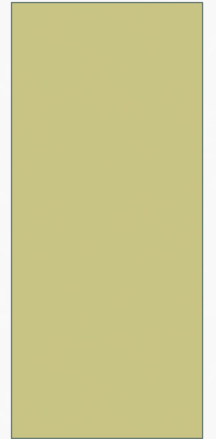


# 'SHIBORI: DIGITAL INTERVENTIONS'

DR KATE WELLS RCA



# J. MATHEWS, J. (1906)

*APPLICATION OF DYESTUFFS TO TEXTILES, PAPER, LEATHER AND OTHER MATERIALS.* NEW YORK: JOHN WILEY AND SONS

*'To the chemist [craft dyeing] should prove an attractive field in the devising of ingenious methods of applying dyestuffs and mordants to produce effects by hand treatment that are hardly thought of by the ordinary dyer.*

*And there is always the possibility that many of these processes may be adapted subsequently to large scale production that will give results of a higher degree of quality and taste.'*

!

# ACROSS THE WORLD & ACROSS CULTURES

## 18<sup>th</sup> Century

### Tie-Dyed, Clamped & Printed Resists

- India – Hand-tied
- Block-printed copies
- Japan- Hand-tied
- Machine Aided
- Woven

## 19<sup>th</sup> Century

### Tie-Dyed, Clamped & Printed Resists

- Hand-tied: Ikat  
Indonesia
- Hand-tied: Ikat  
Europe
- Printed Warps:  
England & France
- Itajime Gasuri -  
Clamped warps  
Japan

# ACROSS CULTURES- HAND & TECHNOLOGY

## 20<sup>th</sup> Century

### Tie-Dyed, Clamped & Printed Resists

- Clamped
- Tied
- Stitched
- Roller
- Screen
- Machine-Dyed
- Block & Screen Printed Warps- Woven

## 21<sup>st</sup> Century

### Hand & Technology

- Hand – Craft – Artist
- Digitally Printed Warps
- Digital Copy
- Digital Manufacture
- Technology revived

# TIED, STITCHED & WOVEN RESISTS

## India – Bandhani & Laharia & Europe

- Hand Tied
- Clamped
- Block-printed copies
- Screen-Printed copies

## Japan – Shibori

- Hand tied
- Hand tying Tools
- Machine Aided
- Woven

# LAHARIA



# INDIA - LAHARIA 20<sup>TH</sup> CENTURY

**Original Laharia**



**Printed Copy**



# JAPAN - SHIBORI; MACHINE AIDED & WOVEN

## Tied & Stitched

- Hand
- Tying Tools

## Semi-Automated

- Kikaigumo Shibori machines
- Looms inserting extra warp or weft as stitching threads

