International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Critiquing and Abridging Transformational Reconstruction by Shingo Sato

Anushka Deshmukh[1], Nikhila Rane[2]

[1]M.Sc. Textile Science and Apparel Design student, SNDT Women's University
[2]Asst. Prof. Dept. Textile Science and Apparel Design, SNDT Women's University

Key words – Pattern making, origami, draping, two dimensional, three dimensional, basic block, sleeves, skirts, flat pattern, style line, fit, comfort, balance, proportion, notches, hatch marks, accuracy, transform, construct, reconstruct, gathers, pleats, ruffles, tucks, structure, illusion.

INTRODUCTION

Transformational Reconstruction is a technique of pattern making which helps to built effect in the garments while the pattern making step (Sato, 2011). Pattern making is process of making template for cutting pieces of fabric for making of a garment. It is essential to make pattern because it enables the 2D fabric to fit on 3D body. Pattern can be made either by flat pattern making or by draping technique (Thiel, 2023). Transformational Reconstruction is basically a flat pattern which when constructed together creates volume and different silhouette in design in correct proportion, balance and fit. TR helps a designer to use fabric like flowly material which can be frozen at a point when needed yet the garments are functional to use. Process involves construction of new shape in or on basic block pattern using fabric, paper and tape then the new design is dismantled in new pattern cutting is done on main fabric, it is usually done with two or more coloured material. The design is then reconstructed and finished. For the success of design choice of fabric for that particular design is important (Sato, 2011). Shingo Sato is a designer who introduced Transformational Reconstruction. He is a Japanese pattern making master and a designer (Welle, 2023). Shingo Sato has worked as technical assistant, modelist and designer. He's has also launched his collections of designs in Milan and Paris. He has his studio in Tokyo and Milan and also works as TR technique instructor for many design schools and universities (Sato, 2011). TR is great to infuse origami with fashion. Origami is traditional paper folding technique of Japan to create various shapes and figures (EuroSchool, 2023). Origami has inspired many designers, quilting and pleating is also a form of origami. Origami mainly helps to make 3D geometric dresses (Elmelegy, 2015).

Shingo Sato (tr_cutting_school, 2020)

STEPS OF TR FOR SUCCESS OF DESIGN ON MAIN FABRIC

For successfully getting the effect of designs as imagined a designer should first draw the concept to see that the design is proportionate to figure and balanced. It is necessary that well crafted basic body pattern is used as base pattern. Pattern should be great in fitting and all modifications should be done before starting TR. Accuracy should be taken care of. Legible lines should be drawn and notches should be cut frequently and carefully. When second layer is being draped base pattern should not he stretched or distorted. Allowance should be added to all cut pattern pieces. Fabric characteristics and grain line of fabric should be paid attention while easing, forming or stretching to have smooth design and we'll matched patterns. To maintain dimensional stability pattern should be pressed frequently. Planning of construction should be done before hand to avoid mistakes and enhance illusion by hiding seam joining. Seam direction and which seam should be pressed open should be analysed and finish the final garments well.

