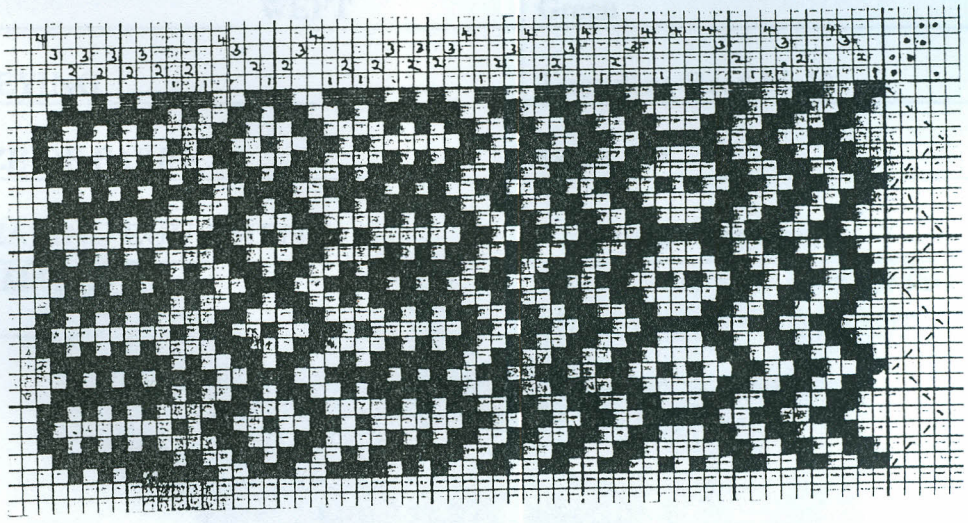
Point paper draft for project 14

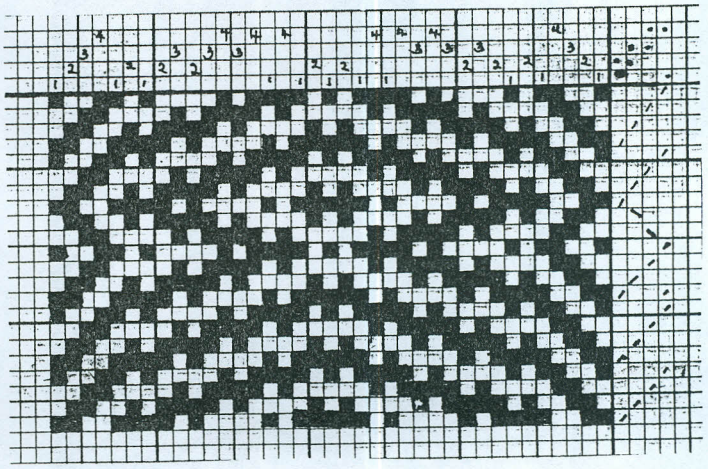
SUMMARY TABLE FOR PROJECT 15 BOYS' SHIRT

TECHNIQUE		Woven Design
TEXTILE YARNS:	WARP	Cotton (18/2) (18/3)
	WEFT	Cotton (18/2) (18/3)
DYES:	WARP	None
	WEFT	None
COLOUR:	WARP	White
	WEFT	Green and Black
SLEYING		2 per dent -Reed No 10
SIZE OF FABRIC		50" by 15"
WEAVING EQUIPMENT		4 Harness table/ floor loom
REMARKS		Bold colours were used on white for more pronounced effect.

Plate 27 *Garment in woven design technique*





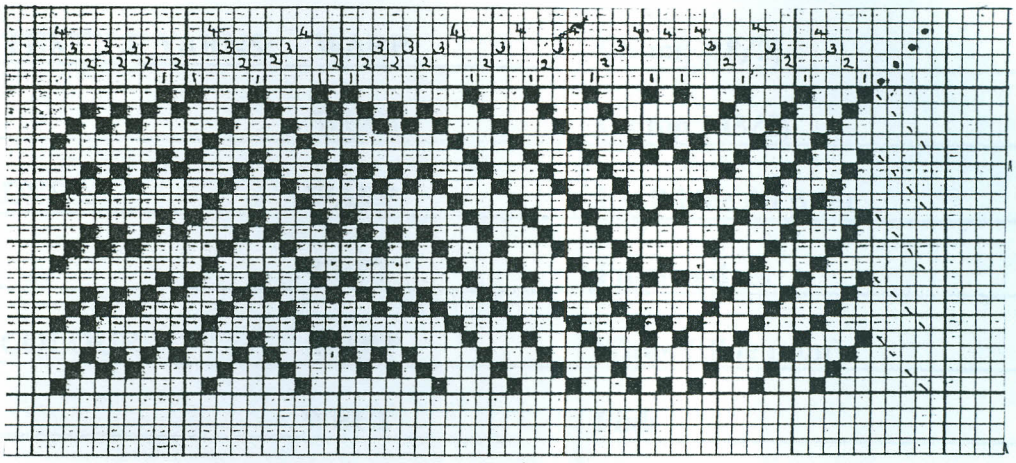


Point paper drafts for project 15

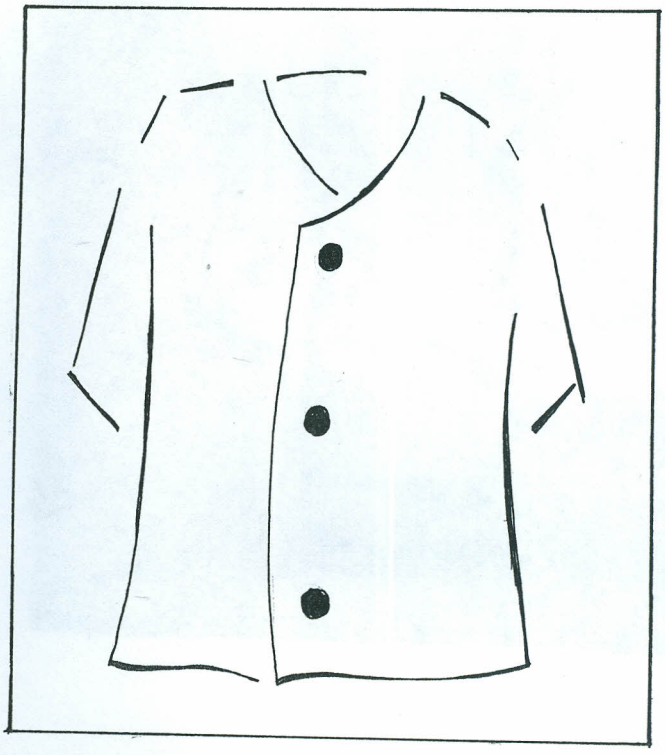
SUMMARY TABLE FOR PROJECT 16 BOYS' SHIRT

TECHNIQUE		Ikat
TEXTILE YARNS:	WARP	Cotton (18/2)
	WEFT	Cotton (18/2)
DYES:	WARP	Procion dyes
	WEFT	None
COLOUR:	WARP	White (Green and Yellow Ikat)
	WEFT	Green
SLEYING		2 per dent-Reed No10
SIZE OF FABRIC		48' by 15"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		Two colours were used for this Ikat and interesting results were seen