## Compression

- Arashi

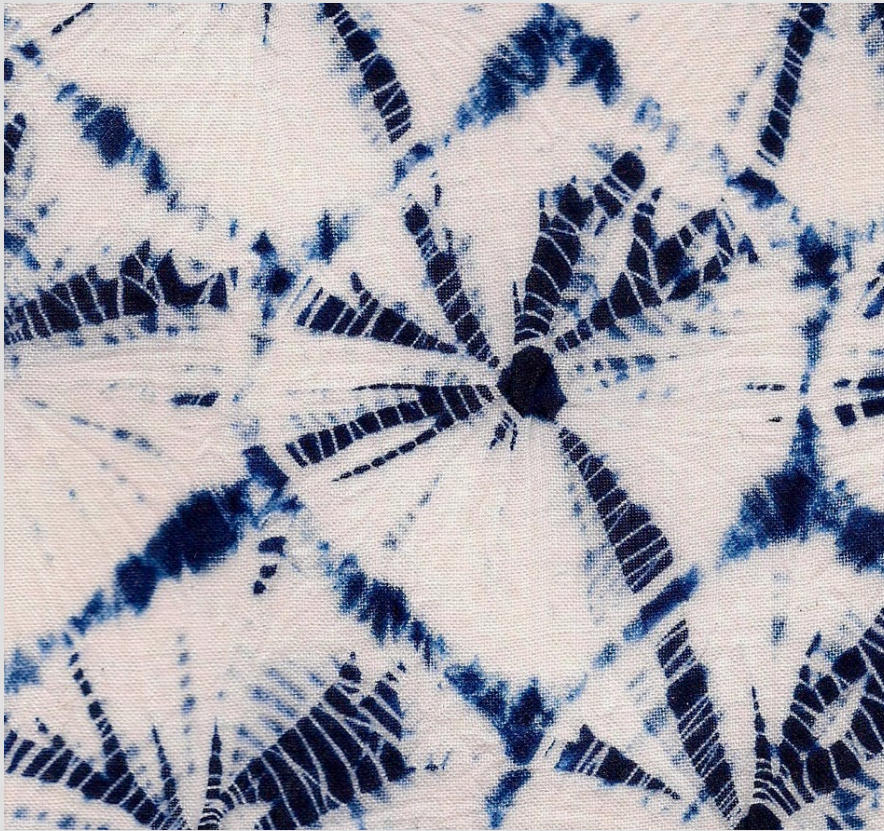
## Clamped

- Itajime
- Itajime Gasuri

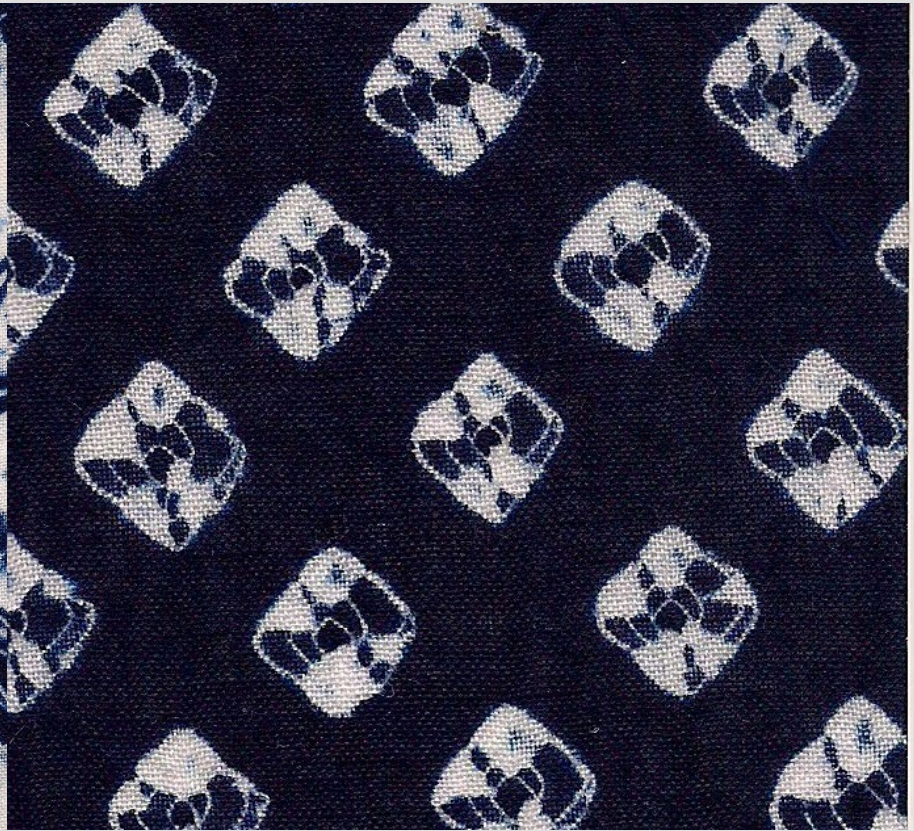


# TYING TOOLS

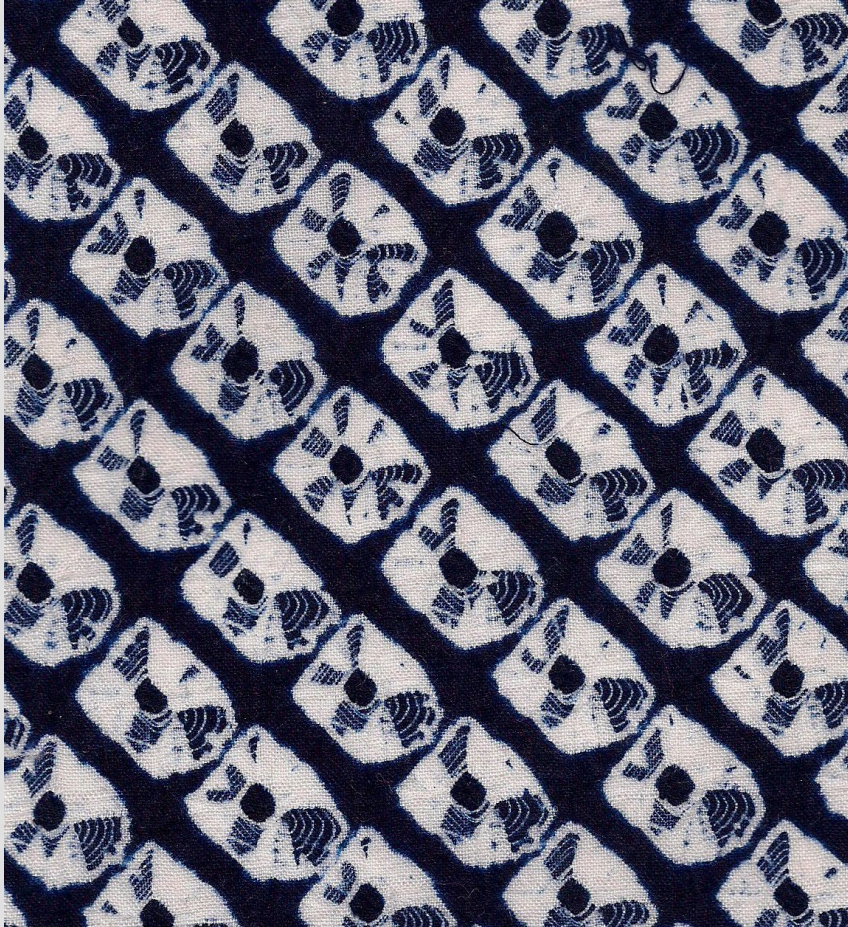
**Tegumo Shibori**



**Rasen Shibori**



# SEMI-AUTOMATED - MECHANICAL



## Kikaigumo Shibori

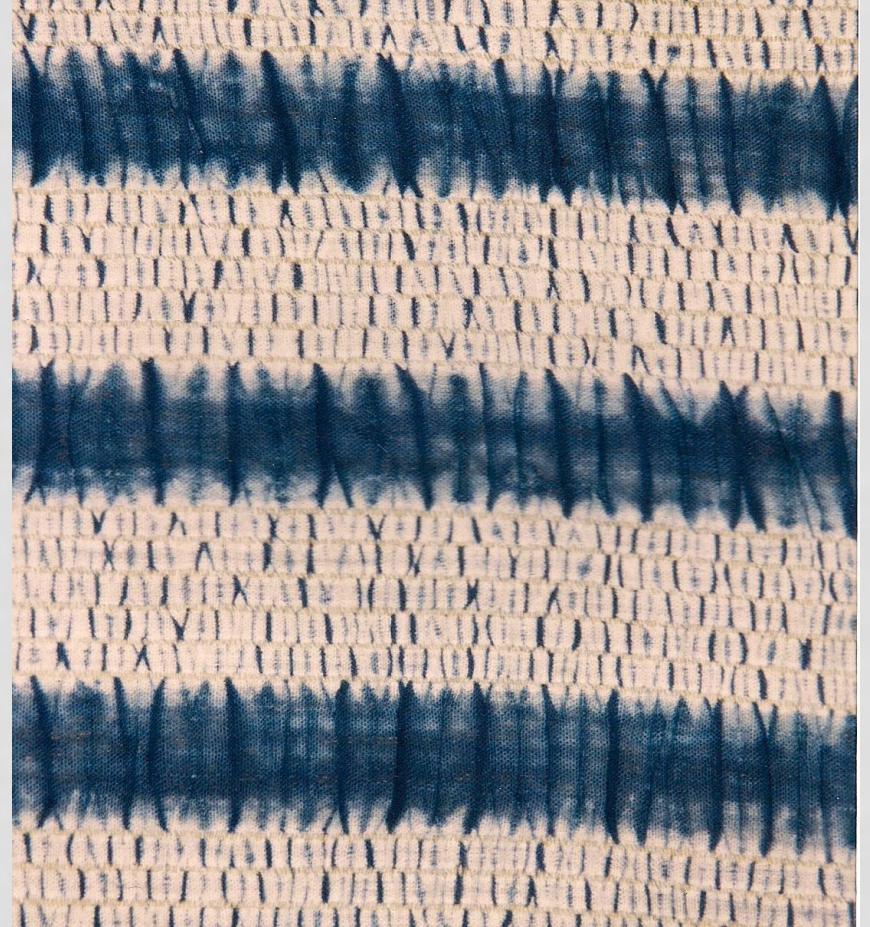
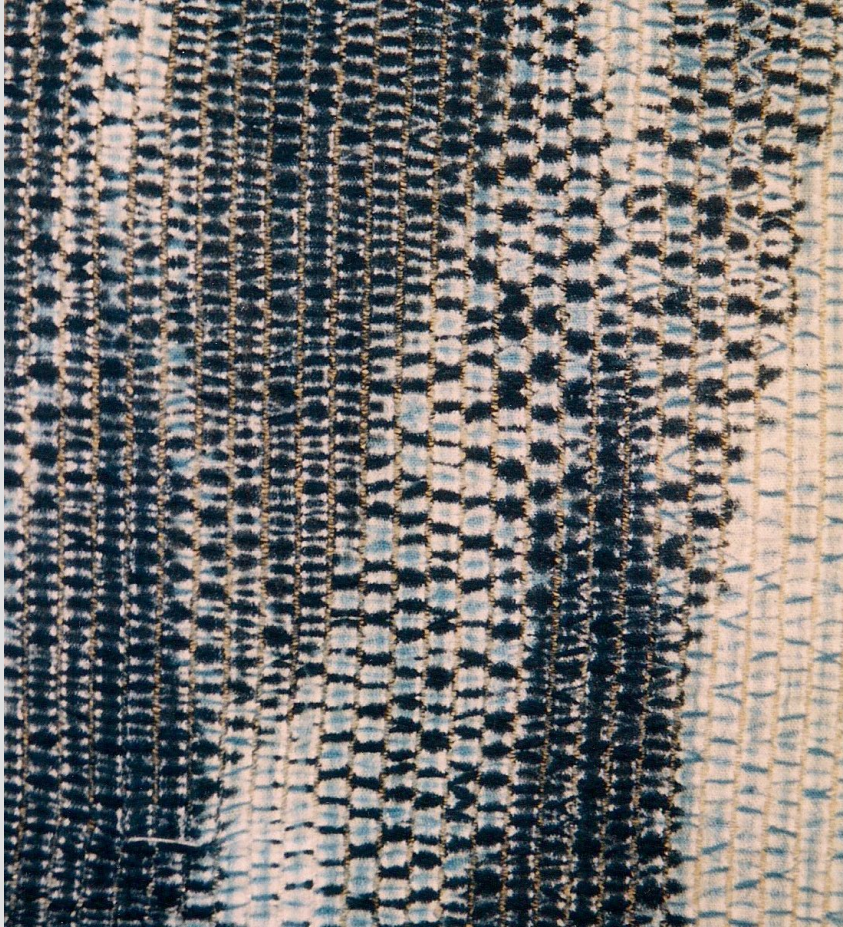
Arimatsu – Nagoia – Japan