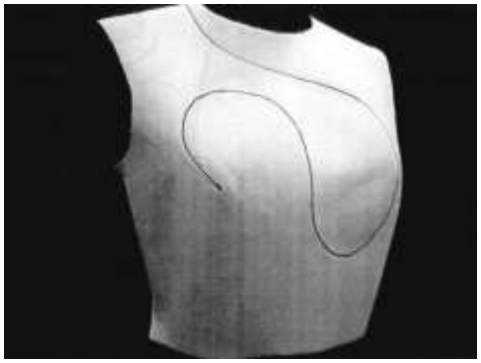
TRANSFORMATIONAL RECONSTRUCTION

Fashion design world in always involving and in this evolving world artists try to push their creativity and innovation. Shingo Sato has mainly recognised for his transformational reconstruction technique. His not so traditional approach to pattern manipulation has inspired many fashion artists world wide. Traditional pattern making is fused with 3D structures of garment by means of intricate cutting and manipulation. By experimenting with angles, folds and cuts the 2D pattern is transformed into 3D structured garment. This technique allows to make creative silhouettes and adding up a new dimension to design. It enables a designer to deconstruct and reconstruct the garment. This technique helps designer not to limit their creativity to traditional patterns and pushes their boundaries of design possibilities. Sato's work of draping is inspired by architecture hence the designs are structured and has architectural essence. Using TR technique allows designer to make garment visually amazing and flawlessly constructed and make designs that have sense of drama, structure and balance. By manipulating fabric with TR garments are brought to life with volume and textures. Eye catchy design can be created by using gathers, pleats and ruffles. TR helps to explore layering, asymmetry change position of seams unconventionally (Welle, 2023).

ABRIDGE OF LESSONS OF TR TECHNIQUE BY SHINGO SATO

Shingo Sato has not only invented Transformational Reconstruction technique but also has taught many students worldwide by means of his schools, book, YouTube videos, Facebook live, social media posts and other conducted classes. Sato has uploaded his classes right from the basics to every depth of the TR technique. He also posts his work videos which helps students to get idea of how he actually works. Sato has a YouTube channel named as 'trpattern'.

Sato has given a brief explanation of every detailed thing in his classes. Right from cutting, dart manipulation to draping in different forms. To be proficient in TR one should begin with dart manipulation. Principles of dart manipulation is easily accessible in any flat pattern making textbook. Blocks are known as slopers and it is better to work with half scale paper slopers until ready to work with full scale. First one should cut and sew the basic bodice block and do the test fit and press open the seams. Draw the design of new style lines with sharp pencil and make sure line passes through dart point. Cut the lines and pattern is ready flat. Add seam allowance and reconstruct the garment. Dart will be eliminated and new style lines will be incorporated (Sato, 2011, pg. 1).



Dart manipulation (Sato, 2011).

Pattern puzzles can also be made using TR technique. In it there are inserts in middle of pattern piece, it can cross seam lines. It consists of making hatch marks and rejoining the pieces. It is better to letter or number the hatch marks in sequence. It allows to incorporate different fabrics, textures, colours or nap effect (Sato, 2011. Pg. 7).

Volume into flares is insertion of flare and gathers. For gathers one should carefully know where to insert extra width and fouls. Main pattern should be copied and slashed for gathers and this draping layer should be pinned on the pattern piece. Gathers stitch should be enough to adjust fullness. Gathers should be retained to original pattern piece. Pin the layers, adjust puff and stitch the pattern. For flare triangles can be inserted instead of slashes. For addition separate flare section can be added. Triangles should have one straight grain vertical edge (Sato, 2011, pg. 17).

Pattern puzzle (Sato, 2011).

Volume into flares (Sato, 2011).

For easing and forming one should study figure and mark the cardinal points and apex areas of body while designing. Identify the definite points clearly and redraw guided by pattern. Eliminate basic seams and draw new TR pattern. New lines should pass within 3 to 4 cm from original points to be flattened. After slashing there may be some curve areas which has not been flattened, one needs clip and ease them and reconstruct the pattern. It is better to use fashion fabric that allows forming (Sato, 2011, pg.25).

Armscye transformation is a further step into pattern processing which happens if 3D shapes are being cut from flat fabric. Wearablity should not be compromised. It is important that the base pattern is sewn and test fit. 8 equidistant points should be marked around armscye. Draw new lines, add notches, cut the new seam. Process reconstruction by easing and forming to get matches of seam (Sato, 2011, pg. 37).

Easing and forming (Sato, 2011).

Armscye transformation (Sato,2011).

Draping is cutting on the model or dress form but in TR draping is done on cut pattern. Different fabrics, nap direction, grain lines, stripes gives different results. Twisted layers is one of the design in which twist and swrills can be added. After the styleline and is confirmed and fit is tested cut the pattern on main fabric make notches, add seam allowance. Some or all pieces can be used as base pattern for draping. Enlarge the pattern on which drape has to be done and manipulate the extra fabric on the pattern pieces until desired appearance. Pin the drape, stitch and trim the excess matching to base pattern. Sew all pattern pieces together and allow fabric to create undulating shapes. Exact amount of drape should be judged by experimenting. While shaping take care that dimensional stability or shape of base pattern is not effected (Sato, 2011, pg. 47). You can also make swirls using same technique, swirls are pinned at a point (Sato, 2011, pg. 51).

