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Innovative application of 2D & 3D Digital design tools for learning and teaching in FE Fashion Design

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West Yorkshire, UK.

Presented at:
The FE CoVE Fashion Event, hosted by University of the Arts.
In; Rootstein Hopkins Space, The London College of Fashion, UK.
July 2004.

Digital Collaboration between CoVE Colleges

- …All collaboratively interested staff and students visit to LCF…
- Chesterfield visits to
- Batley School of Art & Design visits ……

- Project planning:
- Shared ideas and cross college practice
- Demonstrated CoVE technologies
- Evaluated applications for Joint project

3D Research Experiment opportunity

- Opportunities created through CoVEs
- CoVE funding enabled introduction of new technologies in FE Art & Design
- Provided a Unique Opportunity to evaluate 3D software for FE Fashion Design learning in future

2D Digital tools used in Joint ND Fashion Project

2D Digital illustration tools

- Adobe Photoshop + Adobe Illustrator

2D CAD pattern design

- + digitiser
- Cad.Assyst + plotter
- Pattern scanner + i-grafx designer

Digital Textiles Design

- Digital Fabric printers

3D Digital tools used for research and development in Joint ND Fashion Project

3D CG Software

- 3DS MAX – 3D Modelling + animation tool
- Character studio – 3D character design/animation
- Poser – 3D character creation/animation

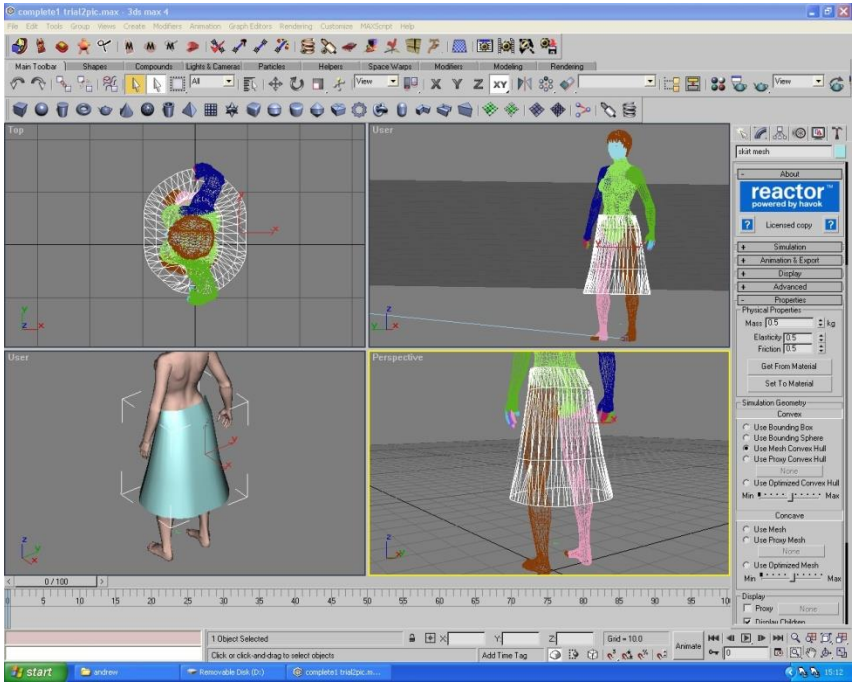
3D Plugins:

- Stitch + Cloth fx

Virtual 3D Clothing simulation software
- Clothing industry sample + merchandising tool

- V-Stitcher (Browzwear - FreeBorders)

‘Research into 3D technologies and cloth animation in Fashion design education’

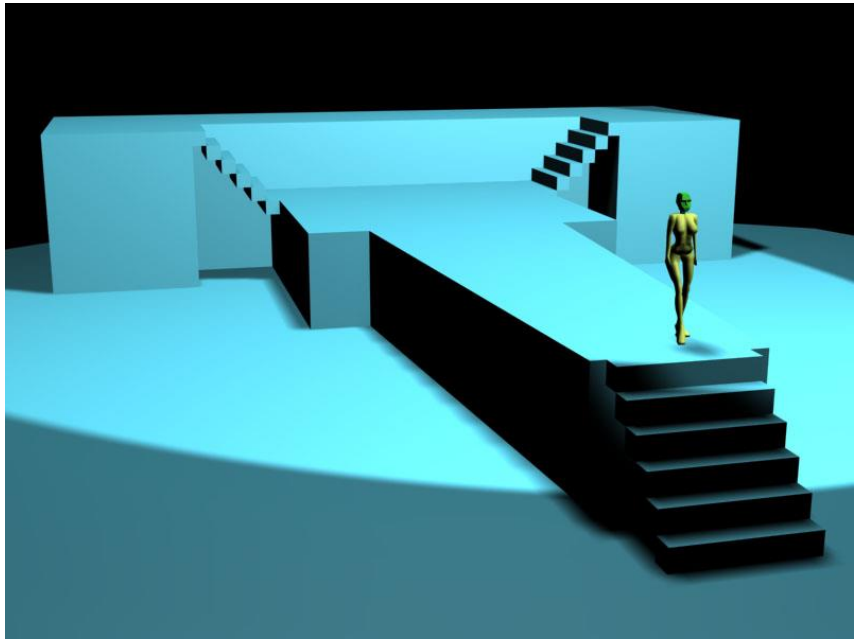


3D cloth animation experiments by Andrew Taylor

3D cloth animation experiments by Andrew Taylor

Exploring use of 3D software applications in Art + Design at Chesterfield College

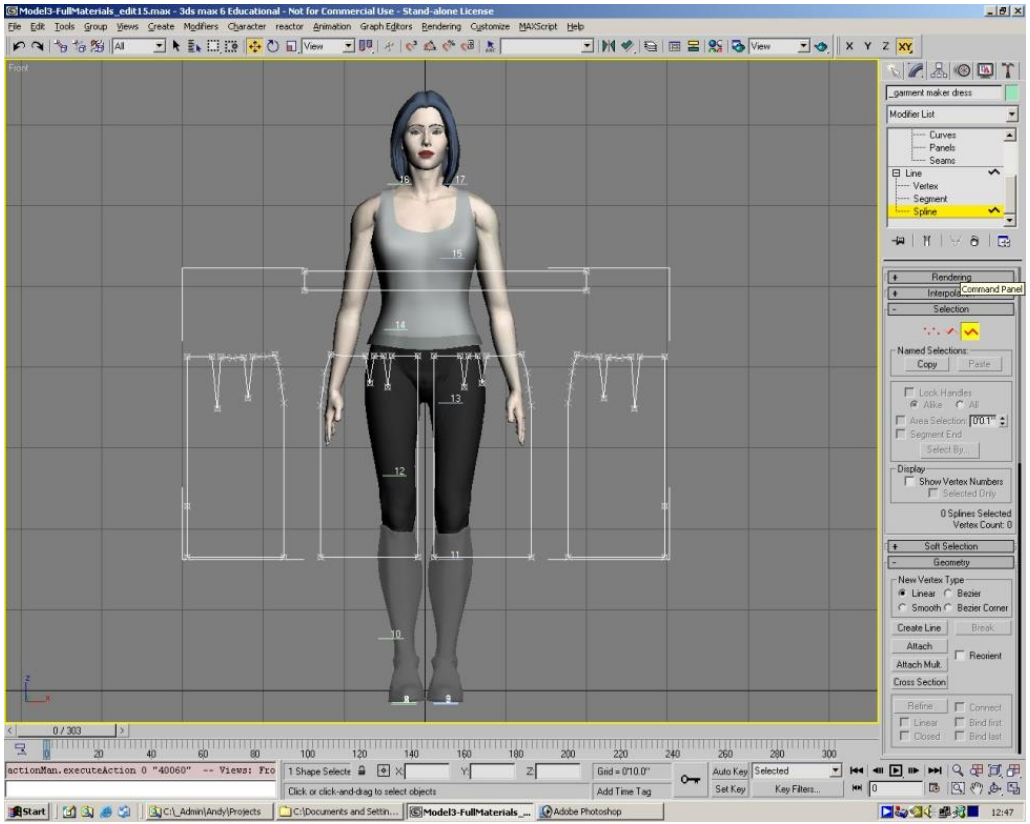
3D character by Nathan Smith at Chesterfield College



Virtual catwalk by Nathan Smith at Chesterfield College

Spatial Design project animated character for office space

Open Cloth fx skirt shapes -
- import Poser girl - 3DS Max – ClothFx –
Adobe AfterEffects – Animated in 3DS Max