An electric tool is used to hold the cloth taut and to bind the cloth. This technique is semi automated and is more efficient produces finer patterns than Tegumo Shibori

# AUTOMATED- MACHINE TIED JAPAN 1997



# WOVEN SHIBORI: JAPAN 1997



# WOVEN SHIBORI-ACQUIRED IN HANGZHOU CHINA. 2013



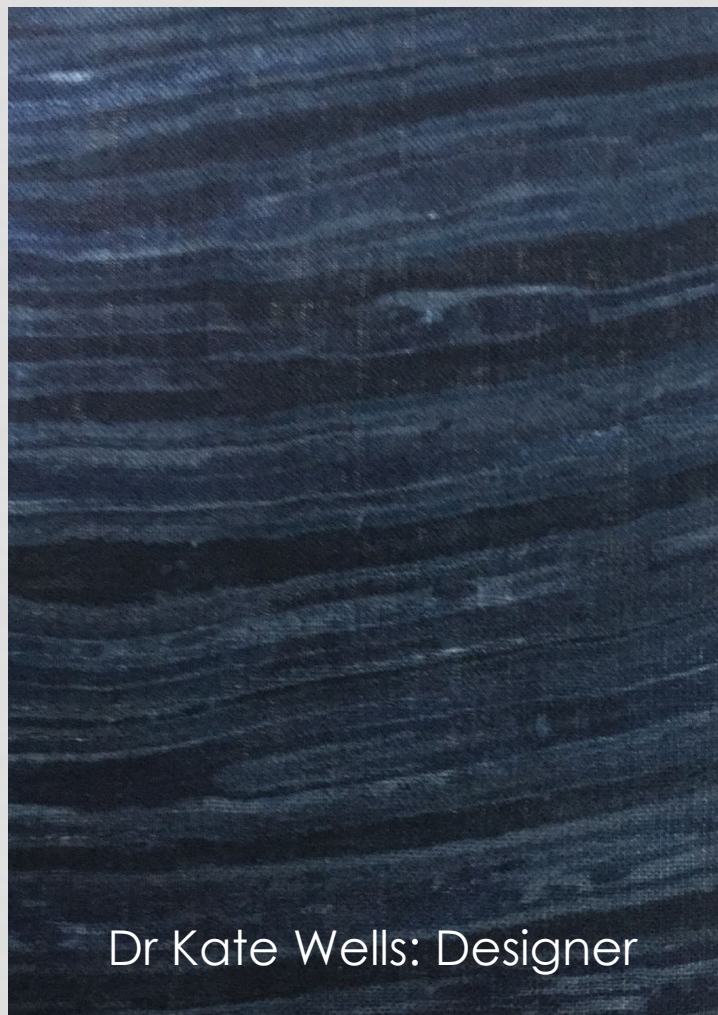
PRINTED COPY  
PRE - DIGITAL

20<sup>TH</sup> CENTURY- DR KATE WELLS

# HAND-RENDERED POSITIVE FOR FLAT SCREEN OR ROTARY PRINTING

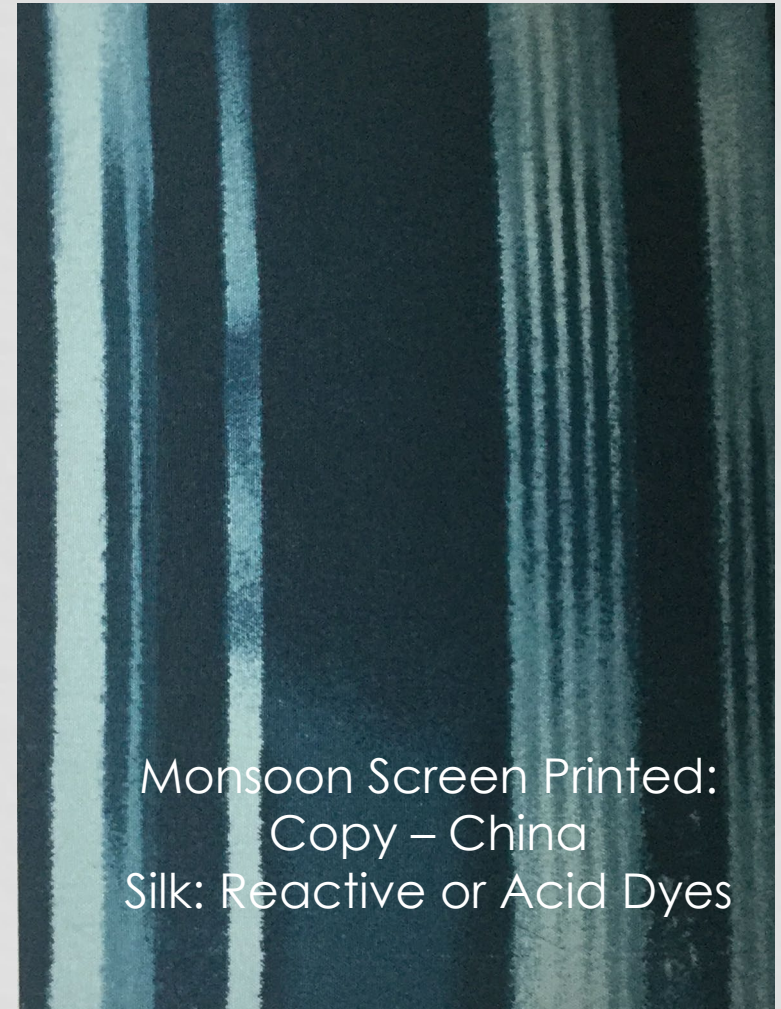
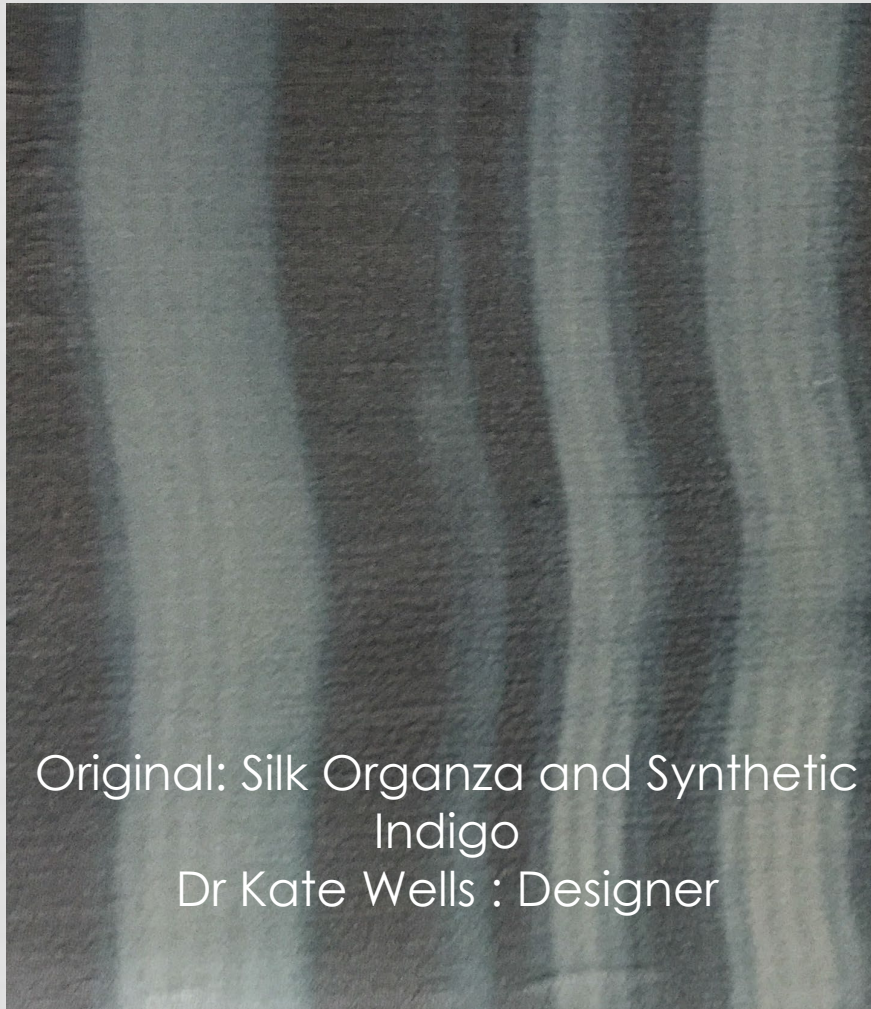