Plate 28 *Garment in Ikat technique*



Point paper draft for project 16

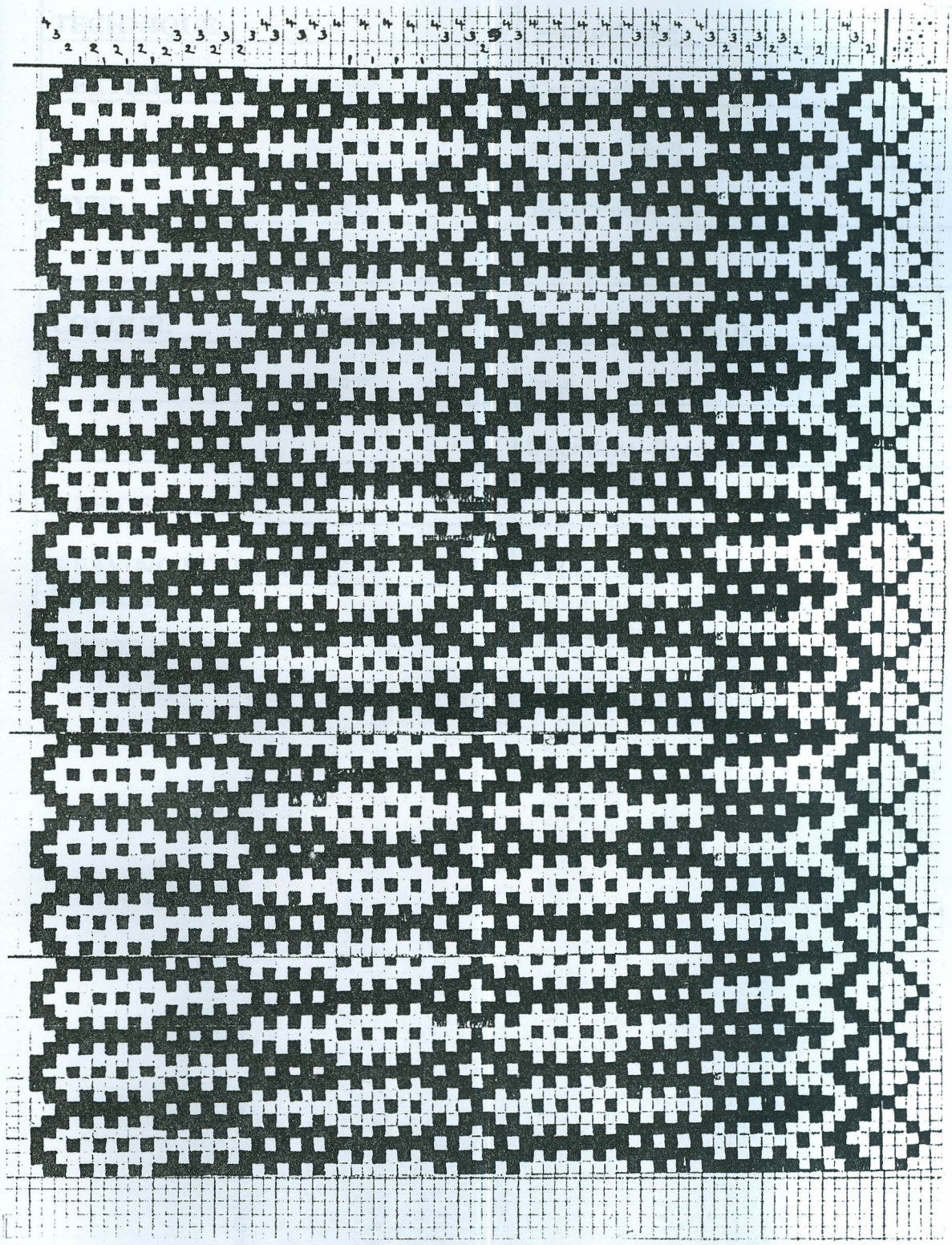


Shirt design for project 16

SUMMARY TABLE FOR PROJECT 17 BABY BOYS' SHIRT

TECHNIQUE		Warp printing
TEXTILE YARNS:	WARP	Cotton (18/2)
	WEFT	Cotton (18/2)
DYES:	WARP	RMP blue for print
	WEFT	Procion dyes
COLOUR:	WARP	White (Blue print)
	WEFT	Pink
SLEYING		2 per dent -Reed No 14
SIZE OF FABRIC		105" by 36"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		An all weave garment can be monotonous thus the use of accessories to reduce monotony.

Plate 29 *Garment in warp printing technique*

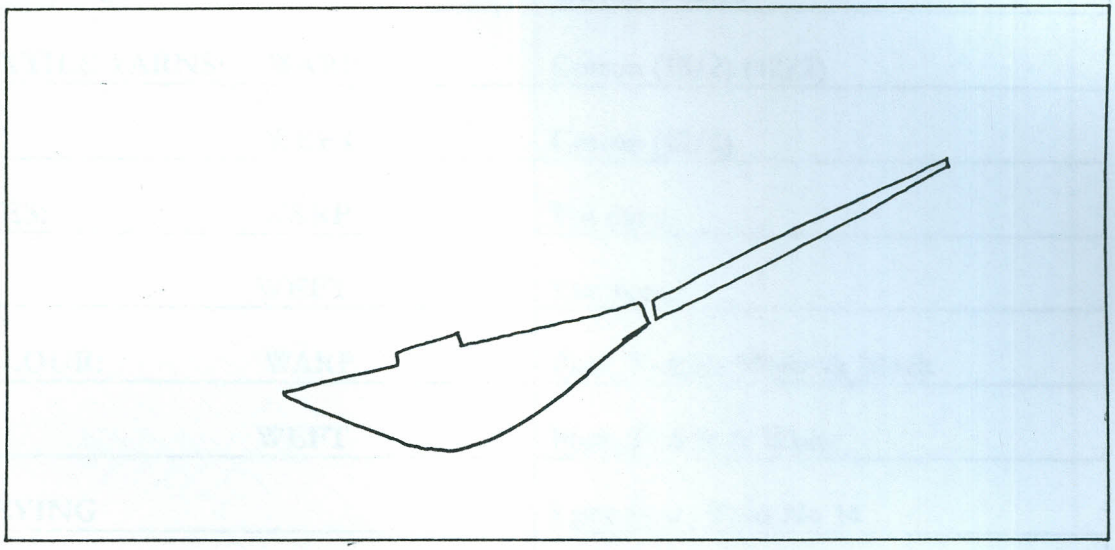


Point paper draft for project 17

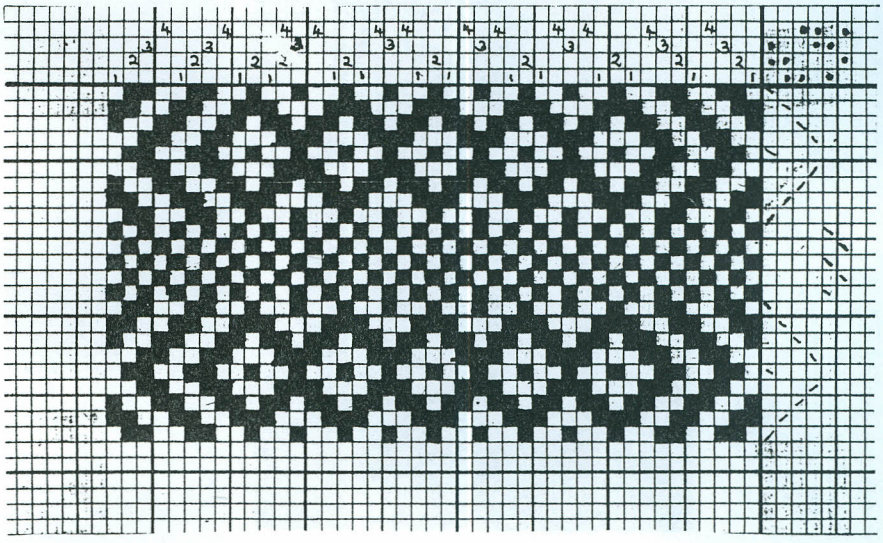
SUMMARY TABLE FOR PROJECT 18 Fabric

TECHNIQUE		warp printing
TEXTILE YARNS:	WARP	Cotton (18/2)
	WEFT	Cotton (18/2)
DYES:	WARP	RMP Purple for print
	WEFT	Procion dyes
COLOUR:	WARP	White (Purple print)
	WEFT	Pink
SLEYING		2 per dent -Reed No 14
SIZE OF FABRIC		150" by 37"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		Simple prints were used and they were very effective