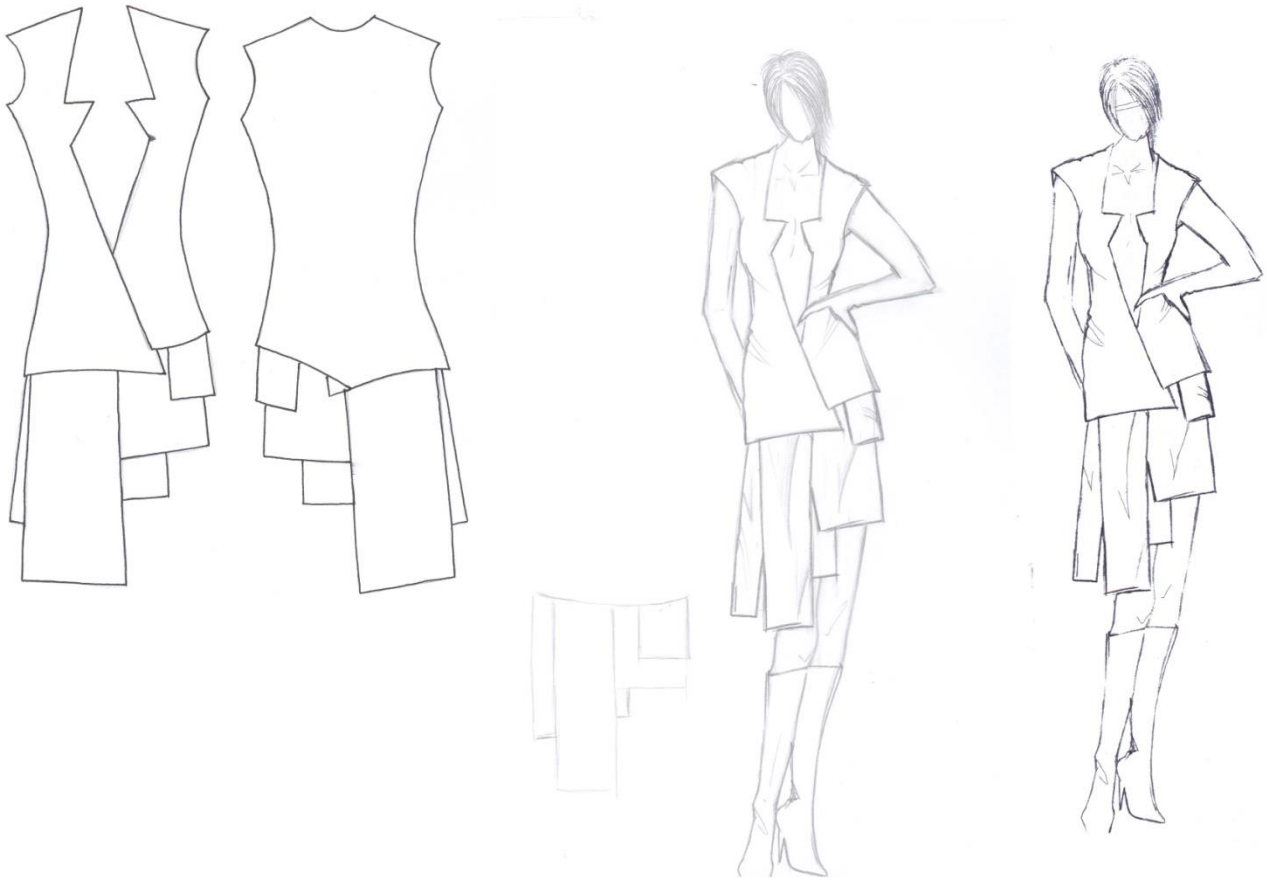


2D - 3D garment development
How we setup design-realisation experiment…

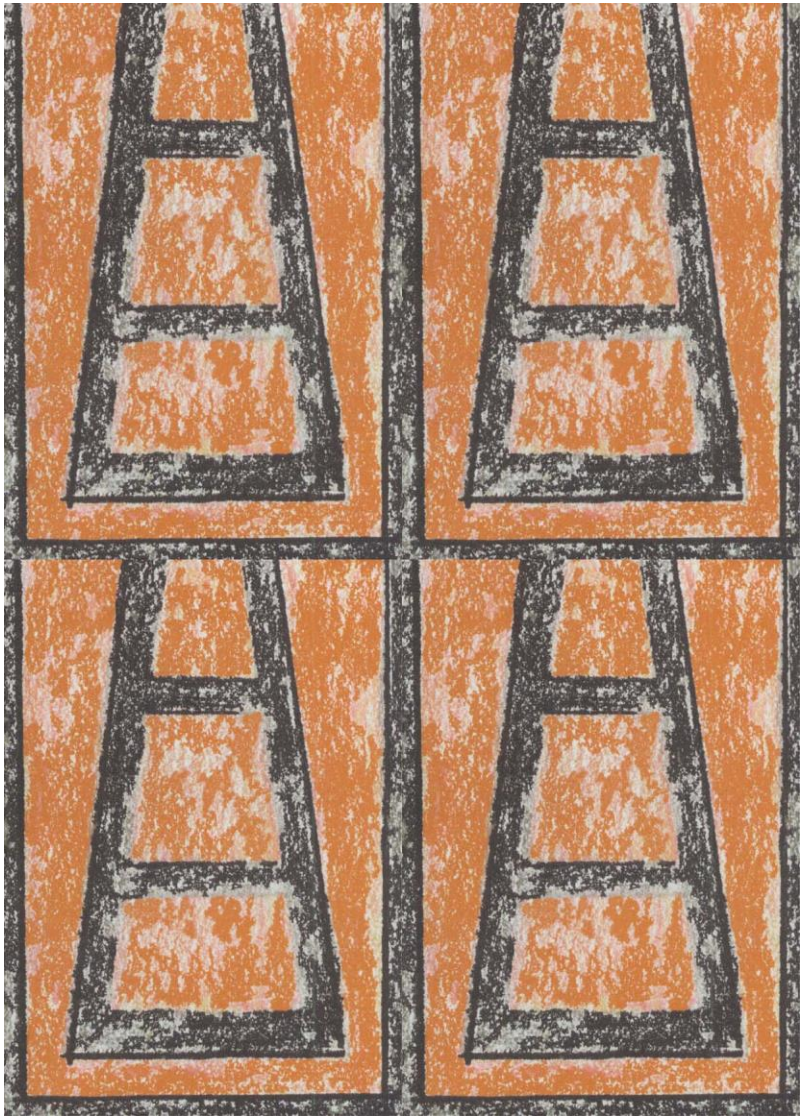
- Method 1:
  3D CG modelling and Animation software

- Method 2 : 3D Clothing Specific software

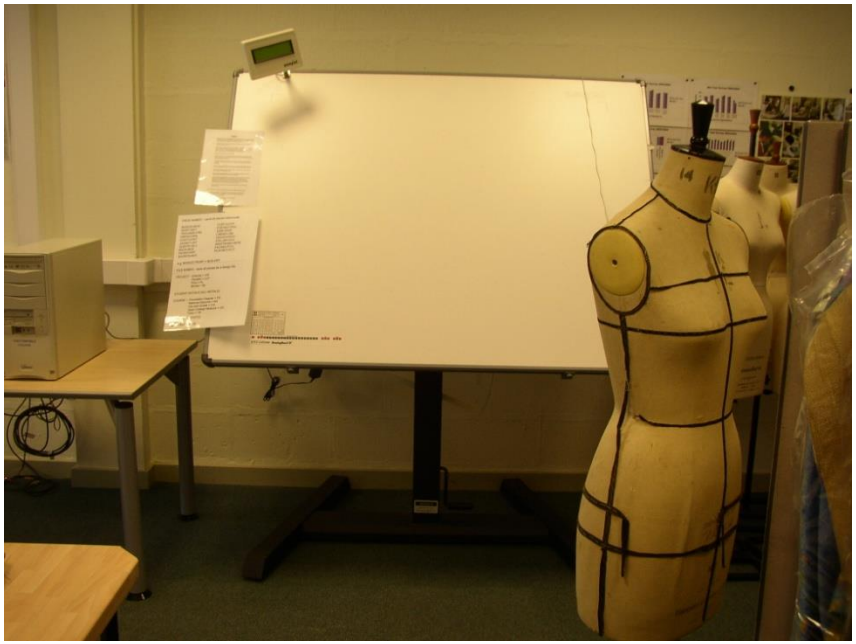
Method 1: 3D CG software
2D hand drawn - photoshop



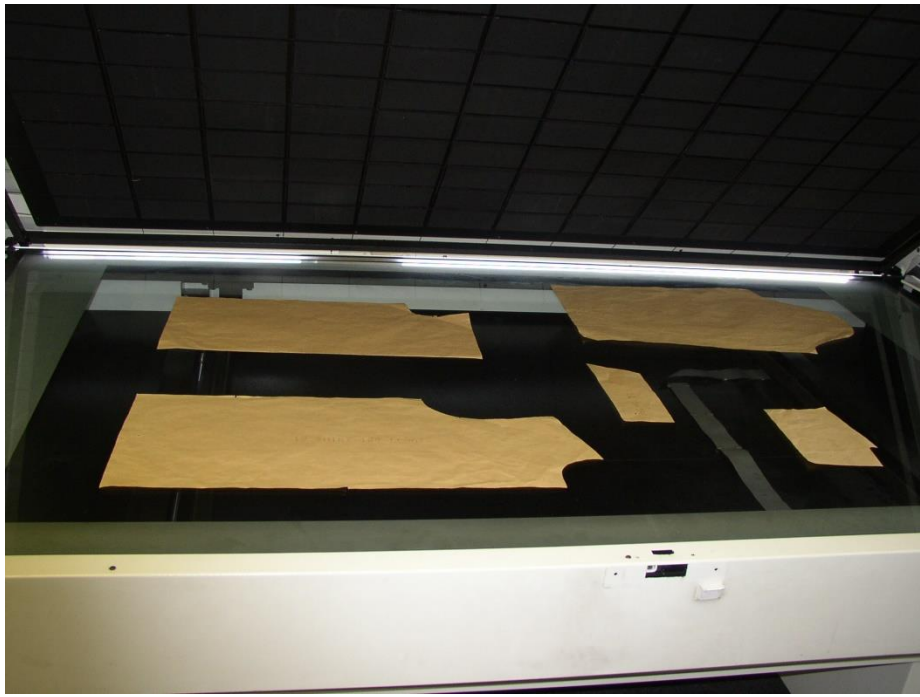
Digital Print repeat design in Photoshop