# MONKWELL - ORIGINAL AND FINAL COPY WITH A BLOCK PRINTED RESIST





# MONSOON ORIGINAL AND FINAL COPY WITH A BLOCK PRINTED RESIST



# NOW & THE FUTURE

21<sup>ST</sup> CENTURY

# DIGITISED AND COLOUR MODIFIED



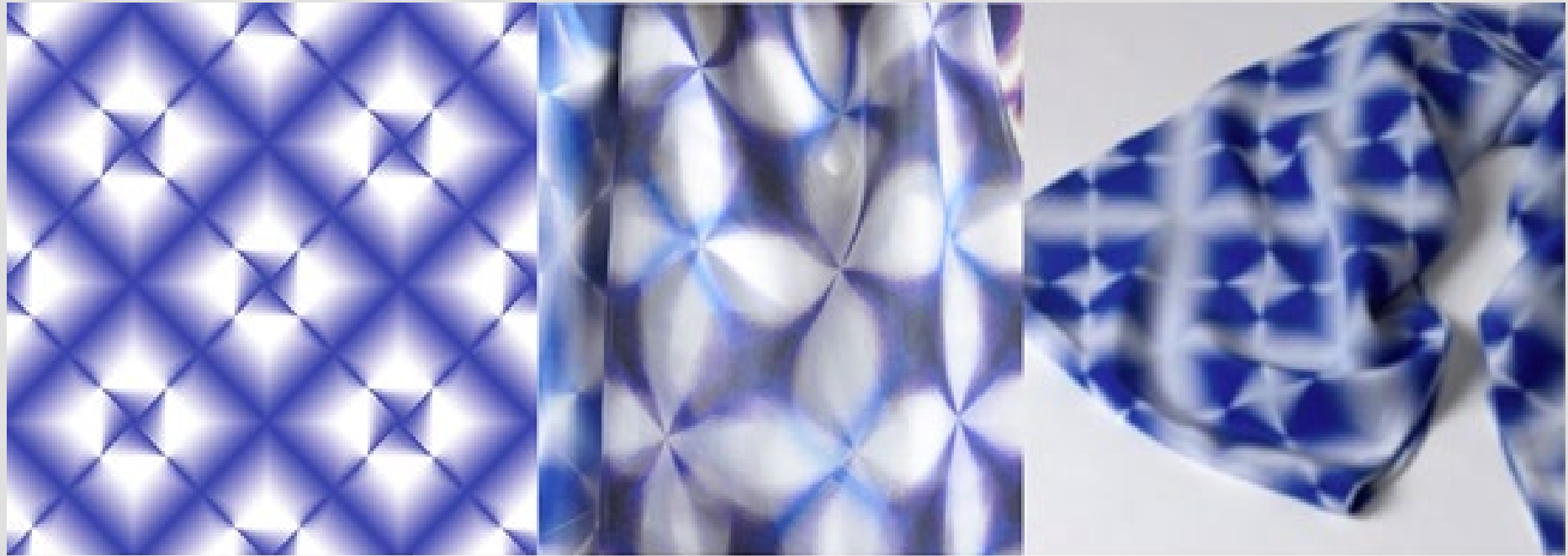
F. SCHUMACHER - TURNBULL DESIGNS  
DR KATE WELLS: DESIGNER



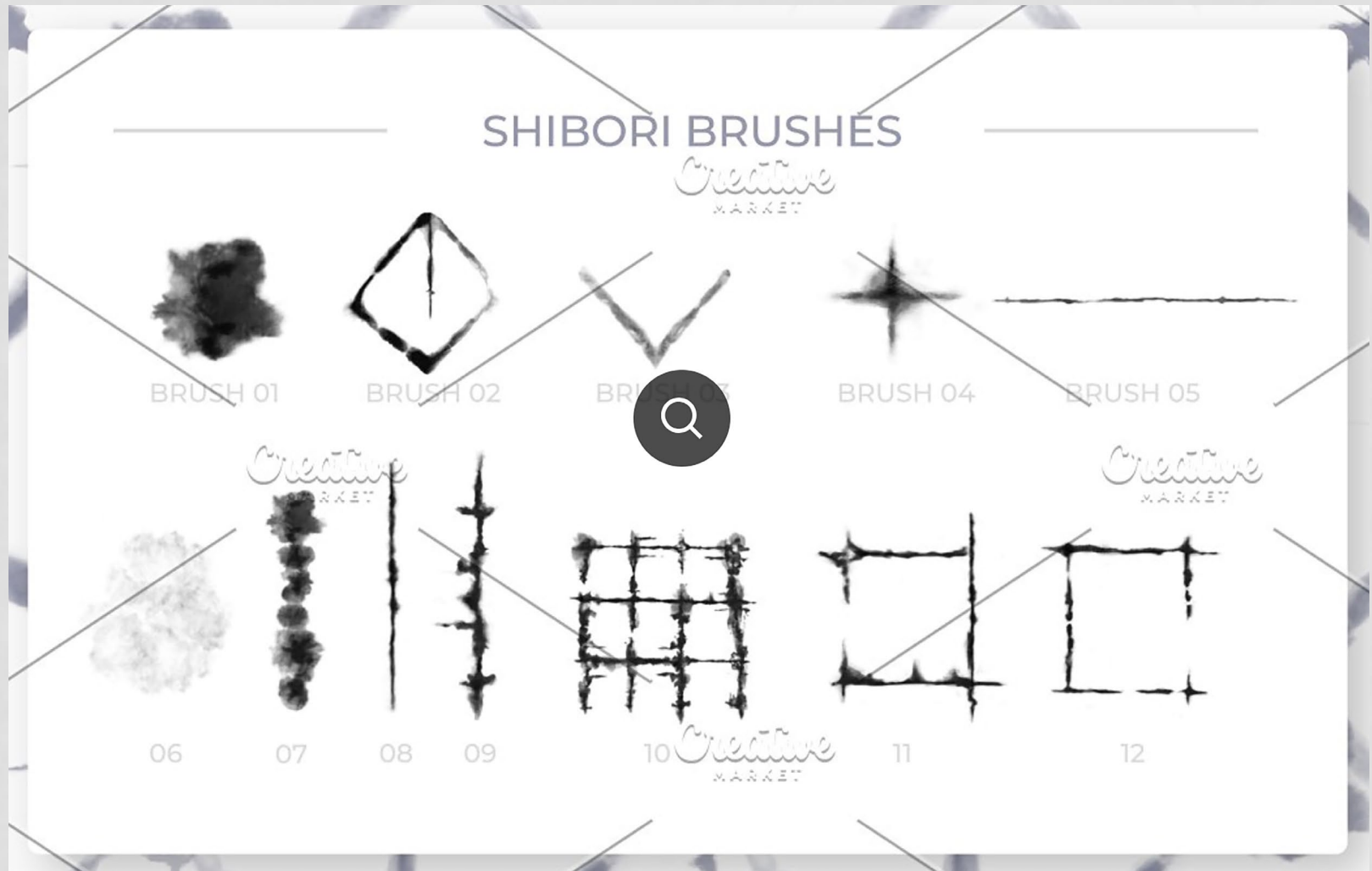


This printed linen evokes the traditional Japanese dye technique of shibori. **With its soft, blurred edges** Andromeda offers a splash of color and pattern.