Twisted layers (Sato, 2011).

Swrills (Sato, 2011).

For sleeve draping it is similar as of draping of bodice, skirt or dress pattern. Complex designs are made possible by dividing sleeves lengthwise and crosswise. For sleeve it is important to keep exact seam allowance of pattern pieces (Sato, 2011, pg. 65)

Origami is traditional paper craft technique of Japan, it is used in TR pattern technique. In TR origami pattern are folded on table and then reconstructed in 3D form. Firstly make style lines, cut and slash the flat pattern, draw new fold lines in each pattern, add pleats by cutting on new fold lines, spread the section, insert paper with masking tape and make pleats. Pleats should be minimum 5 to 6cm in depth to be stable. Mark notches before cutting. In curve areas where the structure lifts up some sections will shift diagonally and measure longer while other sections may not. To make edges of same length slash and spread or fold the excess. Seam should be pressed open from corner and corners should be trimmed (Sato, 2011, pg. 71)

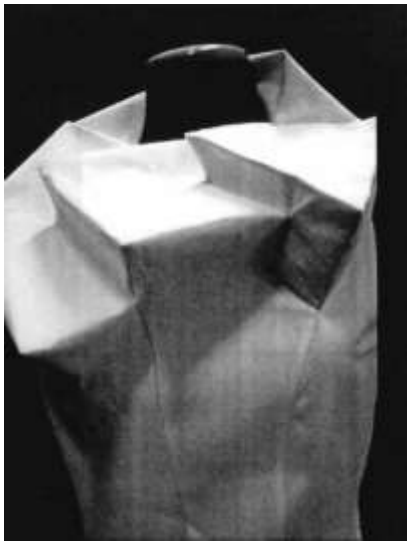
Sleeve draping (Sato, 2011)

Origami pattern (Sato, 2011).

For architectural reconstruction 3D effect can be achieved by simply applique maintaining proportion and balance. 3D effect can be achieved by maintaining fit and comfort. For boxes first make the sketch of design, make boxes with paper using tape. Place the boxes on garment as required fix them with tape and make sure garment shape is not distorted. Position the style line through cardinal point of basic pattern to minimise the pattern pieces and seams. Take special care at corners of boxes, press open seams (Sato, 2011, pg. 77)

Cheating on eye is kind of optical illusion. It is important to work on paper model first, many different effects are possible using overlaps, folds and layers with style lines (Sato, 2011, pg. 84). For balloon technique, the puff is created without gathers or tucks. First draw the style line, determine the size of balloon, allow the depth, trace the pattern, divide the portion in halves. In each half insert triangle with round edge, rejoin the halves make balloon and place it to the original traced pattern. Reconstruct the patterns with balloon integrated in the dress (Sato, 2011, pg.92).

3D vortex is a technique in which cone is made and inverted into itself to make a vortex. Cone can be made with half or three quarter of a circle. While pushing the cone down make sure to twist it a little for more interesting look (Sato, 2011,pg. 96).



Architectural Reconstruction (Sato, 2011).

Cheating the eyes (Sato, 2011).

For reversible TR all other techniques from style lines, cutting to reconstruction are all same as above. Here you can also use drape on style lines and smooth style lines on other side. Suitable double faced fabric, hand finishing of edges and seams are something which has to be perfect (Sato, 2011, pg. 106).

3D vortex (Sato, 2011).

Reversible TR (Sato, 2011).

There are also addendum given to enable students to differentiate between Transformational Reconstruction and Conventional pattern design (Sato, 2011).

There are detailed videos of how to stitch pointed angles (trpattern, 2010), tight curves (trpattern, 2010), how to construct M pockets (trpattern, 2010), 3D pocket (trpattern, 2010), alteration technique (trpattern, 2010), alteration on human body (trpattern, 2012), knotted pockets (trpattern, 2013), box integration technique (trpattern, 2013), different origami techniques, draping moulage, trompel'oeil technique (trpattern 2024) and many more such videos.