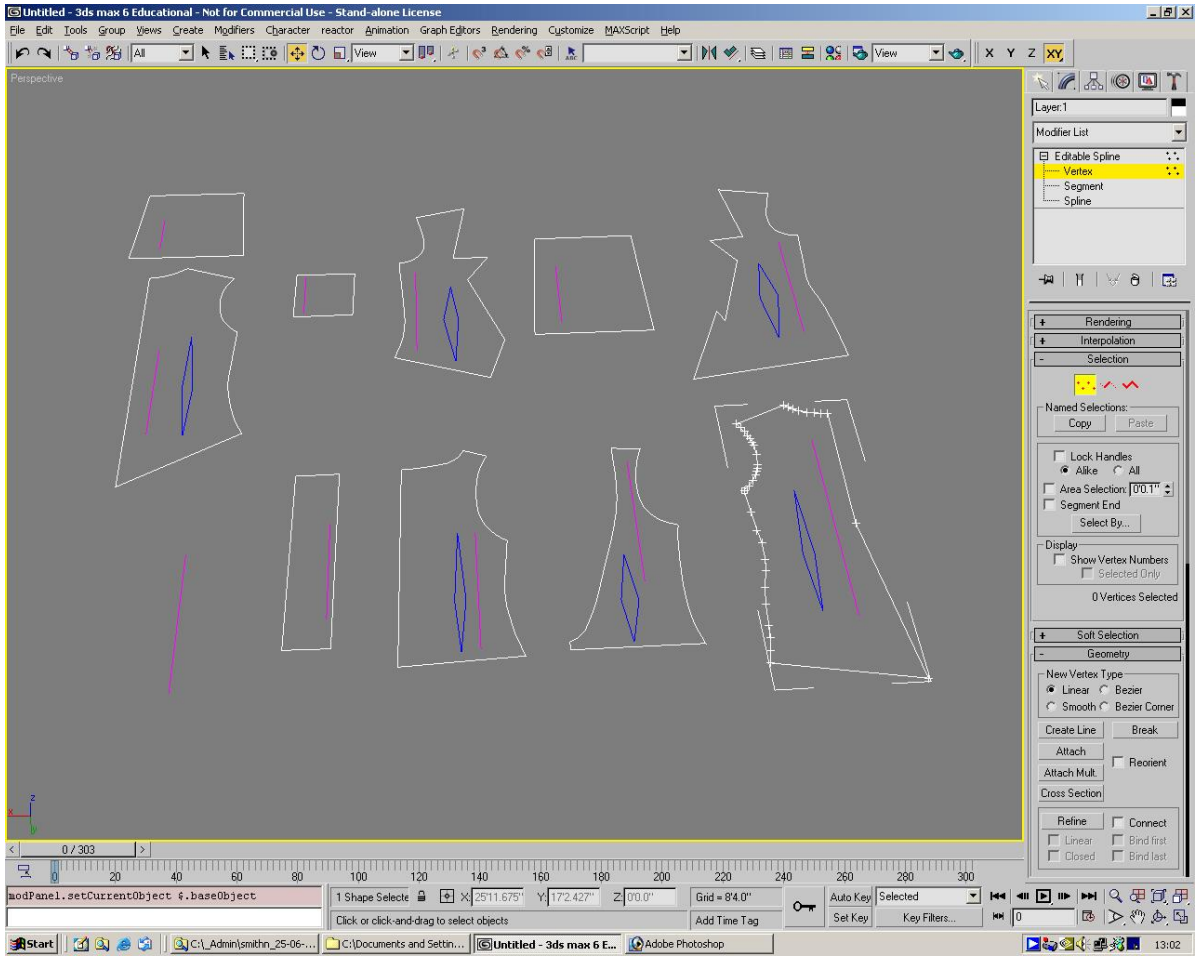
Digitiser for input of patterns to CAD



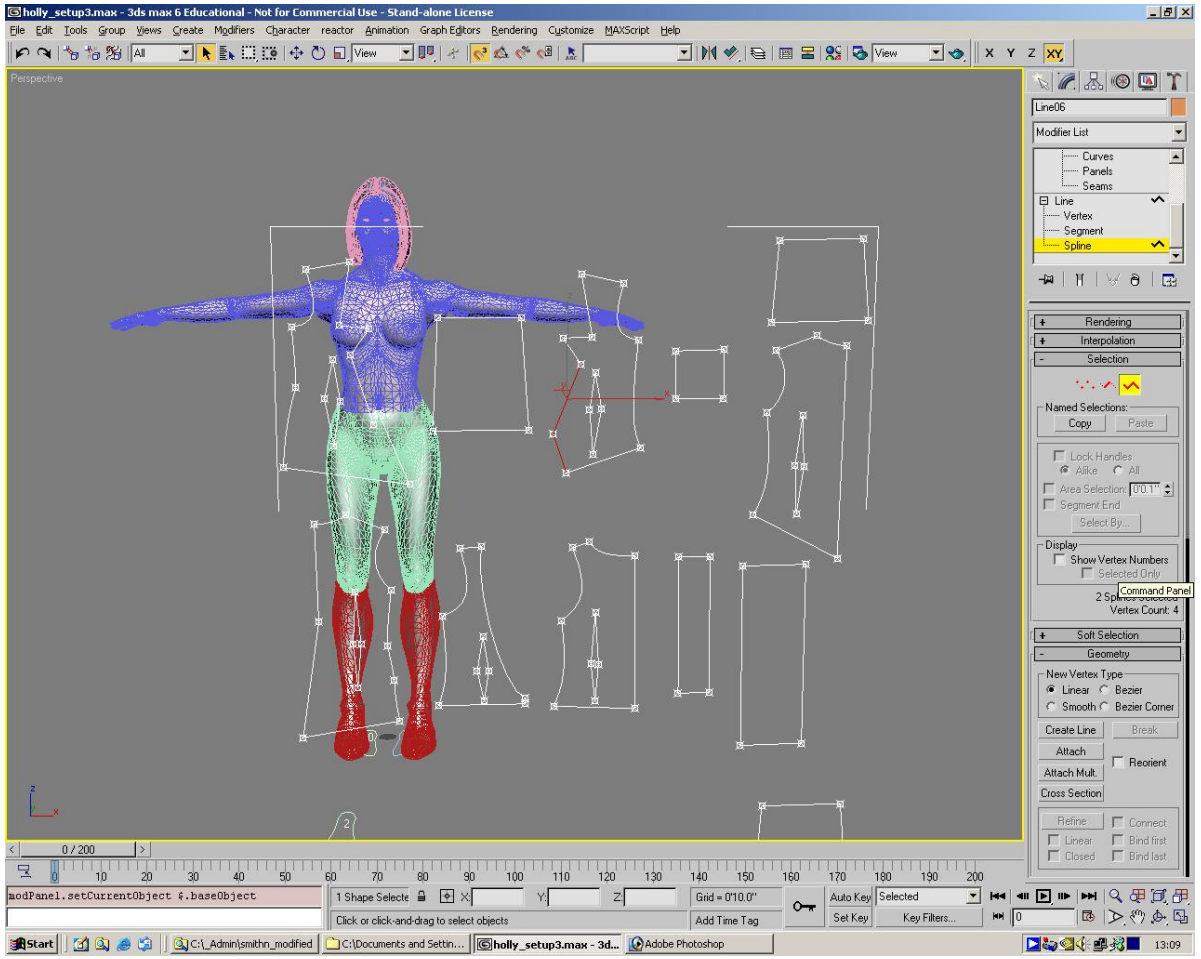
Flat Bed Large format Scanner used for block and patterns
Student patterns were digitised at London College of Fashion.