MELANIE BOWLES: DIGITAL SHIBORI 2010.  
CRAFT COUNCIL UK 2019



# DIGITAL SHIBORI TIE-DYE PATTERNS BRUSH SET FOR PHOTOSHOP



# DIGITAL COPY

*patternbank*

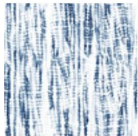
Designs

Collections

Premium

Trends

Blog





# IKAT

## TIED - PRINTED - WOVEN COPY

### Origins

- Bali - Ikat
- Uzbekistan - Ikat
- Japan - Karsuri (Ikat)

### Copy

- France C19th  
Block printed warps
- England C20th  
Shadow Prints
- Japan C20th  
Itajime Gasuri

# COMPLEX IKAT COAT FROM UZBEKISTAN



# BLOCK PRINTED WARPS: LYON C1800 FOR MARIE ANTOINETTE





# SHADOW PRINTS: C1920-30'S TURNBULL & STOCKDALE



# 'E-GASURI' OR 'ITAJIME GASURI' JAPAN 20<sup>TH</sup> CENTURY



# ITAJIME GASURI DOUBLE IKAT EFFECT



# DIGITAL WARP: PRINTING AND PRE-WEAVING





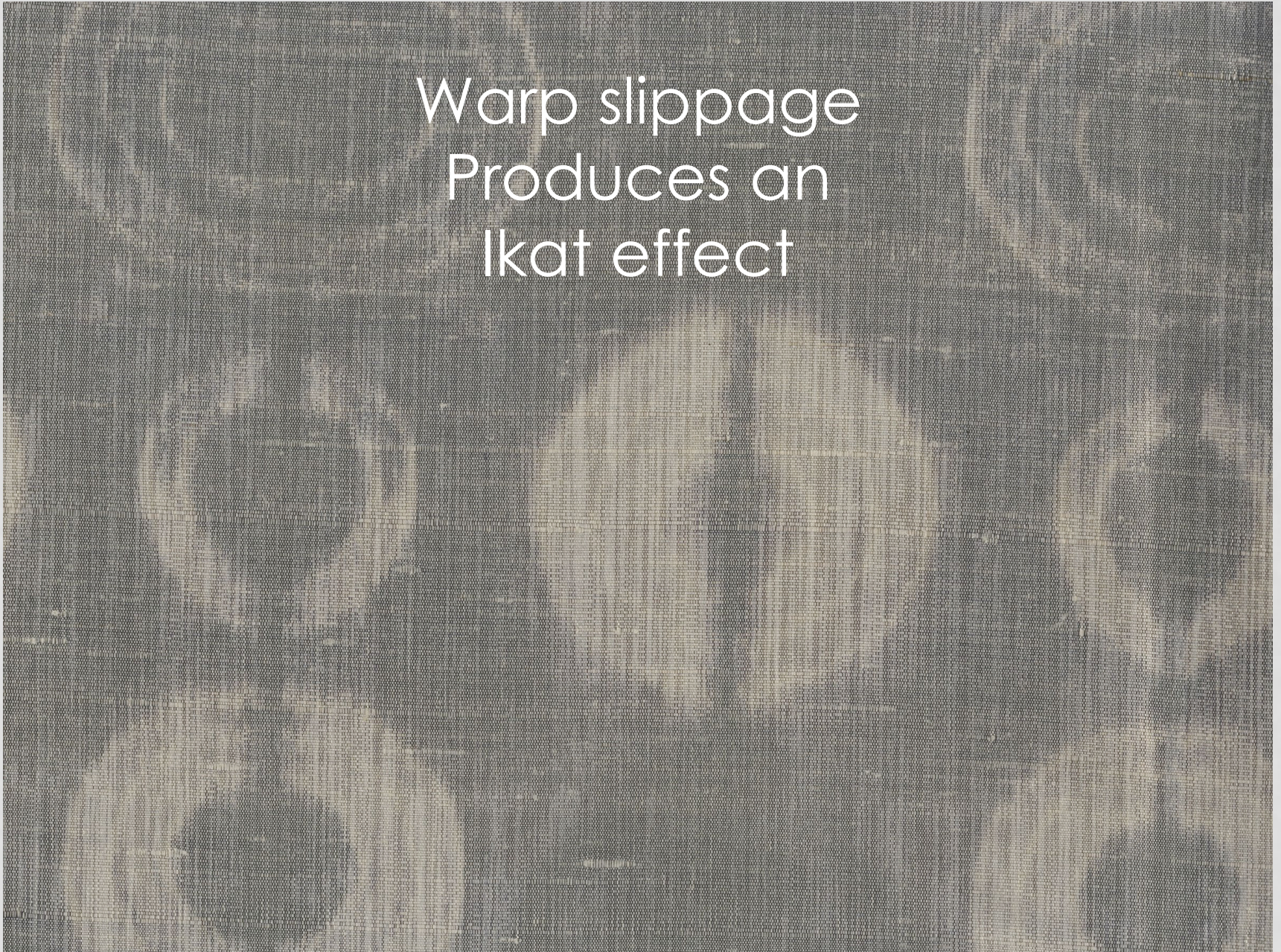
DIGITALLY PRINTED WARP BEING WOVEN  
FOR IKAT EFFECT.



DIGITAL IKAT - PRINTED WARPS  
TURNBULL DESIGNS: THIALAND



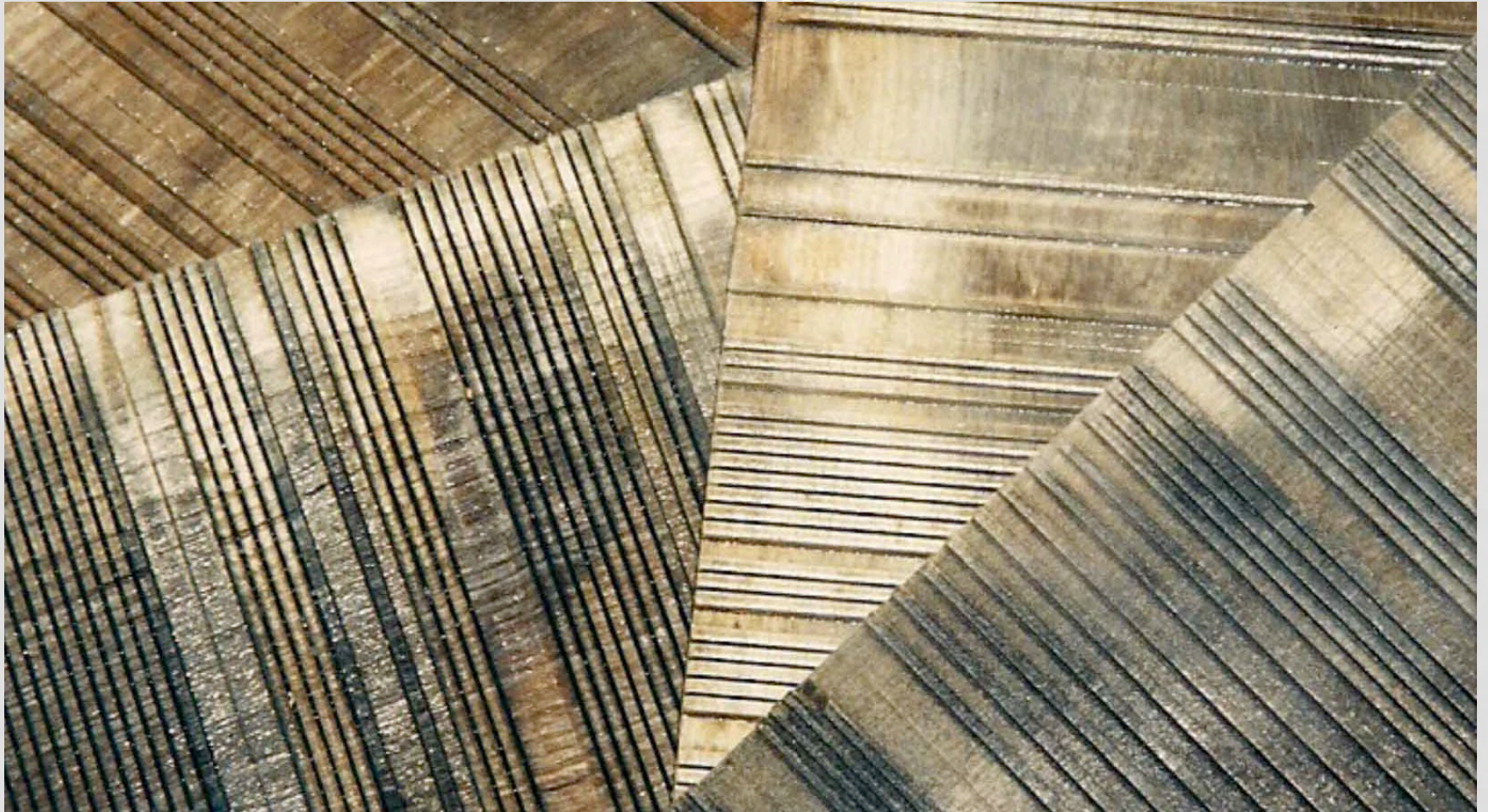
Warp slippage  
Produces an  
ikat effect