Plate 30 *Fabric in warp printing technique*



Motif for project 18

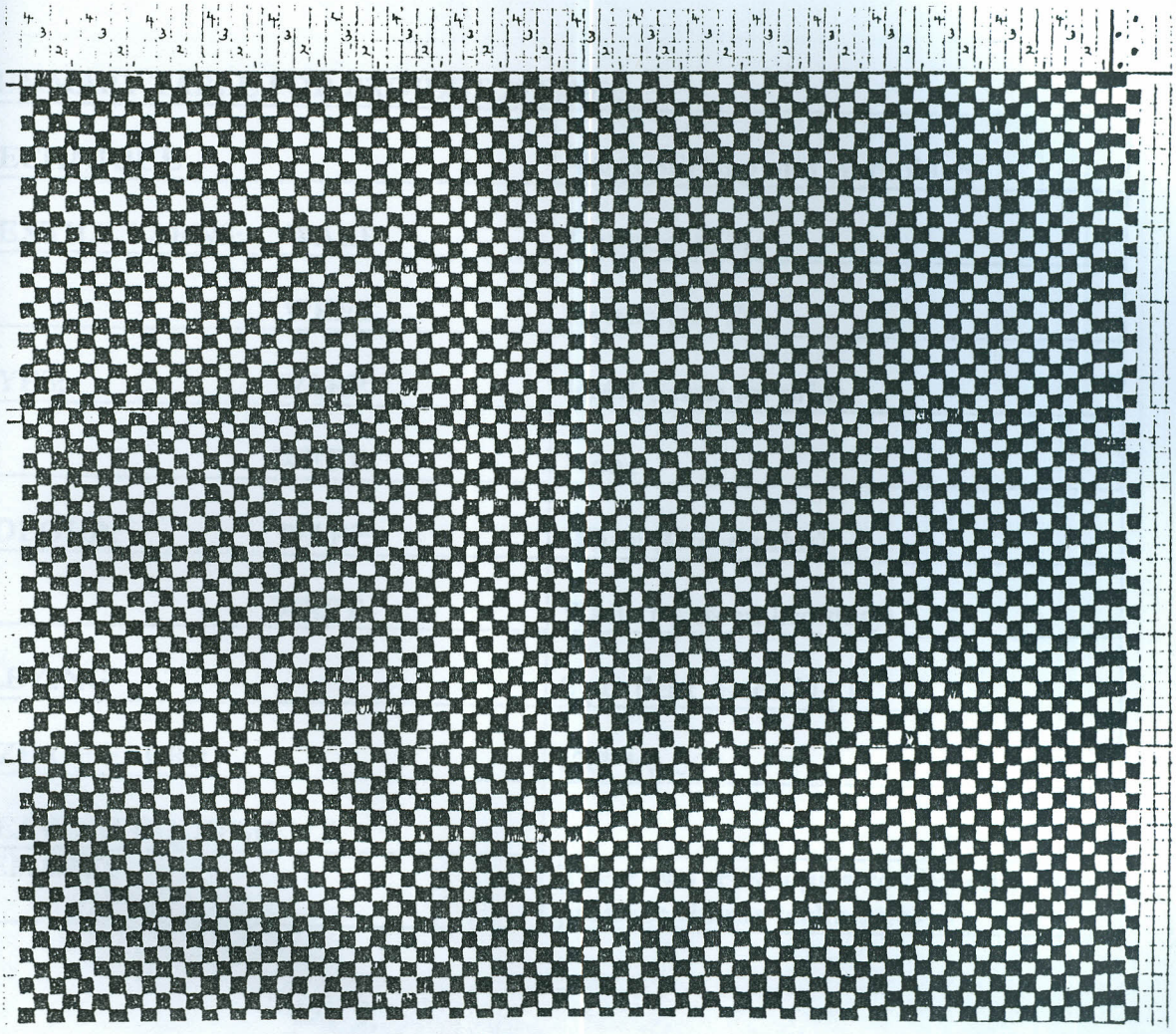


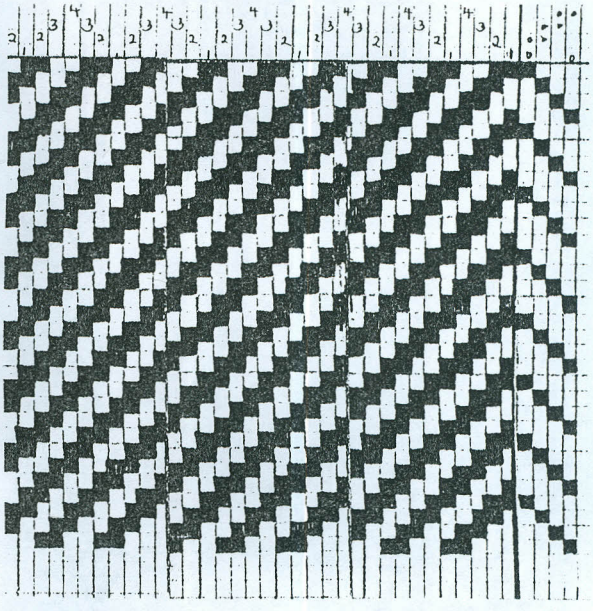
Point paper draft for project 18

SUMMARY TABLE FOR PROJECT 19 Fabric

TECHNIQUE		Woven Design
TEXTILE YARNS:	WARP	Cotton (18/2) (42/2)
	WEFT	Cotton (18/2)
DYES:	WARP	Vat dyes
	WEFT	Vat dyes
COLOUR:	WARP	Pink, Purple, White & Black
	WEFT	Pink, Purple & White
SLEYING		2 per dent -Reed No 14
SIZE OF FABRIC		147" BY 39"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		Stripes and checks were achieved effectively by the use of colour.