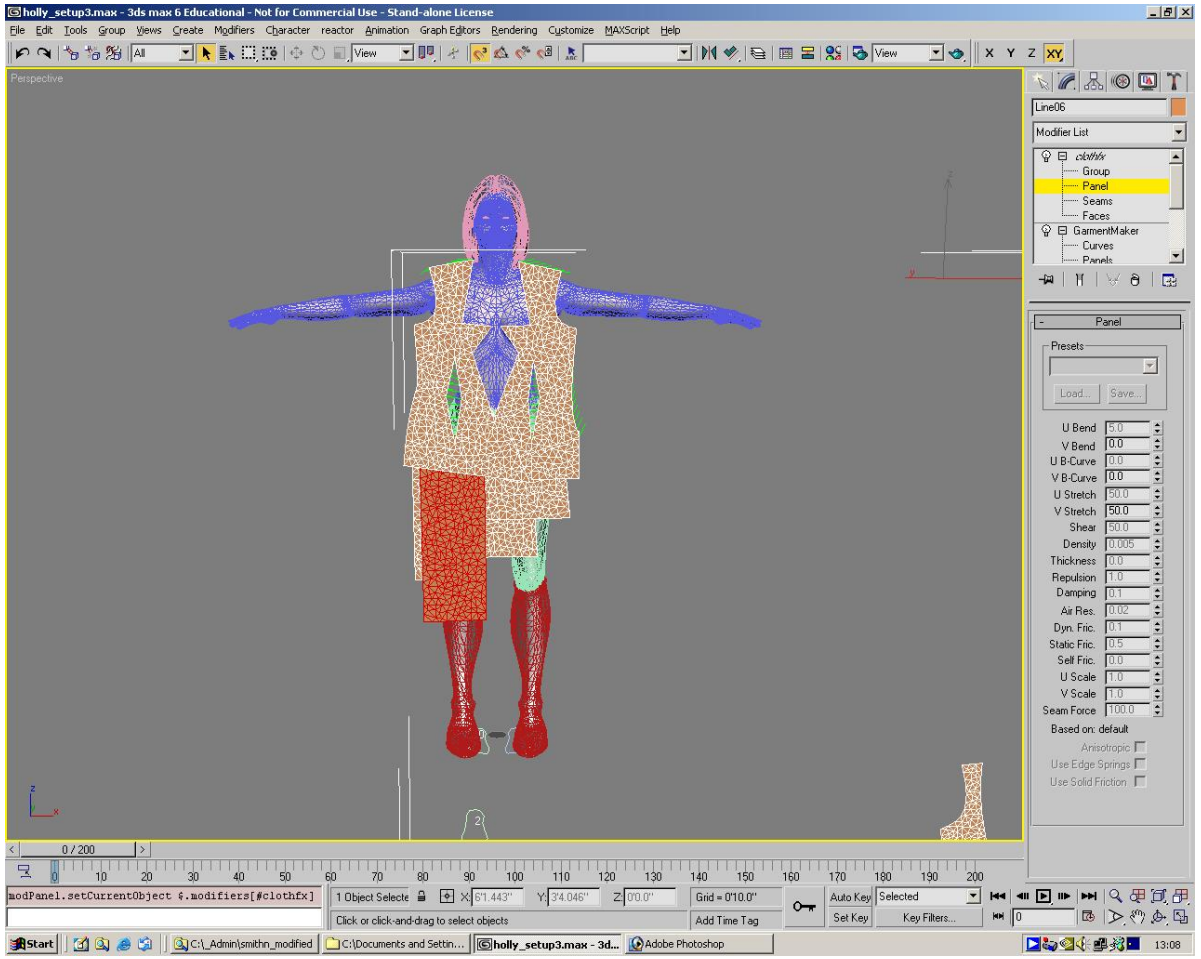
Cad.Assyst –Dxf – 3DS Max/Cloth fx



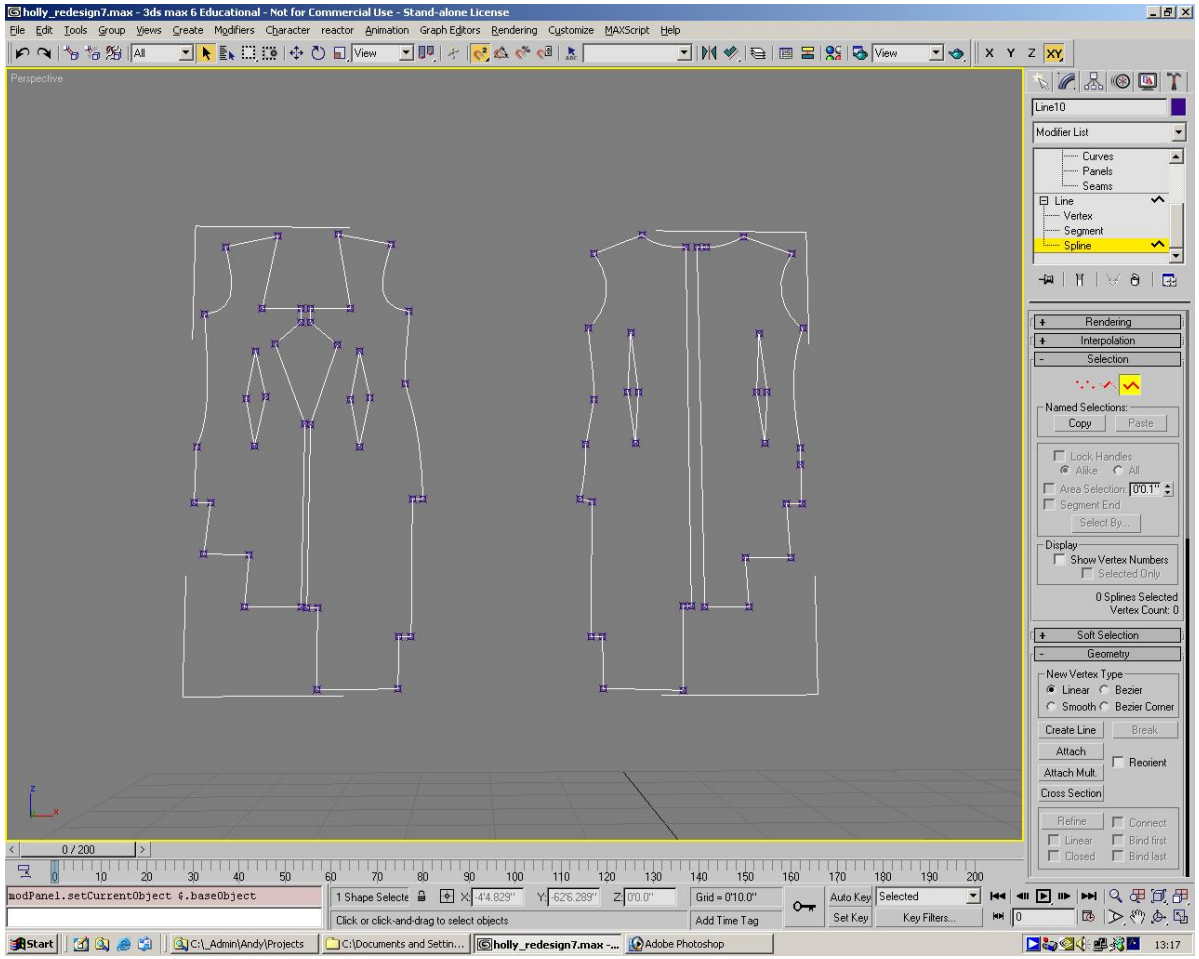
3D positioning of pieces to 3D model



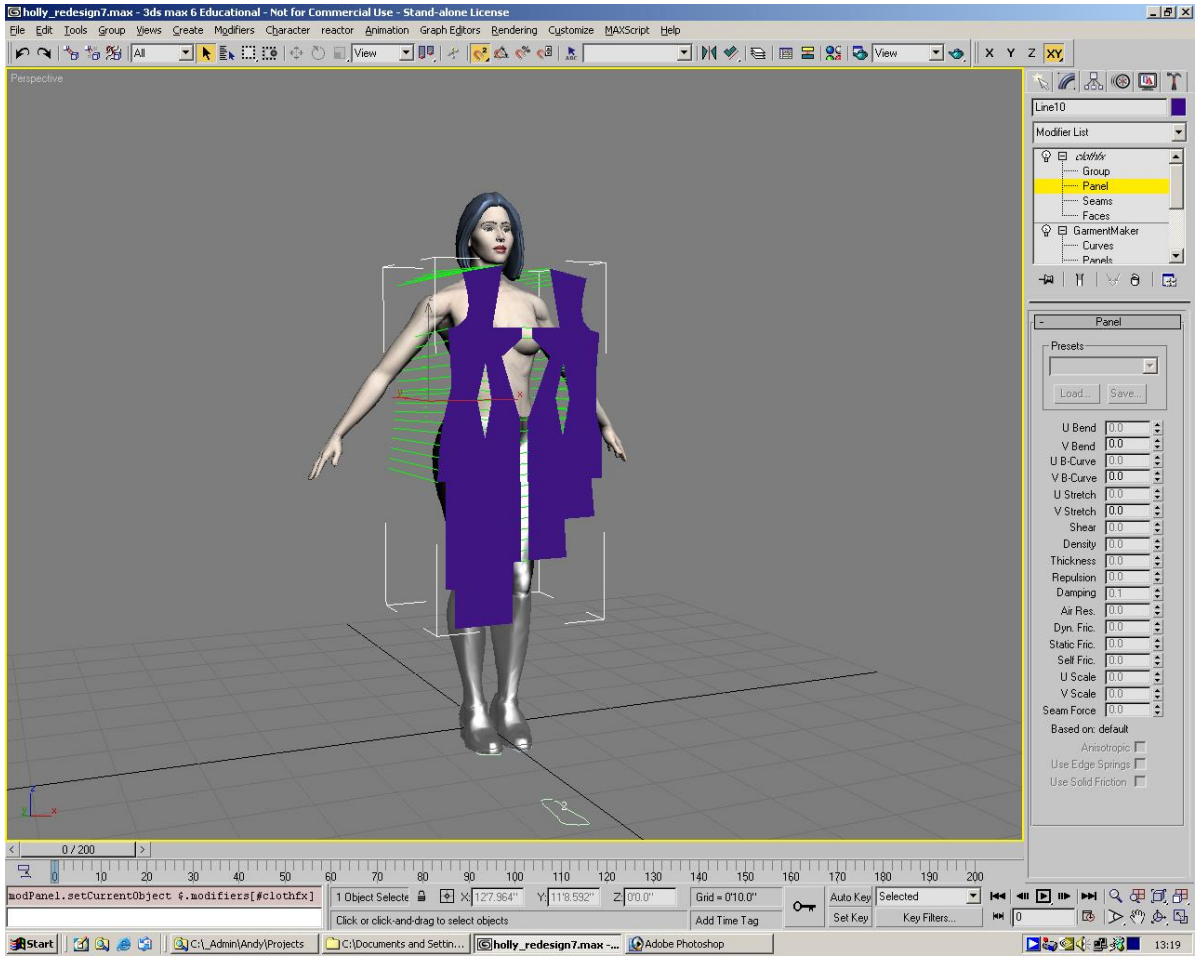
Problems with 3D garment construction onto 3D model



