BBC

Computer-aided design: the birth of digital creativity

Video transcript: clip from *The Brits who Built the Modern World*, Episode 2, first broadcast on BBC Four on 20 Feb 2014

NARRATOR:

To make a strong enough structure out of fabric, the engineers sought digital help. This was one of the first buildings designed, in part, by computers.

TRISTRAM CARFRAE:

In architectural engineering, I don't think anything had relied so much upon the computer.

Software had to be especially developed and written that would compute the shape or 'form find' it as we call it.

Computer drawing was almost unheard of at that time and that was pretty special because you didn't start with sketches and drawings, you started with numbers. Some people found it very difficult to believe that a mathematical process could generate a sculpture.

And so we then made a physical model using hand-sewn pieces of canvas attached to little wires and tension rods with screws and threads just to make sure we got it right.

NARRATOR:

This is high-tech as sci-fi.