Plate 31 *Fabric in woven design technique*



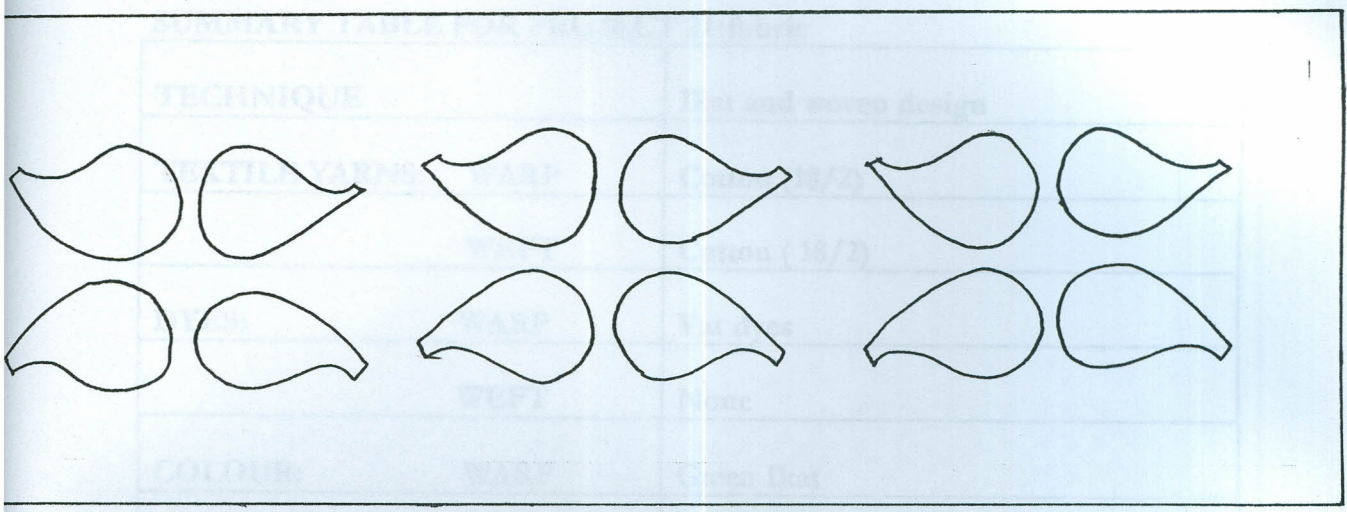


Point paper drafts for project 19

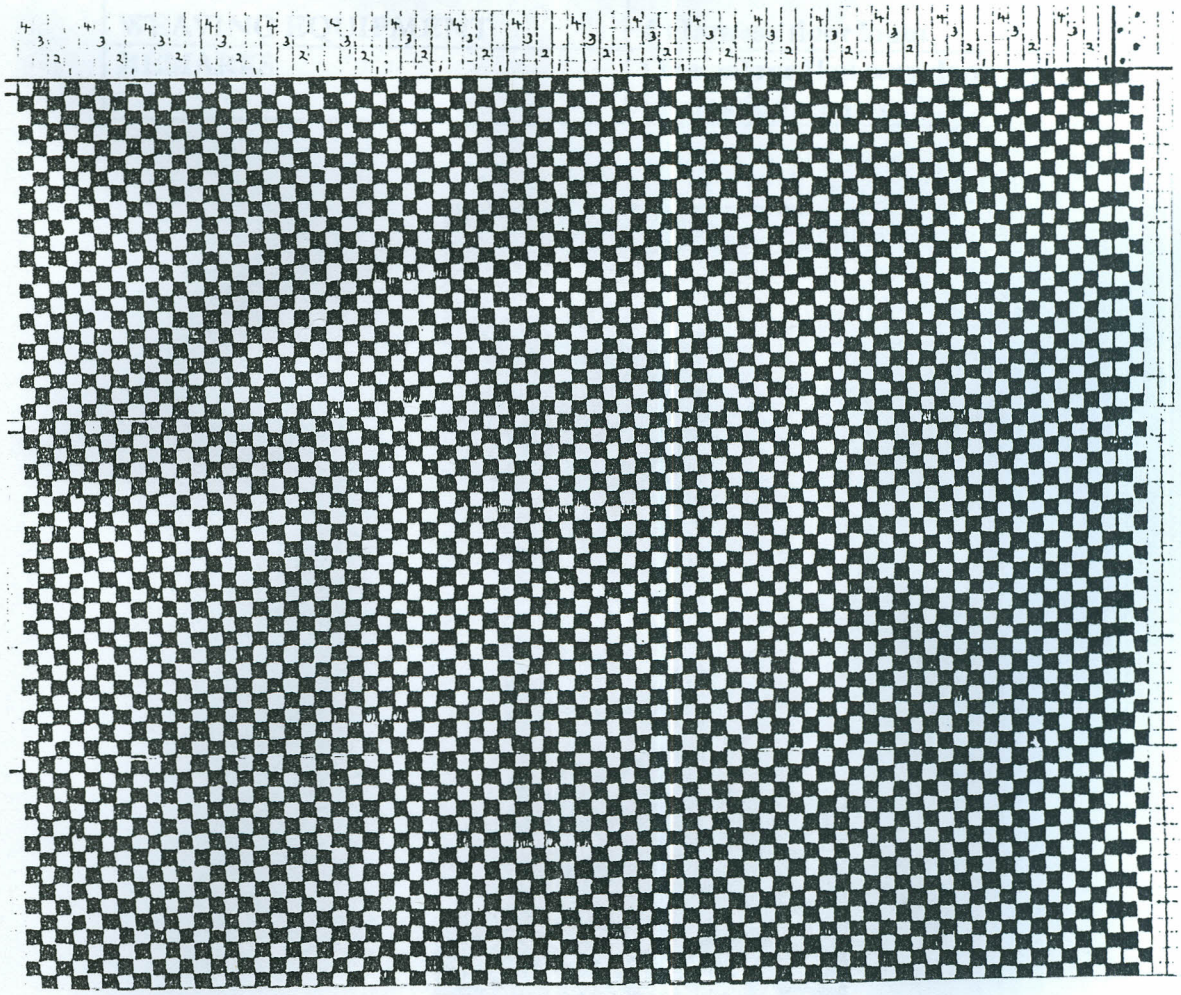
SUMMARY TABLE FOR PROJECT 20 Fabric

TECHNIQUE		Warp printing and embroidery
TEXTILE YARNS:	WARP	Cotton (18/2)
	WEFT	Cotton (18/2)
DYES:	WARP	RMP Green for print
	WEFT	None
COLOUR:	WARP	White (Green print)
	WEFT	White (with embroidery)
SLEYING		2 per dent -Reed No 14
SIZE OF FABRIC		126" by 36"
WEAVING EQUIPMENT		
REMARKS		These two techniques combined well to produce simple techniques.

Plate 32 *Fabric in Warp printing and embroidery techniques*



Motif for project 20

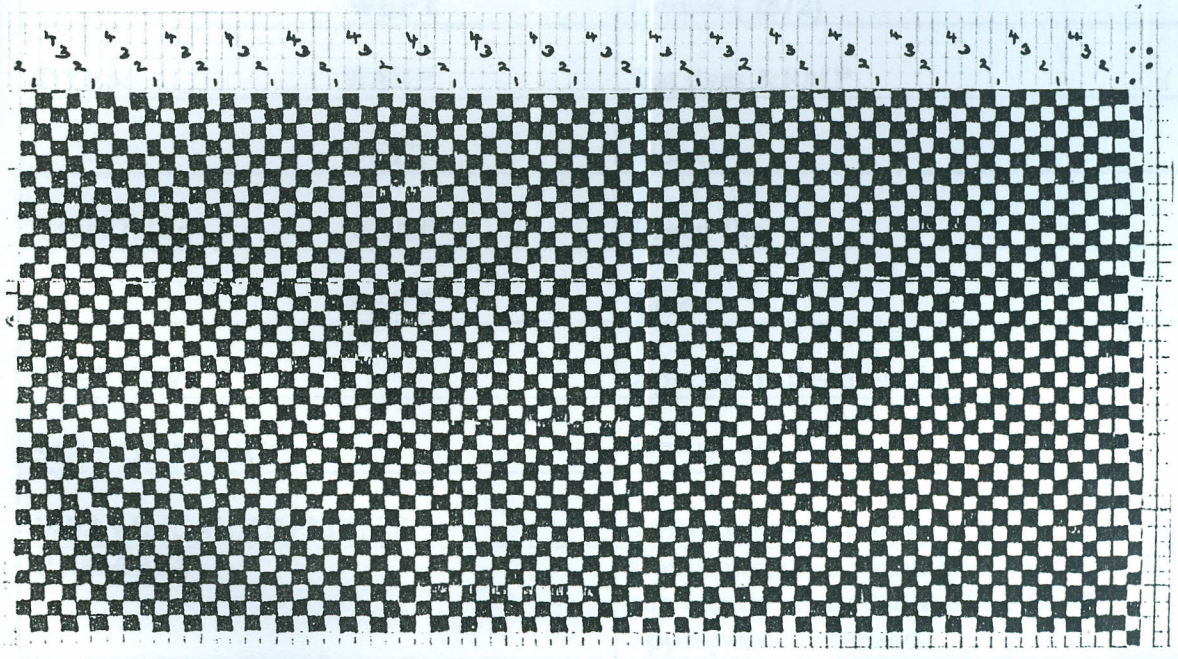


Point paper draft for project 20

SUMMARY TABLE FOR PROJECT 21:fabric

TECHNIQUE		Ikat and woven design
TEXTILE YARNS:	WARP	Cotton (18/2)
	WEFT	Cotton (18/2)
DYES:	WARP	Vat dyes
	WEFT	None
COLOUR:	WARP	Green Ikat
	WEFT	Green
SLEYING		2 per dent -Reed No 14
SIZE OF FABRIC		105" by 36"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		One colour Ikat was done producing interesting shapes.