# CASE STUDY

INVENT – RE-INVENT ITAJIME GASURI

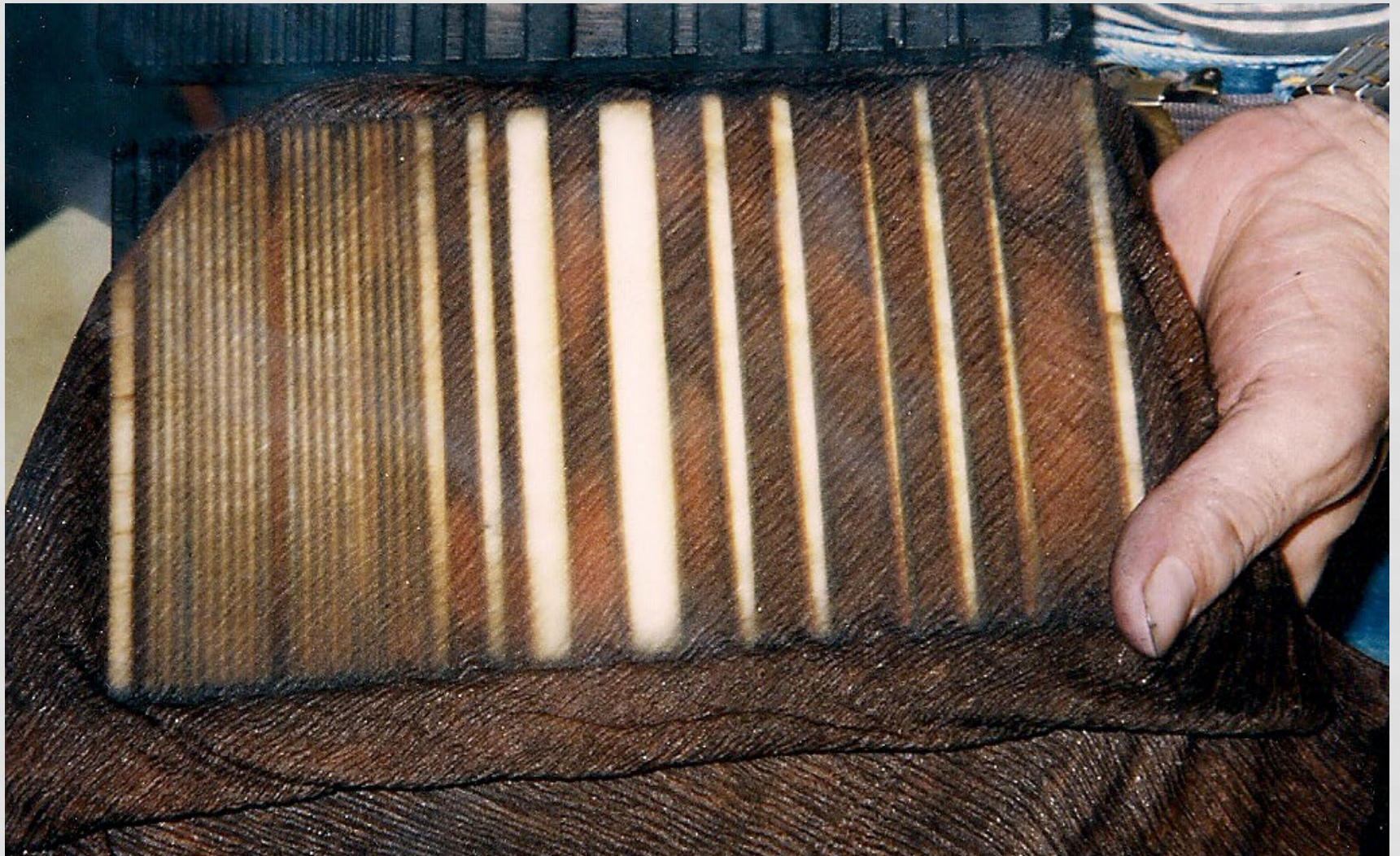
# COLLECTION OF ITAJIME GASURI BOARDS PRESENTED AS A GIFT - 1997



EACH SIDE MATCHES EXACTLY TO  
PREVENT DYE PENETRATION



POST-DYEING ONCE BOARDS ARE  
REMOVED WITH SMALLER BOARDS



# DESIGN RESEARCH EXHIBITION FOR PHD 'RESIST PATTERNING FOR CONTEMPORARY FABRICS'



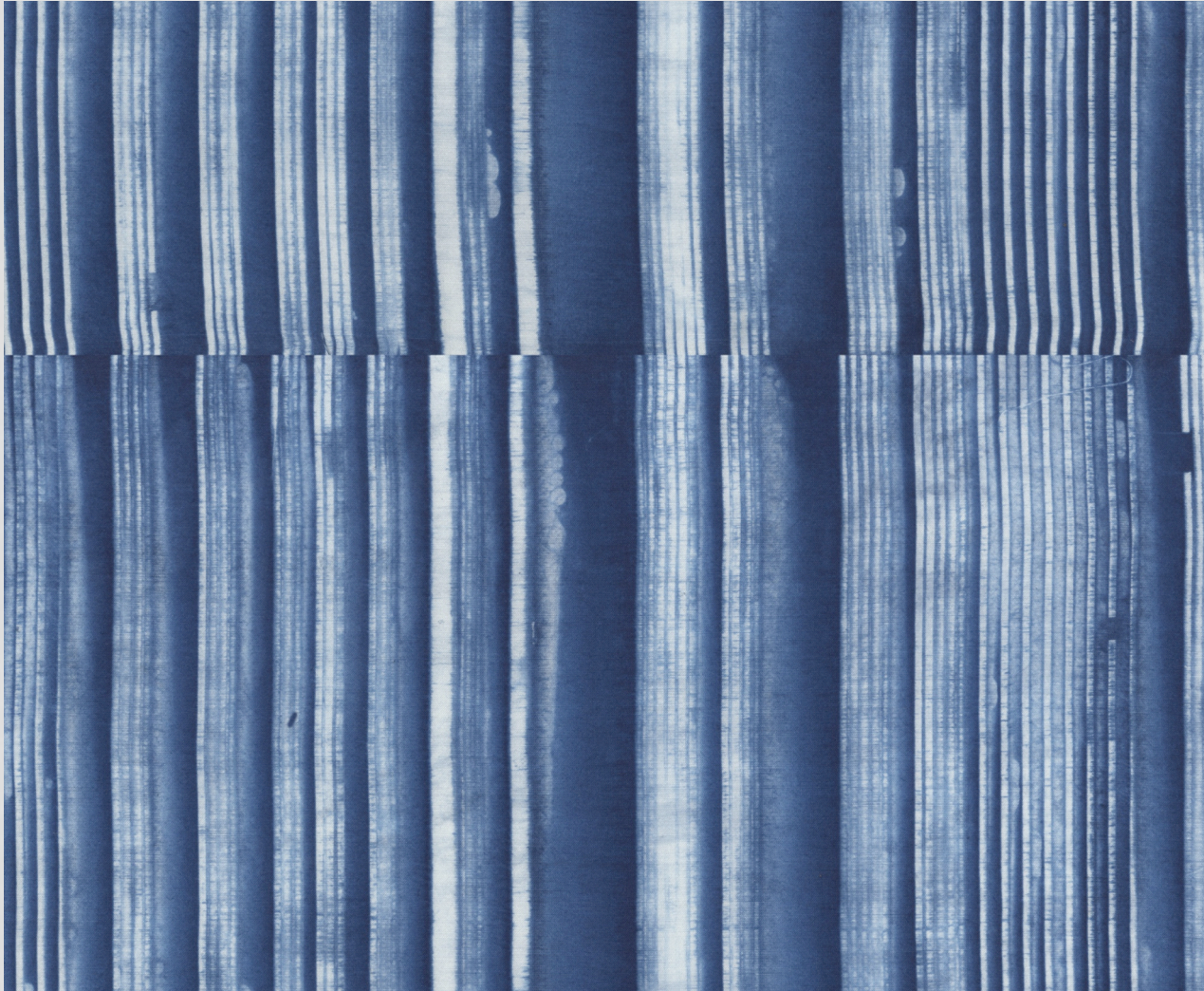
Dr Kate Wells  
1998. RCA



# INITIAL HAND PROCESS: ITAJIME AND SYNTHETIC INDIGO



# DIGITAL MANIPULATION OF SCAN IN PHOTOSHOP



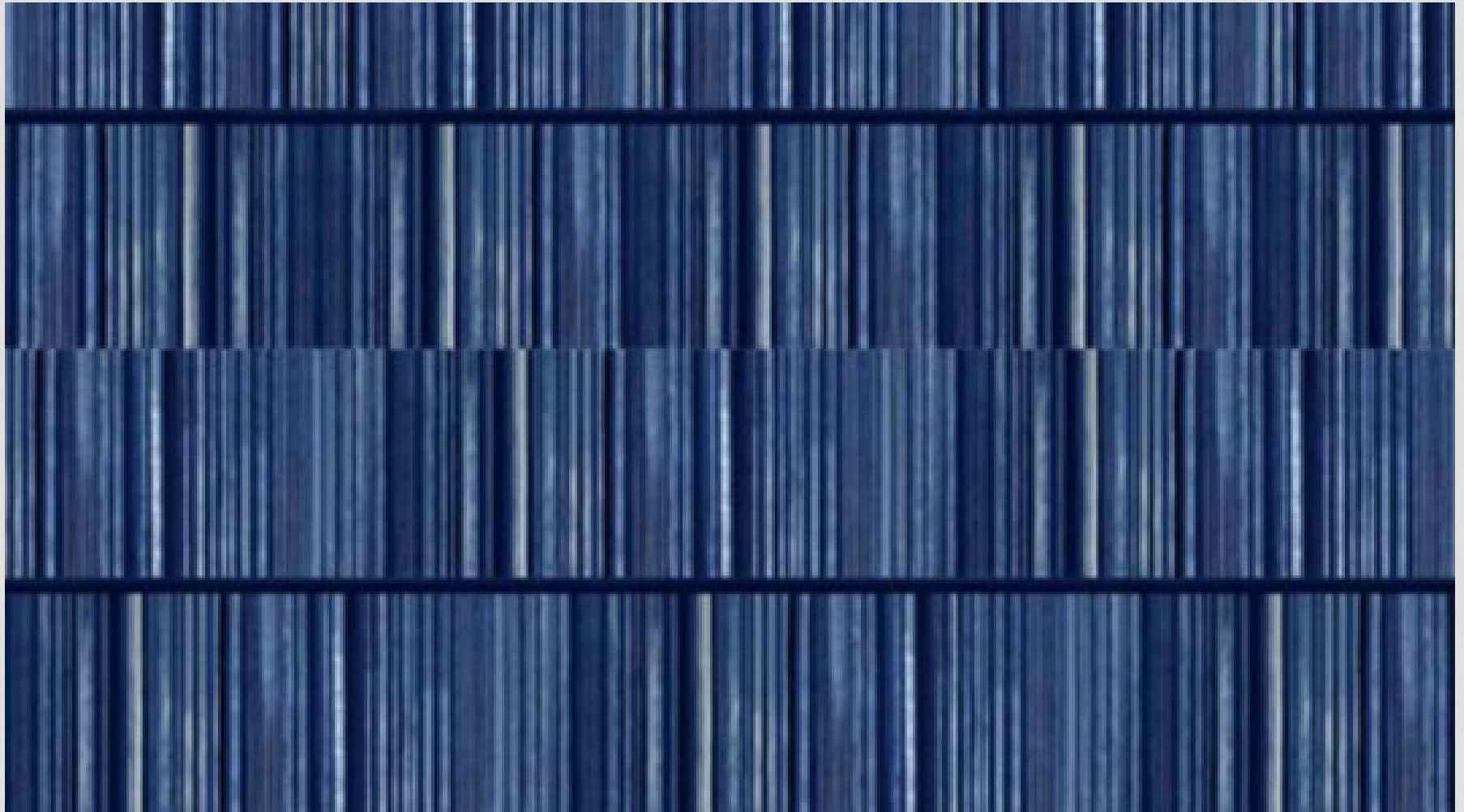
# FINALISED DIGITAL AND MODIFIED IMAGE



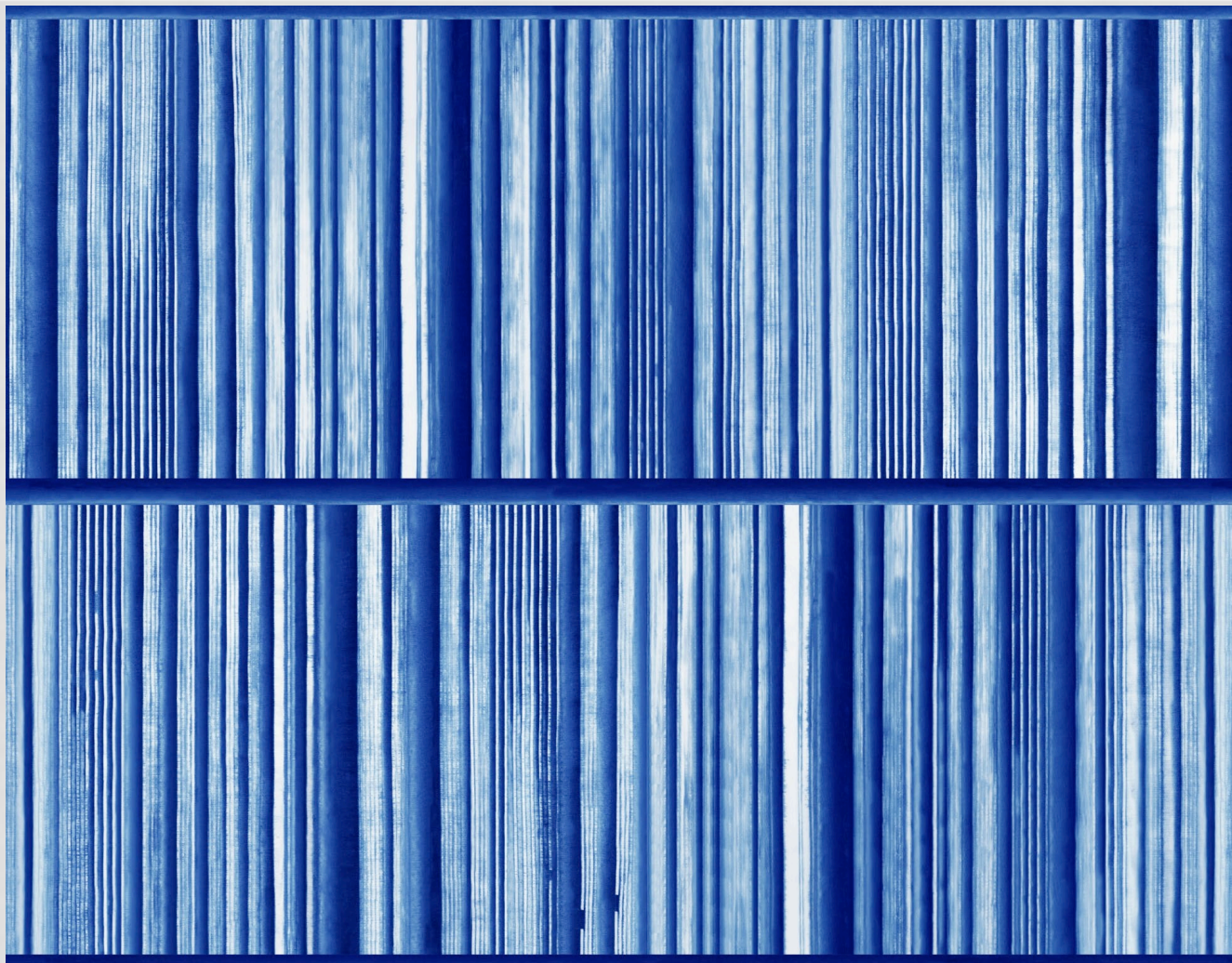
