

Mixed Media Artist uses Polhemus FastSCAN & Rapid Prototyping to Replicate Unique Art Collection

Vivian Pratt, a mixed media artist, combines rapid prototyping technology with her traditional wood carvings to create custom reproductions. Vivian creates her wood sculptures using roots and driftwood then carves, adds and forms pieces to create the finished masterpiece. Vivian's art collection features fantasy creatures, part human, part animal with allusions to dragons and gods.

The process

The technique of creating an original wood sculpture takes weeks to complete. Once complete, the sculpture is then scanned with a Polhemus FastSCAN system (scan result shown in figure 1). FastSCAN is a lightweight, handheld, portable 3D laser scanner. The scanning process is fast, taking as little as just one minute, depending on the complexity of the sculpture. The file can then be saved in multiple file formats such as STL, IGES, OBJ, DXF and many others, for easy importing into the CAD or modeling software of choice. In this particular case Vivian exports into Maya® where she was then able



Figure 1. scan result of original unicorn art piece



Figure 2. original art piece on the right, printed model on the left

to modify the scan for complete customization. Vivian tailored this particular scan by adding frill to the neck and removing certain attributes in order to resemble a female unicorn. (figure 2). The customized model was then produced with a Dimension printer at a reduced scale.

The result

After putting weeks of work into each sculpture, with a simple 3D scan, Vivian has the ability to customize and reproduce her art using a rapid prototyping system. This digital reproduction technique not only saves time but gives options such as scaling

and digital archiving which are not available with traditional methods.

To learn more on how the Polhemus FastSCAN can help your rapid prototyping and/or reverse engineering needs please visit www.polhemus.com, contact us by email, sales@polhemus.com or phone 802-655-3159. To learn more about Vivian Pratt's artwork please visit www.vivianpratt.com or email vivianpratt@yahoo.com.