Plate 33 *Fabric in Ikat and woven design techniques*



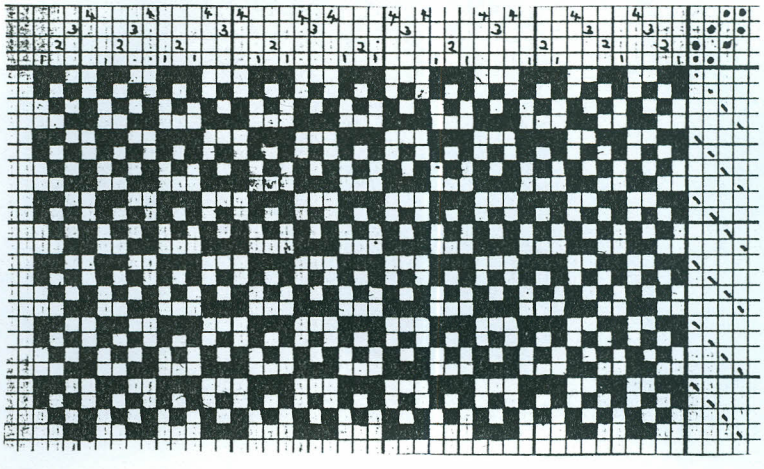
Point paper draft for project 21

SUMMARY TABLE FOR PROJECT 22 Fabric

TECHNIQUE		Mixed techniques: Warp printing and Woven design
TEXTILE YARNS:	WARP	Cotton (18/2)
	WEFT	Cotton (18/2)
DYES:	WARP	Vat dyes &RMP
	WEFT	None
COLOUR:	WARP	Green Ikat
	WEFT	Green
SLEYING		2 per dent -Reed No 14
SIZE OF FABRIC		147" by 36"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		Combining two techniques enhances the beauty of the fabric if well and appropriately utilized.

Plate 34 *Fabric in warp printing and woven design techniques*

Motif for project 22

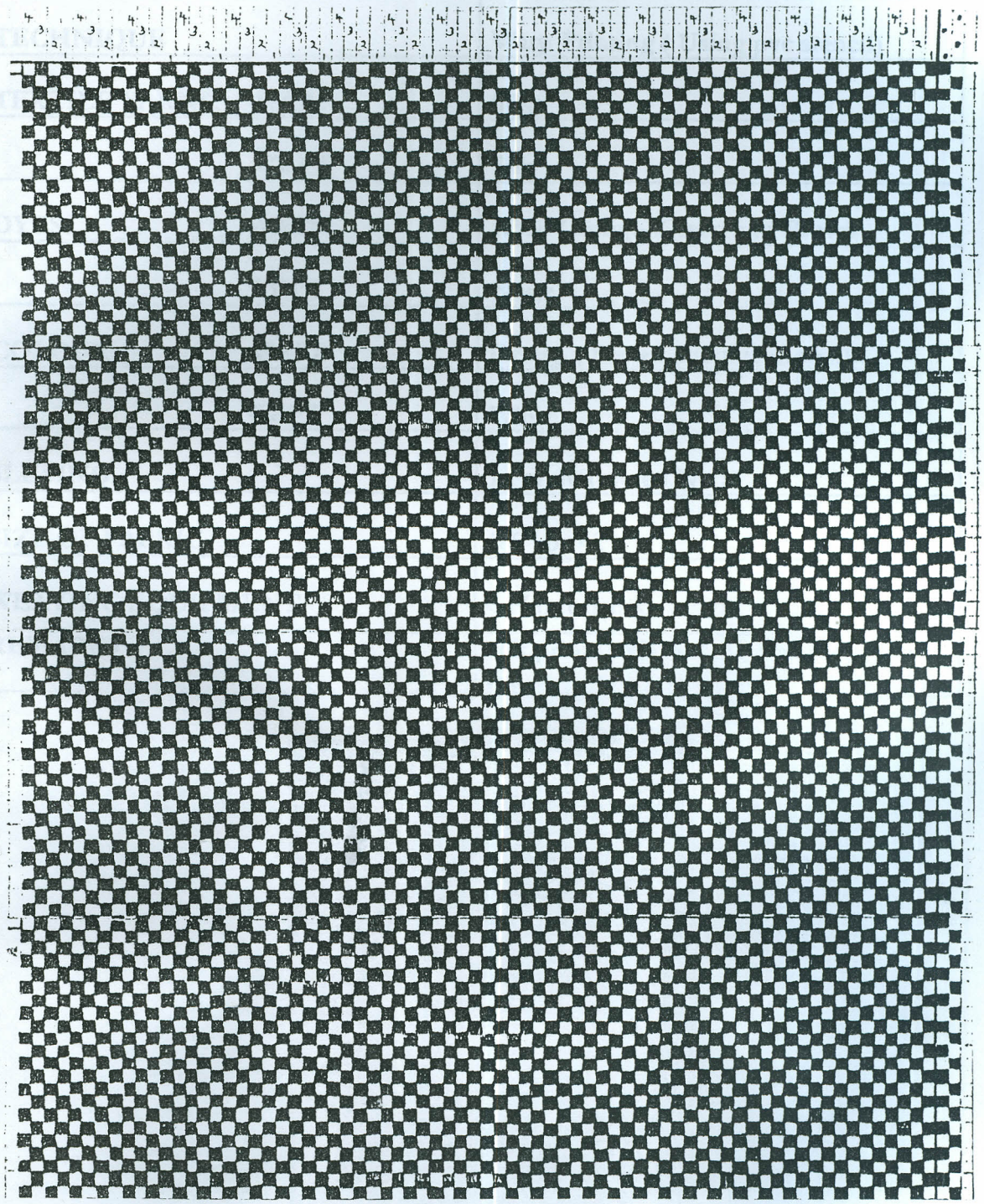


Point paper draft for project 22

SUMMARY TABLE FOR PROJECT 23: Fabric

TECHNIQUE		Warp printing (Using pvc stencil)
TEXTILE YARNS:	WARP	Silk
	WEFT	Silk
DYES:	WARP	RMP Green And Brown
	WEFT	None
COLOUR:	WARP	White (Green and Brown print)
	WEFT	White
SLEYING		1 Per dent
SIZE OF FABRIC		120" by 42"
WEAVING EQUIPMENT		4 Harness Floor loom
REMARKS		Breaking of warp spoilt the design as white warps were added and this broke the continuity.