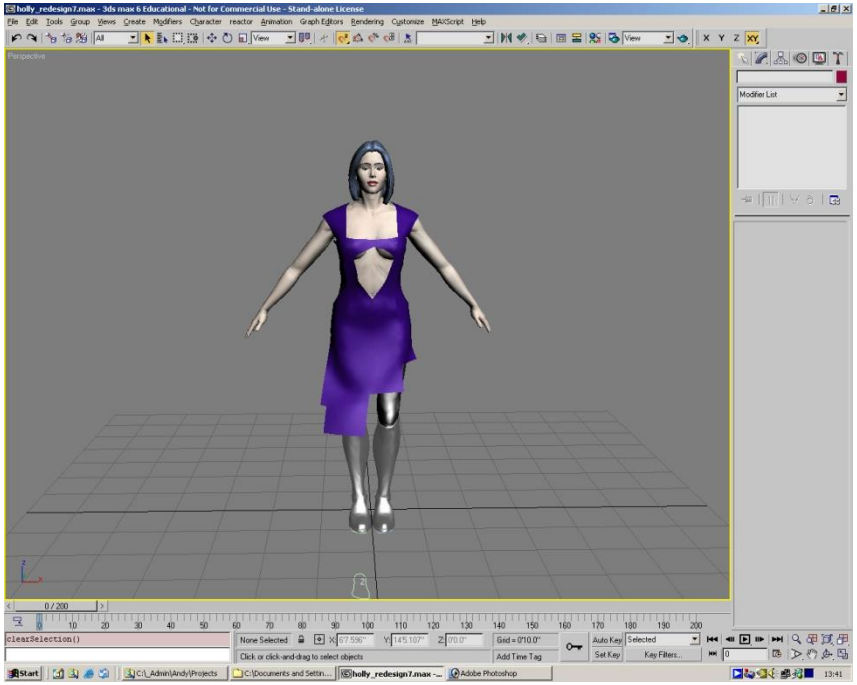
Re-design of pattern in 3DS Max

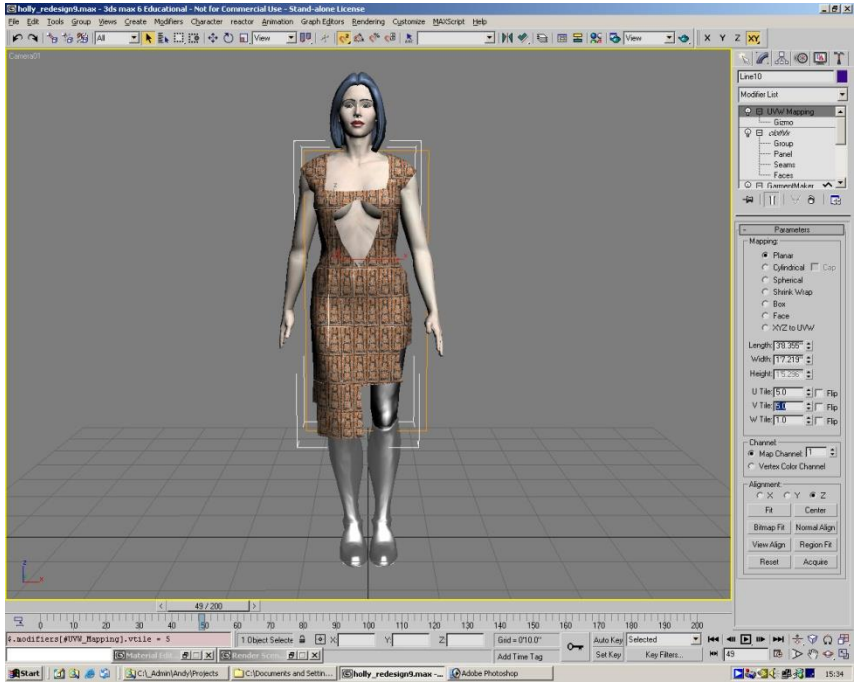


Selecting Fabric Properties for pattern pieces in Cloth fx



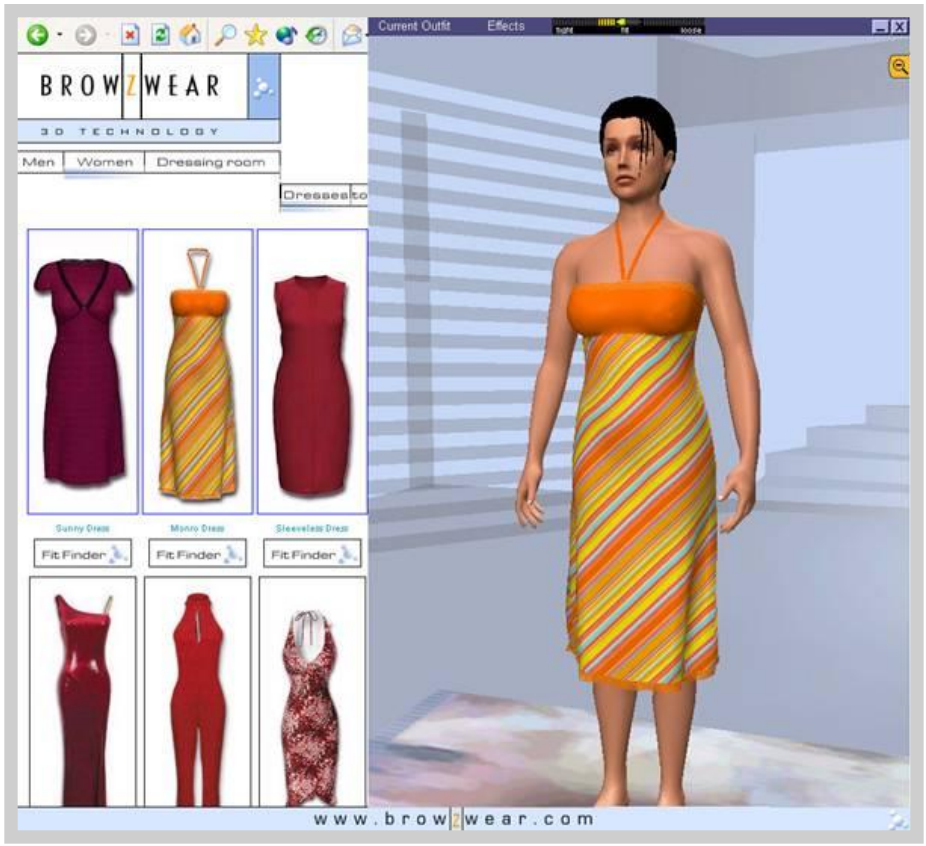
Complete 3D Dress with Print design and cotton fabric properties added