CONCLUSION

Transformational Reconstruction is a technique which is combination of flat pattern making and three dimensional effect on garment. Making a style line, cutting, transforming patterns and reconstructing are the basic steps which every TR technique has. Marking notches, apex points, cardinal points and matching them while reconstruction is important. There is basic theory for TR but experimentation is key to creative and innovative designs. Starting with half scale will avoid wasting resources.

REFRENCE

1. EuroSchool. (9 August 2024). *Origami- Meaning, history, types and facts.* Retrieved from https://www.euroschoolindia.com/blogs/origami-meaning-history-styles-facts/#:~:text=Origami%20is%20a%20traditional%20Japanese,and%20%E2%80%9Ckami%E2%80%9D%20meaning%20paper.

2. Sato, S. (2011). *Transformational Reconstruction by Shingo Sato*. Centre of Pattern Design. Retrieved from https://www.pdfdrive.com/transformational-reconstruction-shingo-sato-e188948796.html
3. Thiel, S (13 January 2023), *Apparel pattern making : A guide for fashion designers*. Techpackers. Retrieved from https://techpacker.com/blog/design/apparel-pattern-making/#:~:text=the%20ideal%20fit.-,What%20is%20Pattern%20Making%3F,trims%20that%20will%20be%20used.
4. tr_cutting_school (15 October 2020). Creative moulage workshop by Shingo Sato [Photo]. Retrieved from https://www.instagram.com/p/CGWI89vF7ZG/?igsh=MTE3OW9oOWsxZHJpbg==
5. trpattern (20 July 2010). *TR Cutting School (sewing skills – how to stitch pointed angles)* [Video]. Retrieved from https://youtu.be/YJCI3kkn4cA?si=n8MLgPKydEbDiKHk
6. trpattern (20 July 2010). *TR Cutting School (sewing skills – how to stitch tight curves)*[Video]. Retrieved from https://youtu.be/6xf2UHDkLDM?si=1G0rCs9S2jVd99Mu
7. trpattern (20 July 2010). *TR Cutting School – How to construct "M" pocket* [Video]. Retrieved from https://youtu.be/HBOFafRLr10?si=4coTqzbwz1z9SL7S
8. trpattern (30 July, 2010) *TR Cutting School – How to construct a 3D pocket* [Video]. Retrieved from https://youtu.be/cZ9cH7GtZLE?si=v_JcQm0-81Nm0f8A
9. trpattern (3 August 2010). *TR Cutting School – Alteration technique* [Video]. Retrieved from https://youtu.be/v-Jibu0Fte0?si=11XPKfiOyf0WF5iP
10. trpattern (18 March 2012) *TR Cutting School by Shingo Sato – TR Alteration on Human body* [Video]. Retrieved from https://youtu.be/SaDVLtugs8Q?si=abFEbYfb61ccr6hS
11. trpattern (16 November 2013). *TR Cutting School – Online Class – Knotted Pocket* [Video]. Retrieved from https://youtu.be/cMPtbvhpN5A?si=4_bWt315Q0h4smtr
12. trpattern (21 November 2013). *TR Cutting School – Online Class – Box Integration Technique* [Video]. Retrieved from https://youtu.be/x2EAJMwJ0gc?si=Y9Yec392WERXyCNC
13. trpattern (29 February 2024). *Trompel'oeil technique* [Video]. Retrieved from https://youtu.be/Ci2hCueJfhA?si=_LHrjPIomu9gLikc
14. Welle, S (19 June 2023). Exploration techniques Japanese designer Singo Sato. Dutch couture academy. Retrieved from https://www.dutchcoutureacademy.com/verkenning-technieken-japanse-ontwerper-shingo-sato/?lang=en#:~:text=Among%20these%20visionary%20designers%2C%20Shingo,inspired%20countless%20fashion%20enthusiasts%20worldwide.