Plate 35 ***Fabric in warp printing technique***

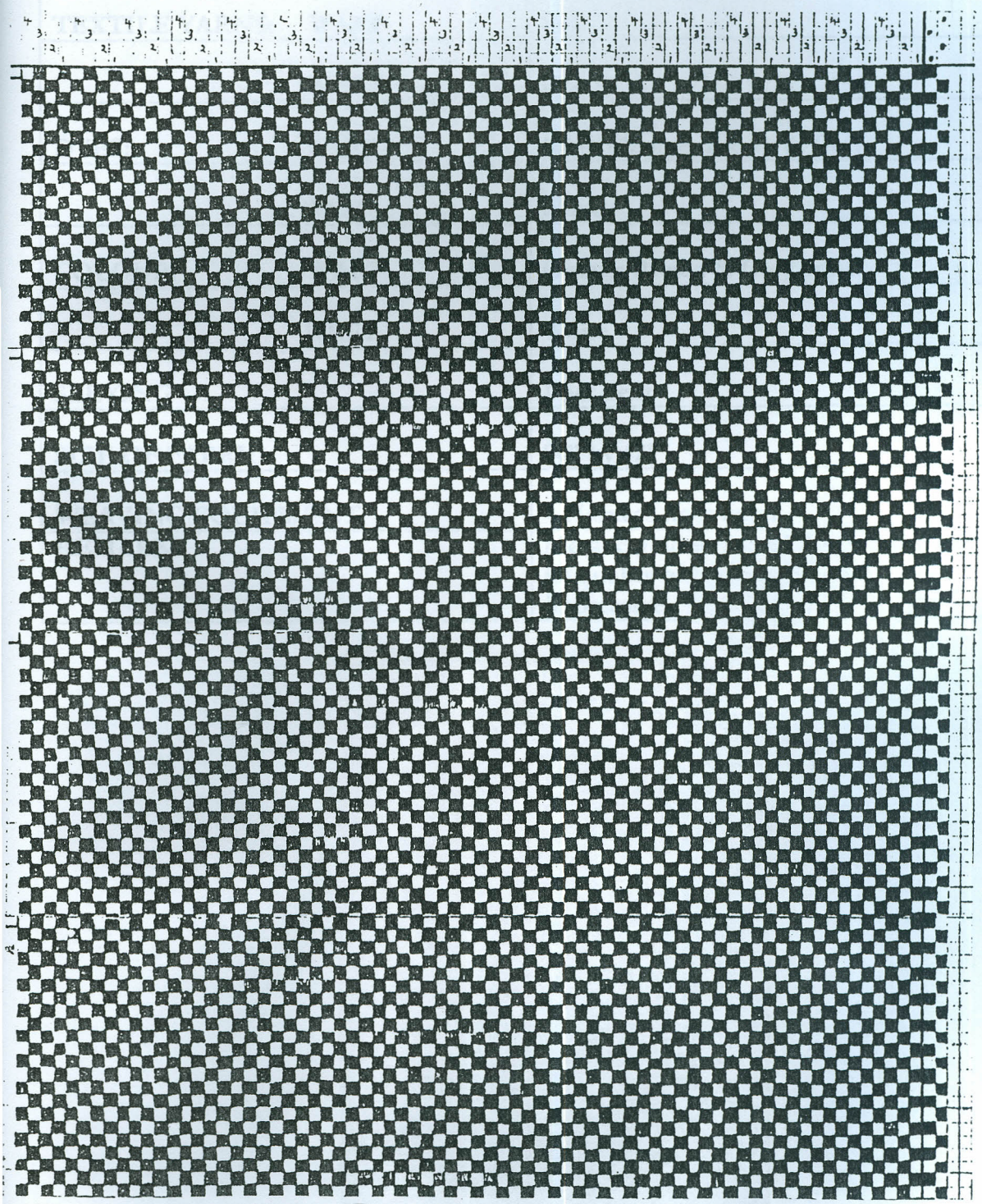


Point paper draft for project 23

SUMMARY TABLE FOR PROJECT 24 Fabric

TECHNIQUE		Warp Printing (Using pvc stencil)
TEXTILE YARNS:	WARP	Silk
	WEFT	Silk
DYES:	WARP	RMP Orange, Green and Brown
	WEFT	None
COLOUR:	WARP	Orange, Brown and Green print
	WEFT	White
SLEYING		1 Per dent Reed No 14
SIZE OF FABRIC		105" by 42"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		silk prints well in RMP and is easy to fix.