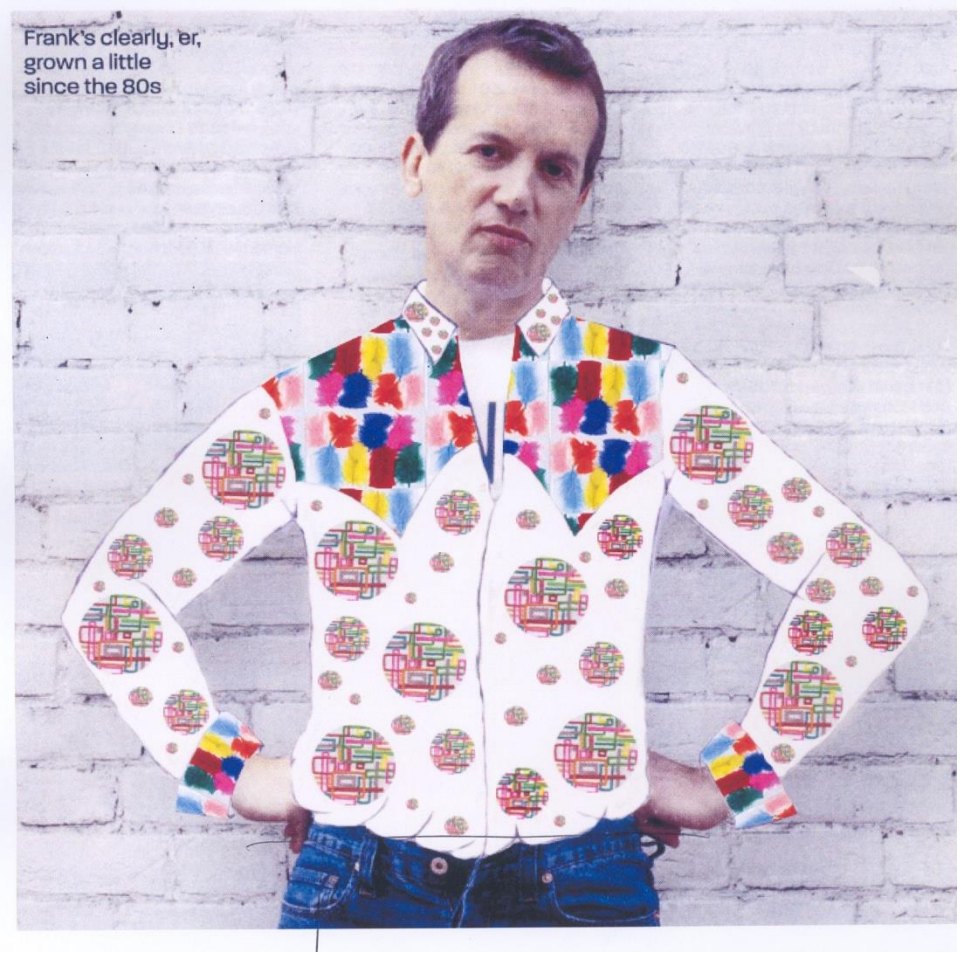
3D CG Tools allow alternative design options to be easily selected >

Method 2:
Virtual 3D Clothing modelling Software

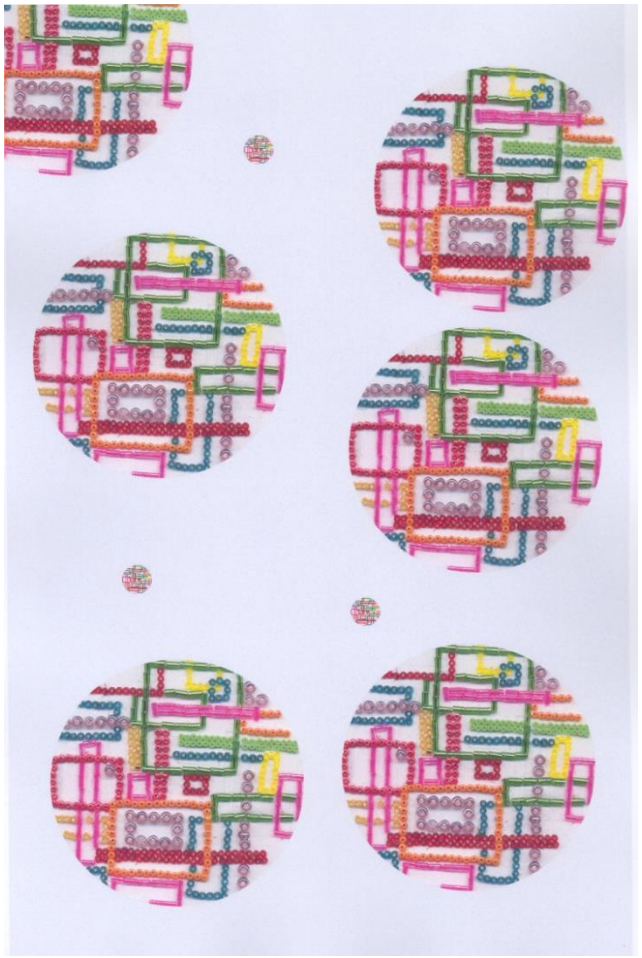


freeborders™

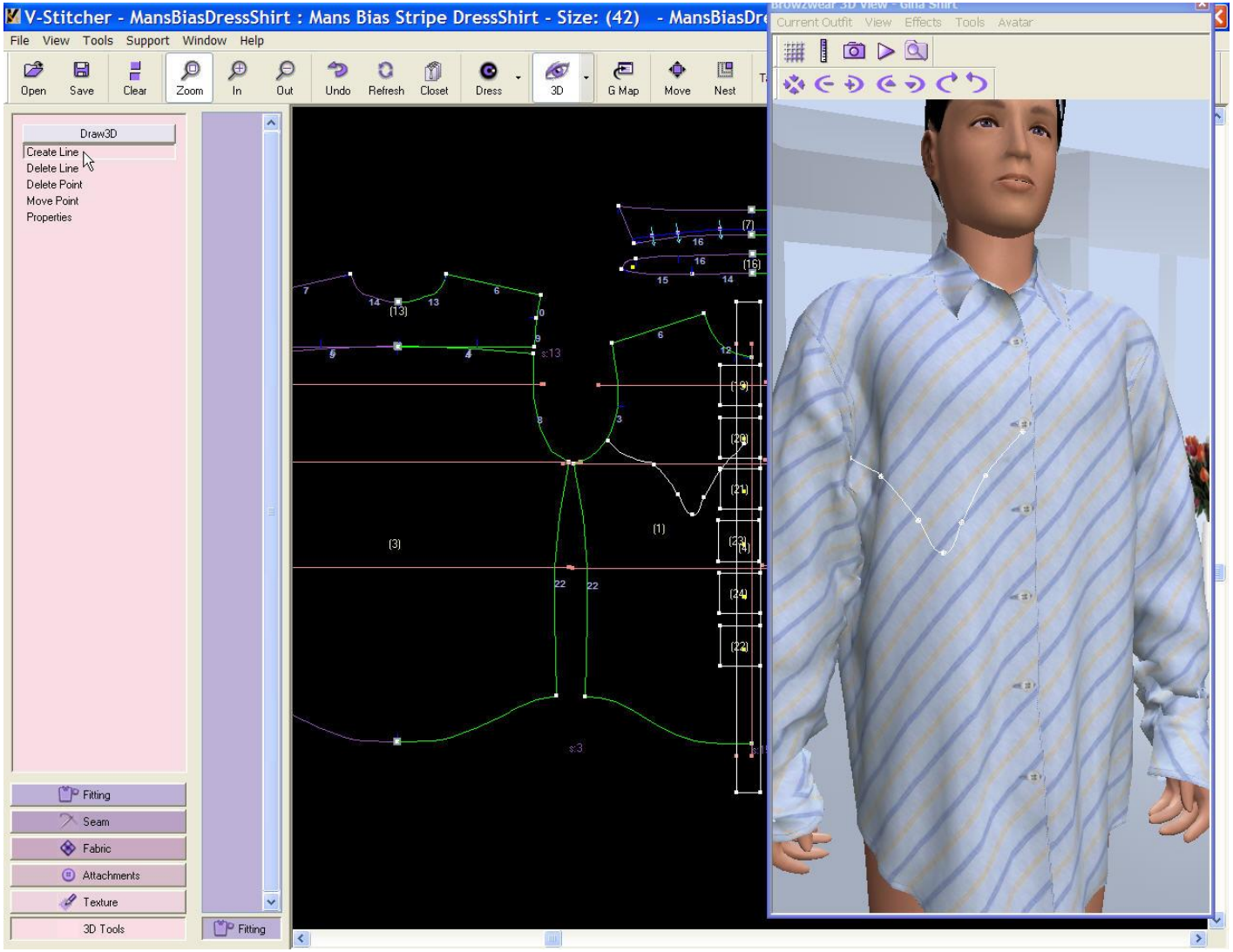
2D Digital Illustration in Adobe Photoshop



