functions of the Rhinoceros CAD software. When a designer types a word into the EmotiveModeler to manipulate a simple 3D model such as a bottle, the system analyzes which primary emotions are associated with the word and combines the relevant design parameters to modify the form to reflect the emotive character of the word.

What for you is the most important/interesting thing about what you made?

The fascinating part of my research is trying to decode the mappings in a designer’s thought process. The emotive-form design taxonomy is this key translation system that allows novice designers to interact more intuitively with a CAD program, inputting abstract verbally described ideas and outputting the appropriate design attributes to generate an emotively shaped 3D model.

Was this a collaborative process and if so, who was involved? Yes, a crucial part of developing the EmotiveModeler was getting feedback on the emotive forms it generated: Did other people actually perceive them as the emotive character we predicted? Designers and non-designers participated in many user studies that helped us improve the taxonomy to better reflect how people actually perceived the forms—something we are hoping to automate more using machine learning in future prototypes.

What was the biggest surprise in making this?

Initially motivated by how the EmotiveModeler could aid novice designers, we were pleasantly surprised to find that professional
designers liked using it too, particularly how they could very quickly generate a huge range of expressively shaped designs to inspire their final creations.

What is the one thing about making this that you would like to share with other makers? When making a design tool, it’s important to find a balance between computation and human creativity; we did not want to create the artificially intelligent design machine! We tried to achieve this in the EmotiveModeler by allowing the designer to modify the emotions (and therefore forms) associated with their inputted words to reflect their personal interpretation, enabling a more creative conversation between the designer and their tool.

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