Plate 36 *Fabric in warp pinting technique*

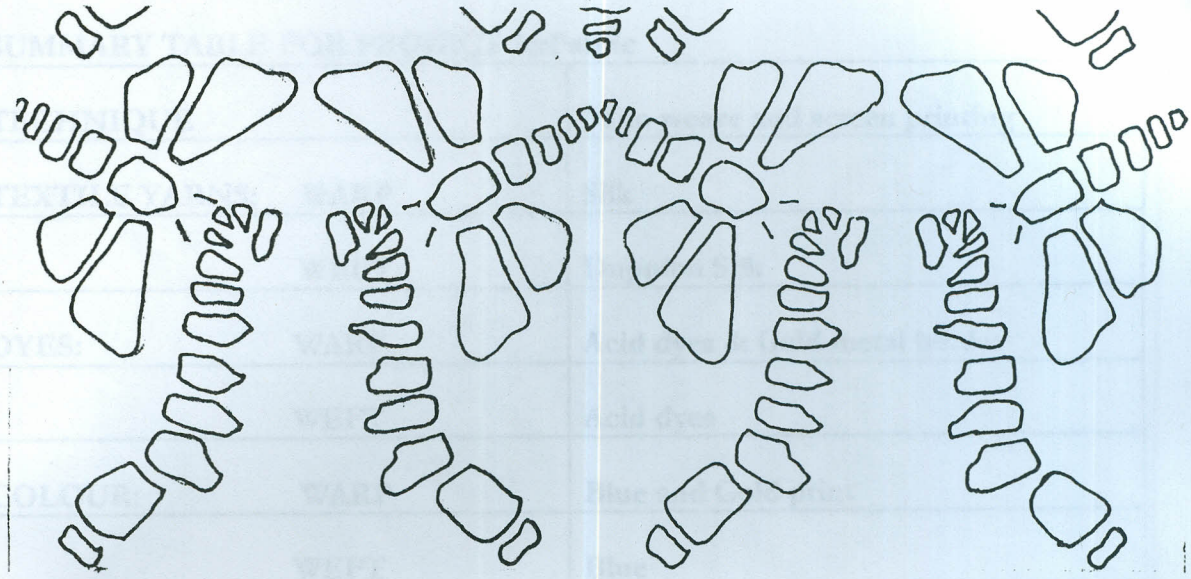


Point paper draft for project 24

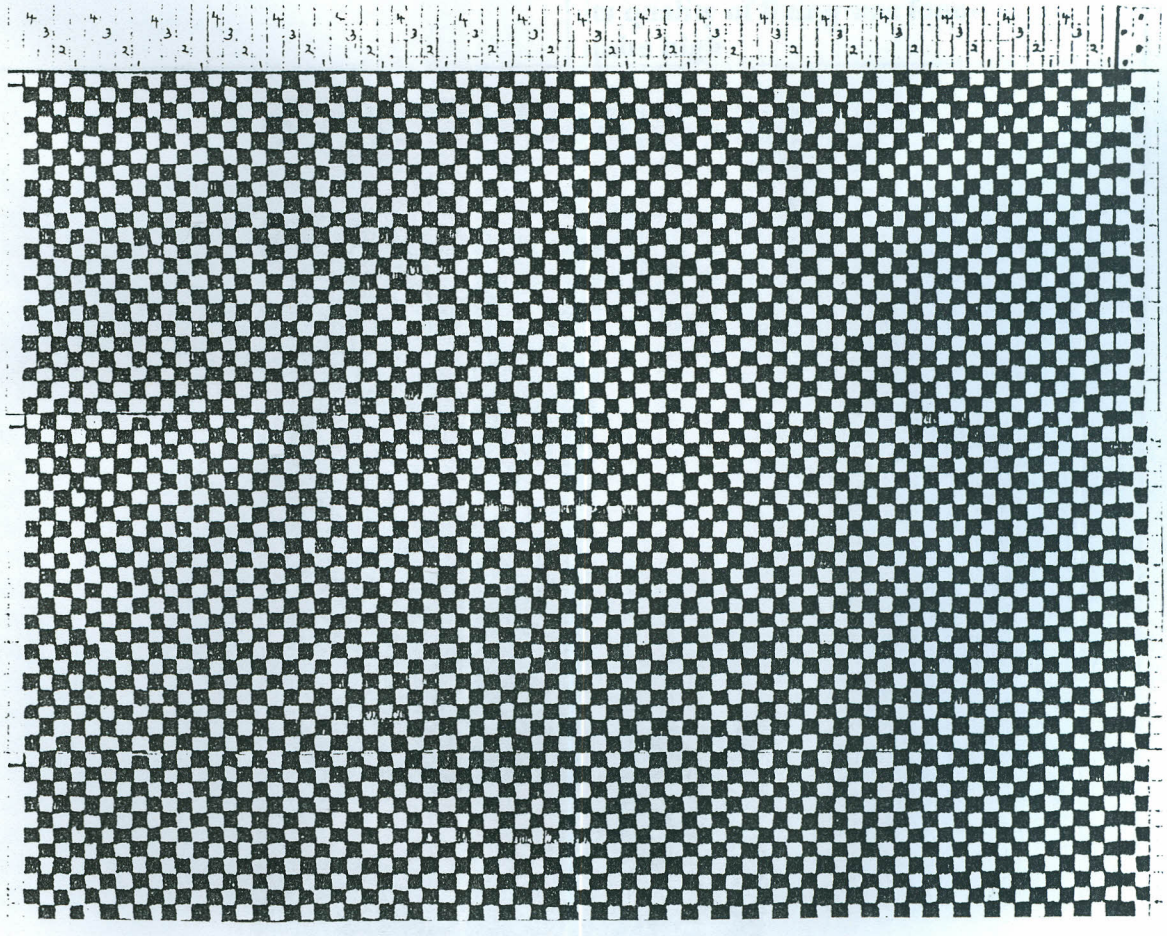
SUMMARY TABLE FOR PROJECT 25 Fabric

TECHNIQUE		Plain weave and screen printing
TEXTILE YARNS:	WARP	Silk
	WEFT	Silk
DYES:	WARP	RMP Orange, Brown & Grey
	WEFT	None
COLOUR:	WARP	Orange Brown & Grey print
	WEFT	White
SLEYING		1 per dent
SIZE OF FABRIC		84" by 42"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		Metalic gold was used for printing and its quality of printing is quite impressive.

Plate 37 *Fabric in Plain weave and screen printing techniques*



Motif for project 25

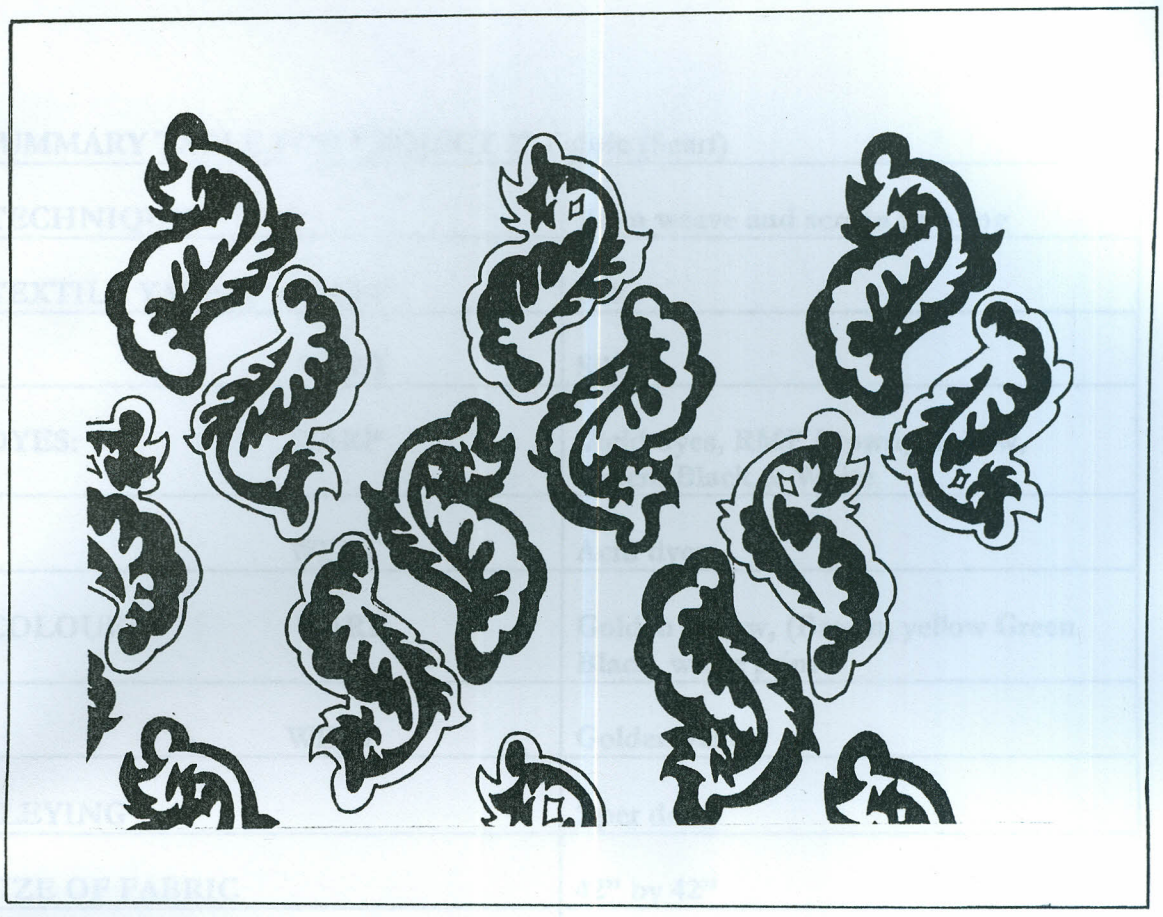


Point paper draft for project 25

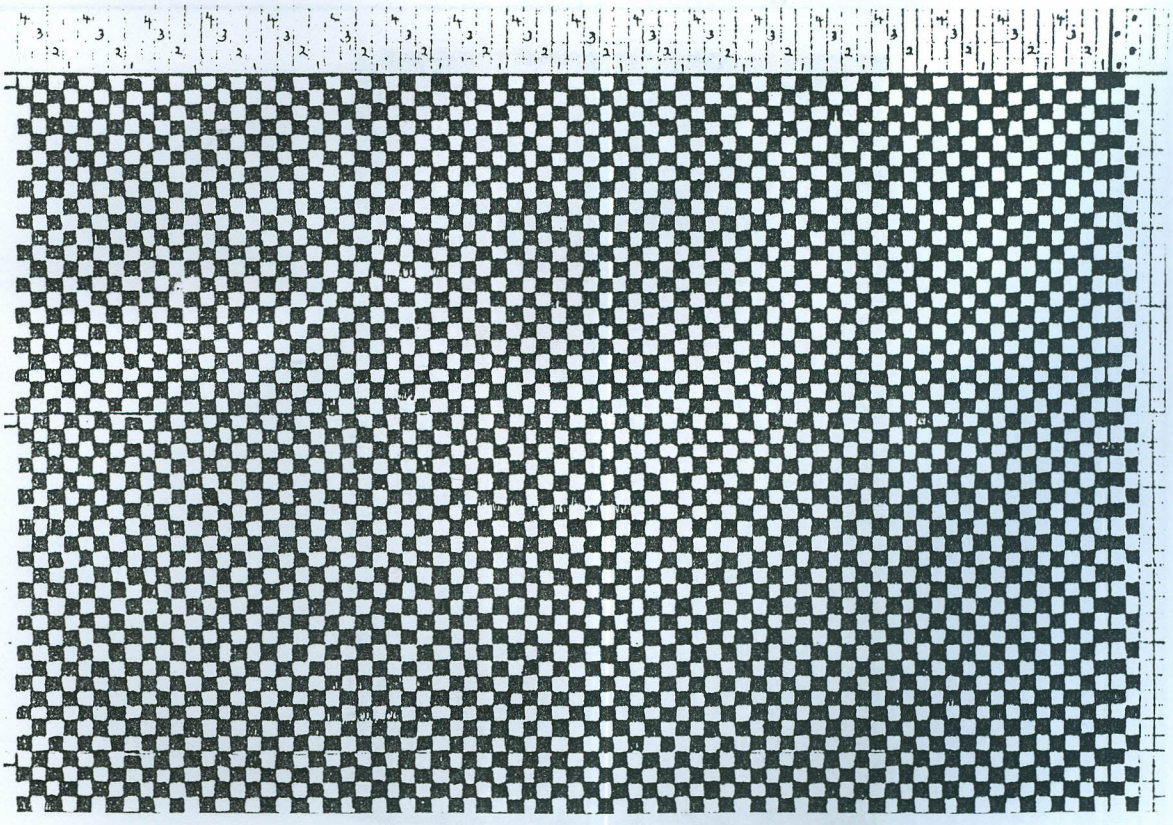
SUMMARY TABLE FOR PROJECT 26:Fabric

TECHNIQUE		Plain weave and screen printing
TEXTILE YARNS:	WARP	Silk
	WEFT	Duppion Silk
DYES:	WARP	Acid dyes & Gold metal binder
	WEFT	Acid dyes
COLOUR:	WARP	Blue and Gold print
	WEFT	Blue
SLEYING		1 per dent
SIZE OF FABRIC		84" by 42"
WEAVING EQUIPMENT		4 Harness floor loom
REMARKS		Metalic gold was used for printing and its quality of fixing was found to be quite high.