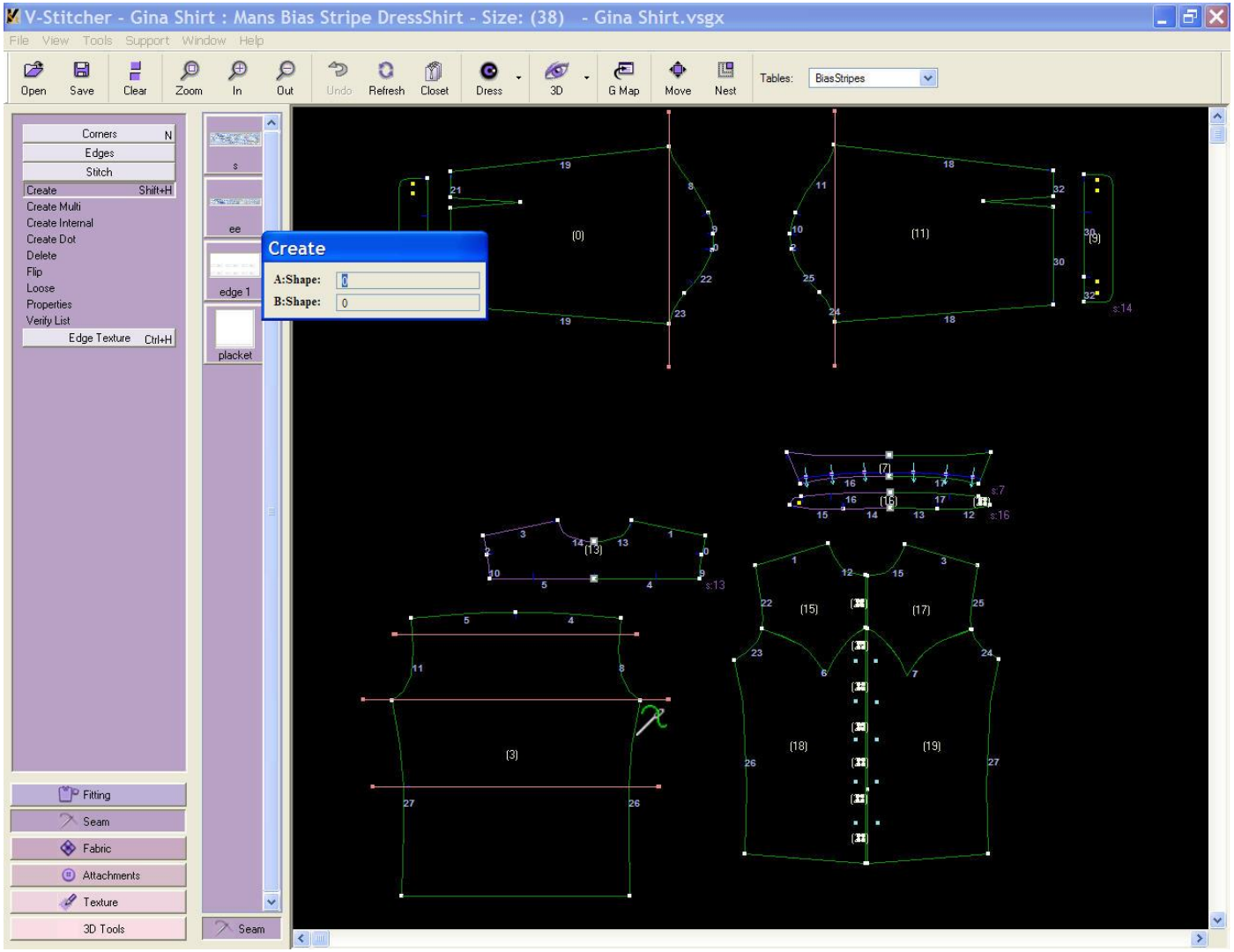
Digital Fabric Print design



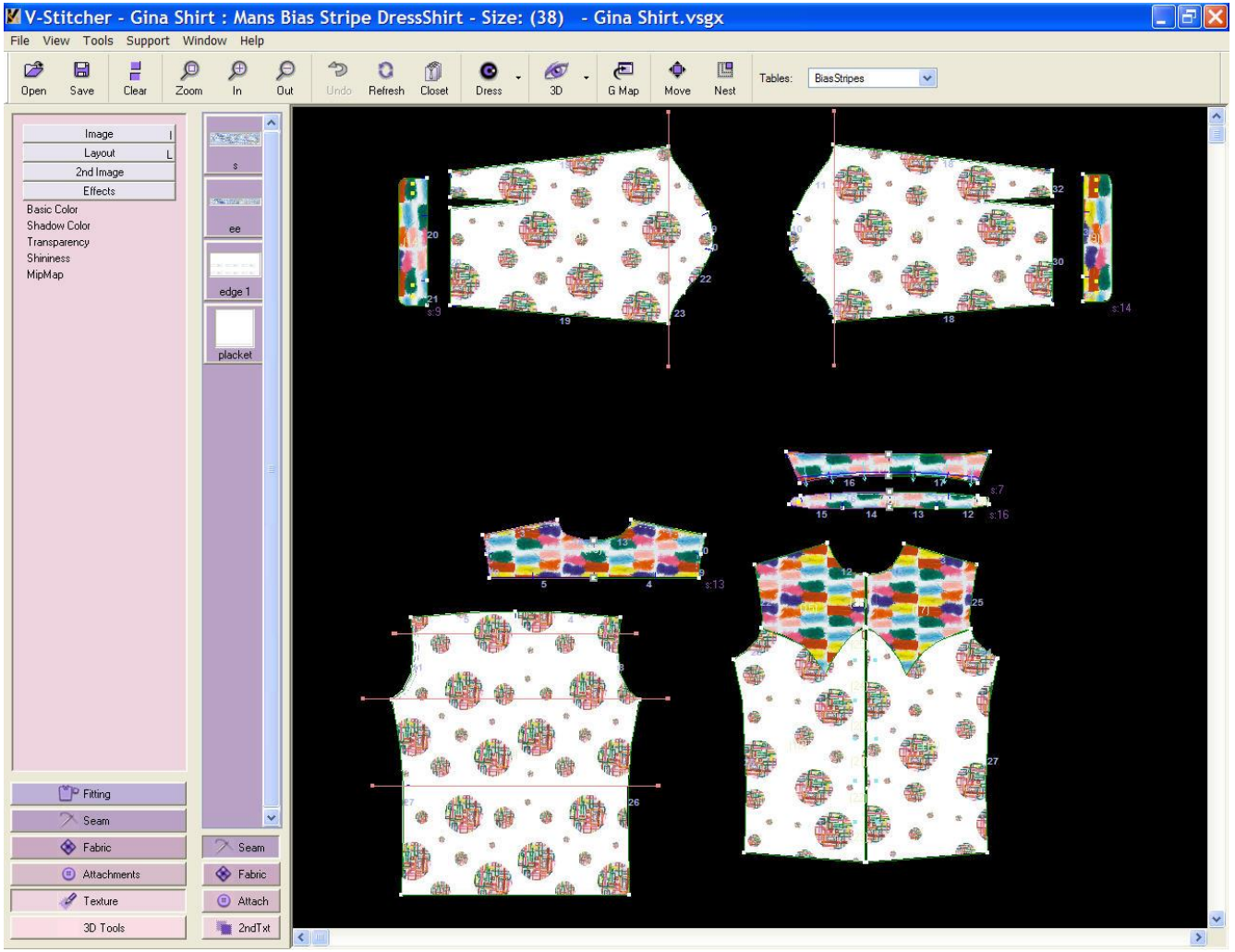
Re-designed Mens shirt pattern



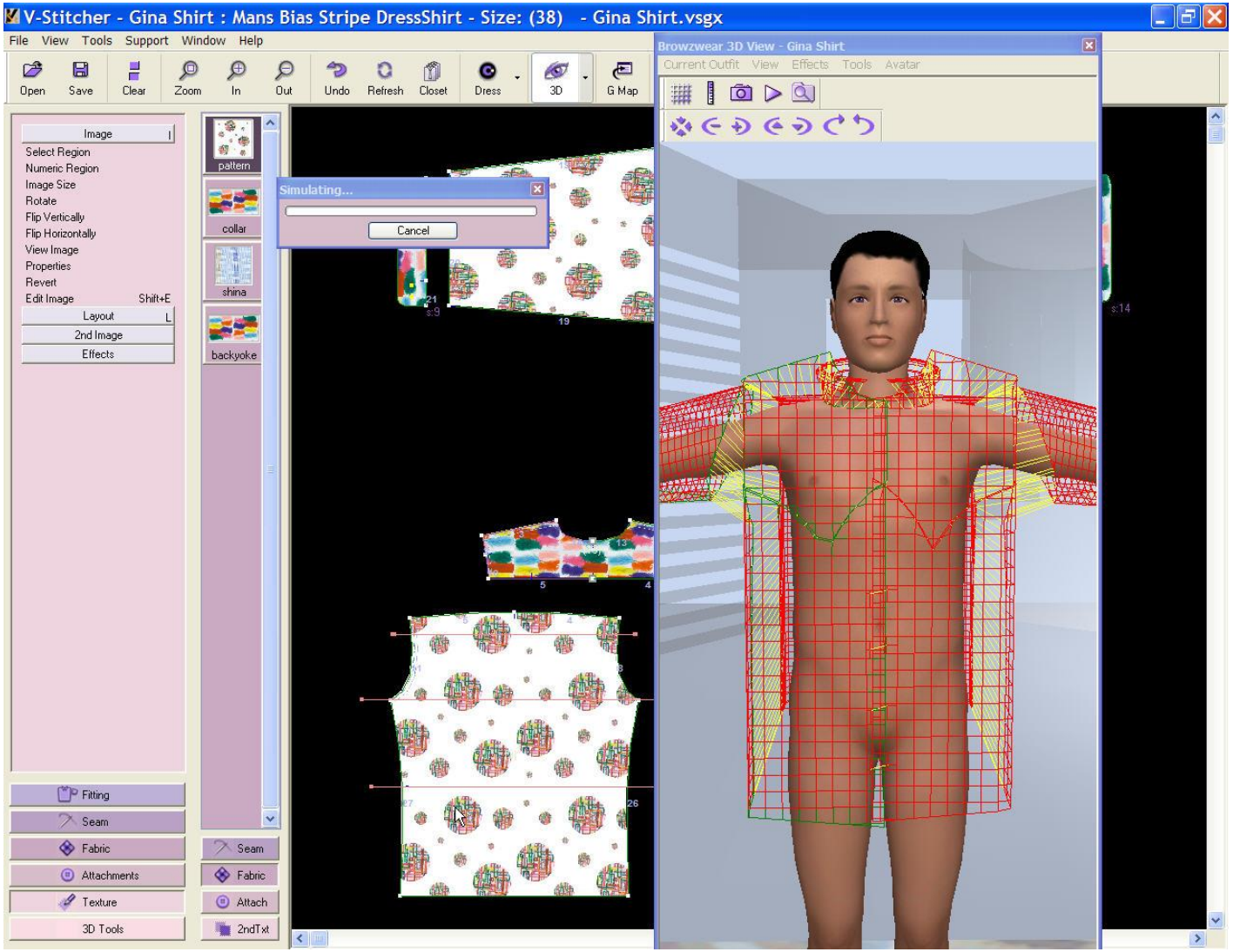
3D CAD patterns with all 2D CAD.Assyst data included