# DIGITAL PRINTED ITAJIME GASURI



# 'ITAJIME GASURI: DIGITAL WARPS'



# FINALISED DIGITAL FILE AND DESIGN FOR PRINTING WARP



# ITAJIME: DIGITAL WARP BLUE

DR KATE WELLS 2014 KATEELLS 2014



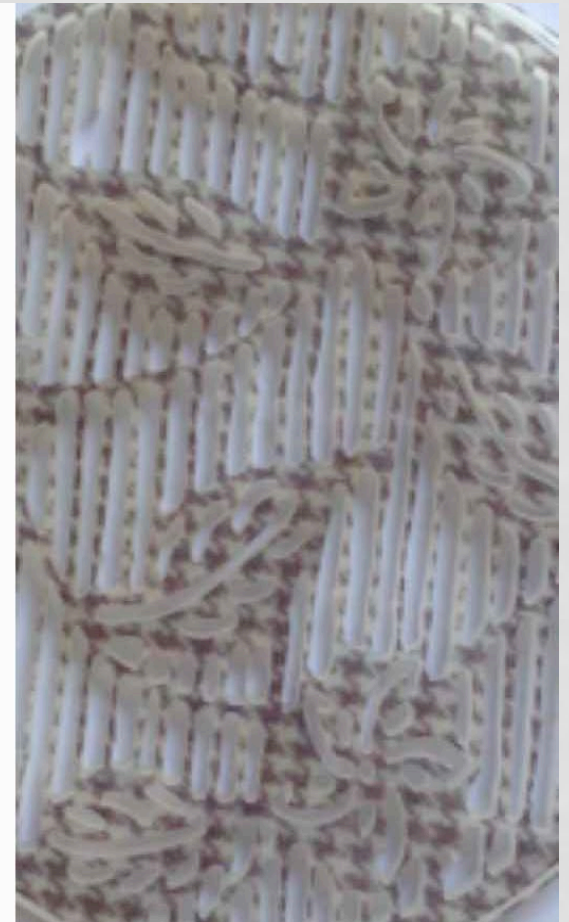
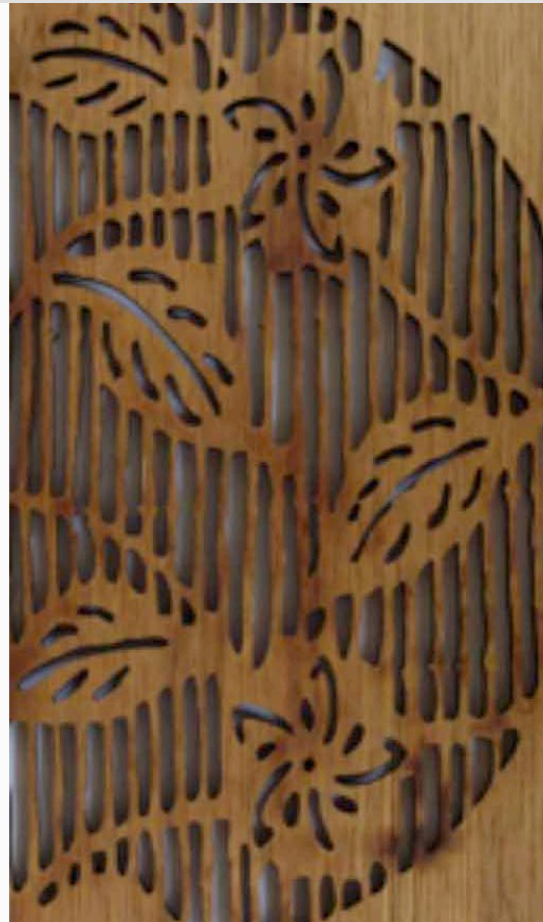
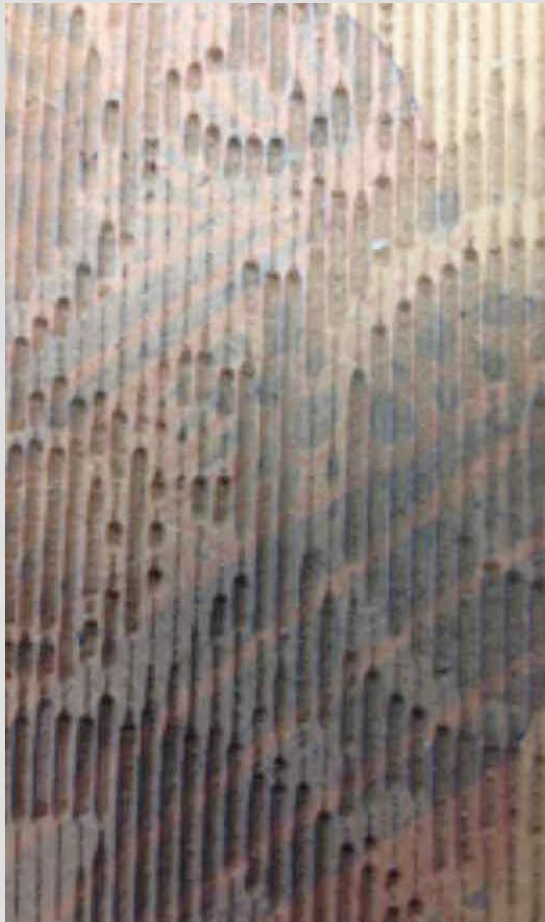




DIGITAL PROCESSES are facilitating the revival rather than the survival of the 'HANDMADE' process.

PAUL TURNBULL PRINTS go further than using digital Technology to mimic the traditional, but look at the soul of the HANDCRAFT to create new and exciting hybrid textiles

# COLLECTION OF DIGITALLY CREATED CLAMPING BOARDS



Jo Newton, University of Derby. 2013.

# IN CONCLUSION

*Surely it is the duty of each one of us to strive that this heritage may pass on to our successors unimpaired in beauty, and no less instructive to them than it has been to us, and to fight earnestly against modern vanity which would obliterate all traces of the bygone days when Art was living, with the dull nineteenth century stamp of feeble copyism or wilful falsification.'*

*William Morris*



# PERSONAL MANTRA

*What use is high  
technology if we do not  
know the soul of the  
craft?'*

Junichi Arai.1997 India