Plate 38 *Plain weave and screen printing techniques*



Motif for project 26

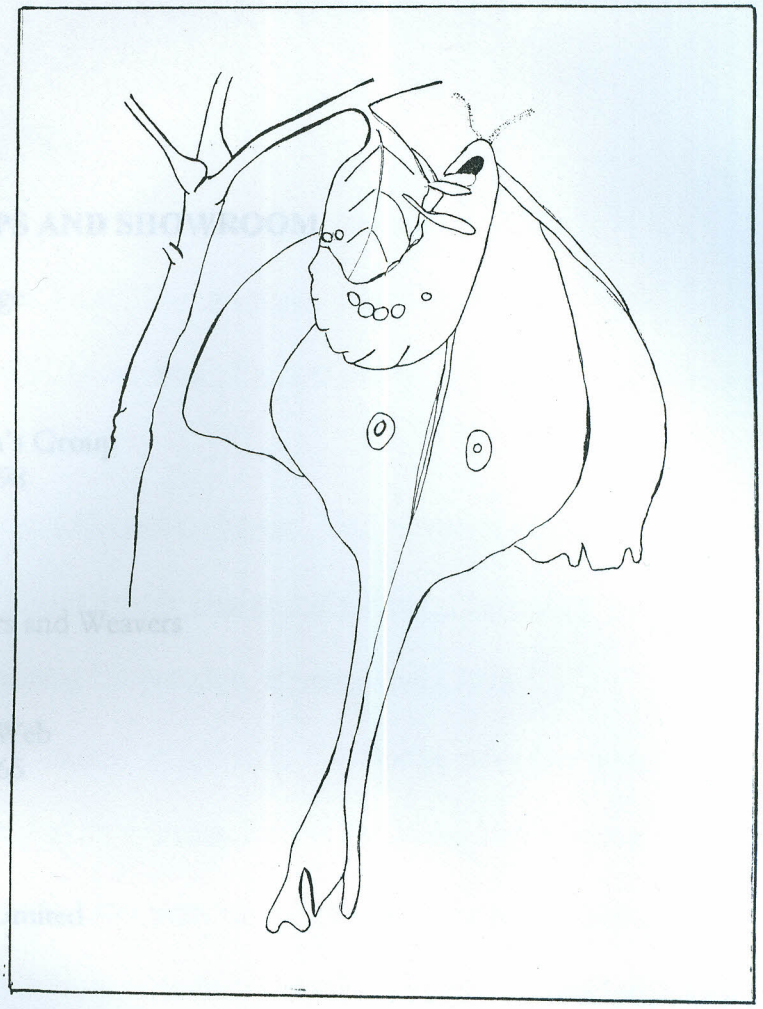


Point paper draft for project 26

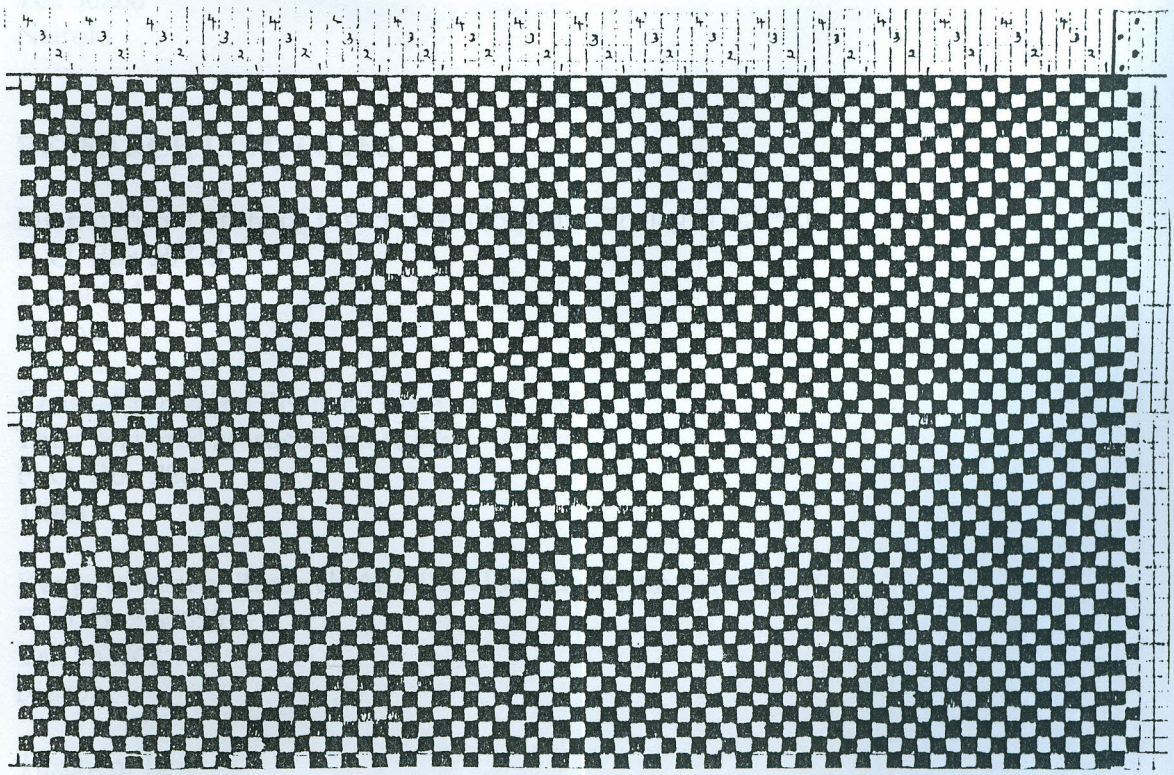
SUMMARY TABLE FOR PROJECT 27 Fabric (Scarf)

TECHNIQUE		Plain weave and screen printing
TEXTILE YARNS:	WARP	Silk
	WEFT	Silk
DYES:	WARP	Acid dyes, RMP Brown, Yellow, Green, Black & White
	WEFT	Acid dyes
COLOUR:	WARP	Golden yellow, (Brown, yellow Green Black, white print
	WEFT	Golden yellow
SLEYING		1 per dent
SIZE OF FABRIC		42" by 42"
WEAVING EQUIPMENT		4 harness floor loom
REMARKS		Full colour prints can be used to produce designs successfully.

Plate 40 *Fabric in Plain weave and screen printing techniques*



Motif for project 27



Point paper draft for project 27

APPENDIX

WORKSHOPS AND SHOWROOM

African Heritage
Tel: 333157
Nairobi

Ayany Women's Group
P. O. Box 51898
Tel: 572273
Nairobi

Mbeki Spinners and Weavers
Nairobi

The Spinners Web
P. O. Box 52165
Tel: 228647
Nairobi

TRIO Crafts Limited
Tel: 571962
Nairobi

Woodley Weavers
P. O. Box 52669
Tel: 50208
Nairobi

RESEARCH INSTITUTES

International Centre of Insect Physiology and Ecology (ICIPE)
P. O. Box 30772
Tel: 80251
Nairobi

Kenya Agricultural Research Institute (KARI)
Thika National Horticultural Research Centre
P. O. Box 220
Thika

Kenya Industrial Research And Development Institute (KIRDI)
P. O. Box 30650
Tel: 557762
Nairobi

Texchem Limited
Tel 440671
Nairobi

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