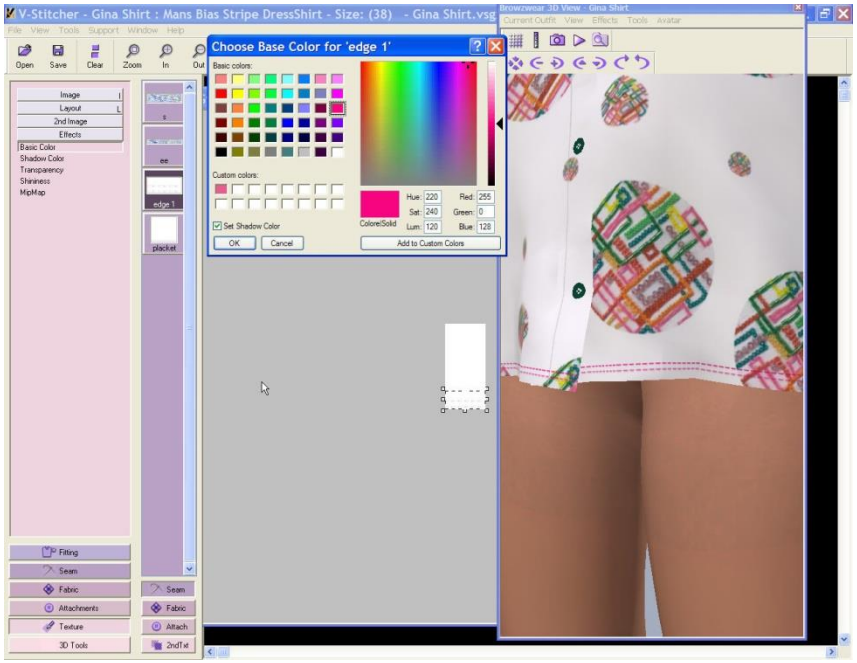
Import print design to pieces

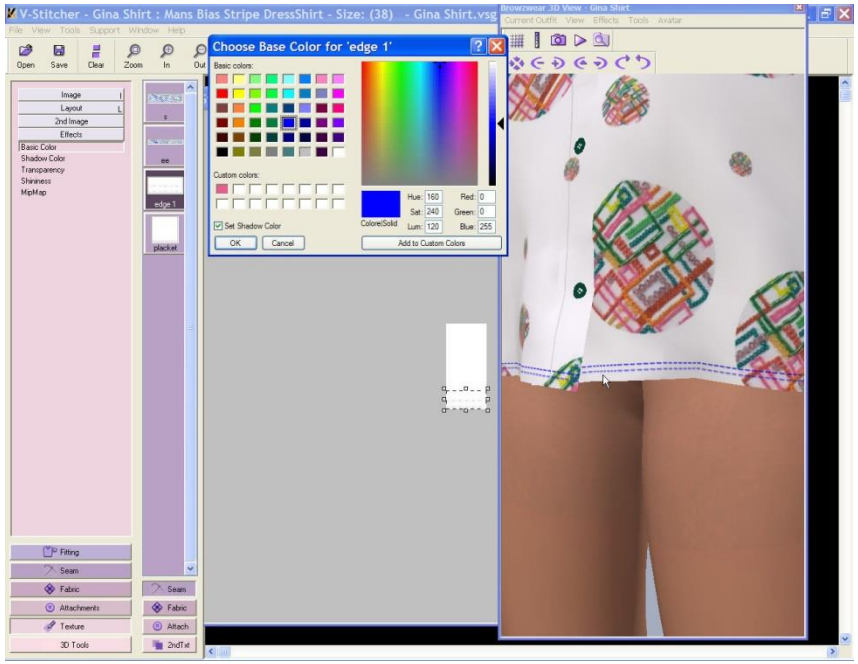


3D simulation of Shirt

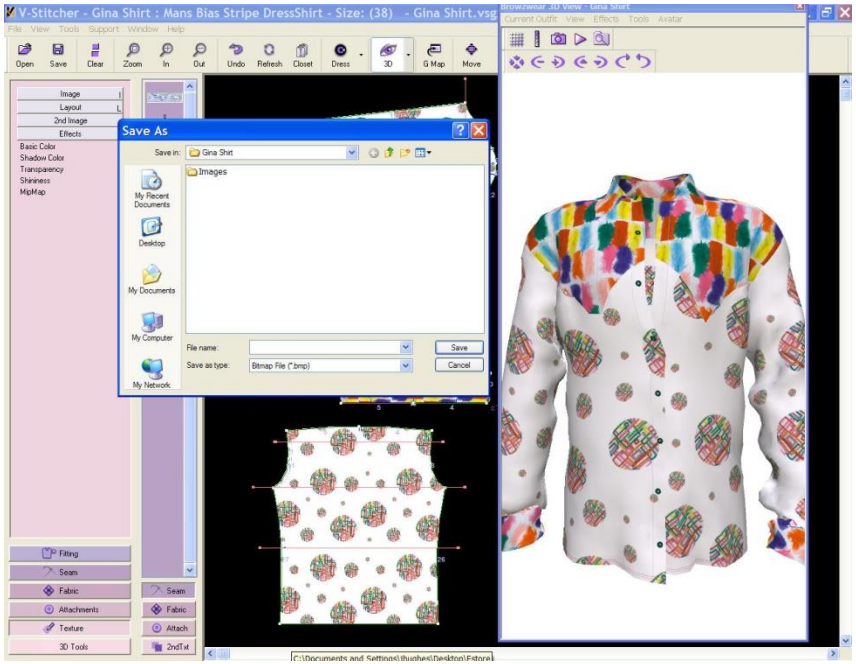


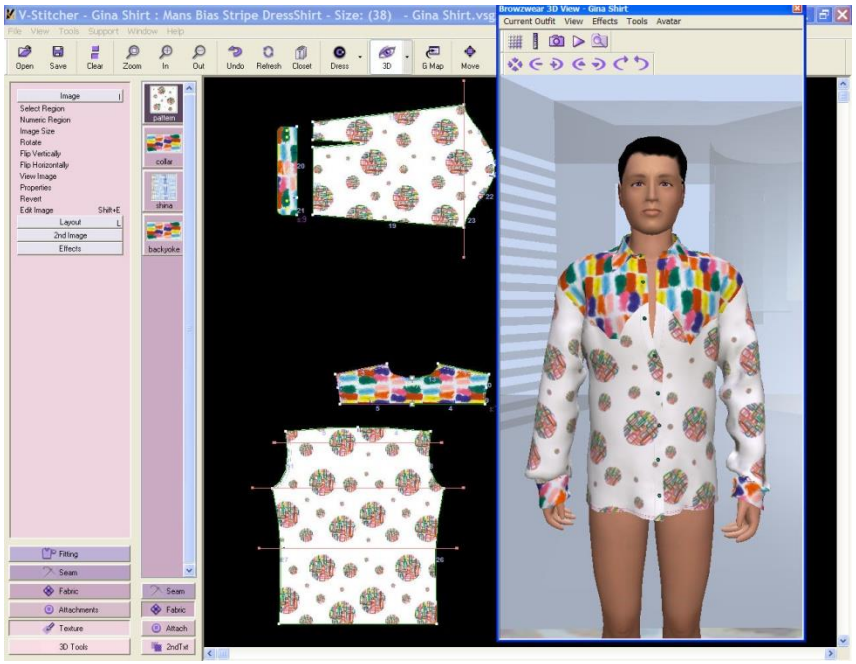
Altering hem width + stitch details





3D shirt + accurate fabric properties





Digitally printed collaborative collection at CovE project Catwalk show held at LCF Rootstein Hopkins Space, 2004