

Museum Activity: Touching Duplicates

About the Artist

Working as a sculptor requires using hands as a tool, to add or subtract materials to create form. When holding a smaller sculpture, the viewer can imagine the process of the artist's creation, as if they were the artist themselves. While being known for public monumental works and whimsical smaller sculptures, both types of work Charles Rudy created were made to be explored with a viewer's eyes, not hands. This notion is challenged in reproduced copies of his work, such as *Cornish Red Chicken*, 1945. Long being a challenge for museums, the rule of 'no touching' is in some ways coming to an end with technologies such as 3D printing being available.



IMAGE CREDIT: 3D Models of Charles Rudy Sculptures printed courtesy of the Perkiomen School, Pennsburg, PA

Looking Questions

What do you see when you look at the 3D models? Describe their details.

Describe the similarities and differences between the sculptures in the cases versus the 3D models. What details do you notice?

In examining the 3D printer, how are the 3D models made? What is the material being used?

Examine the texture of the 3D models. Would they feel the same as the originals? Why or Why not?

About the Process

Rather than the traditional practice of sculpture being created by the artist's own hand, 3D printing changes the ownership and availability of artwork. By scanning already made sculptures, such as the ones created by Charles Rudy, computers can create 3D digital reproductions of the works in a variety of sizes. From these digital models, the 3D printer then goes through the process of spending hours layering plastic filament to replicate and recreate the same structure. The printer digitally slices the 3D model into 2D shapes, then prints those layers on top of one another to create the form.

Museums and the art world have begun using 3D printers for cultural preservation, research, learning experiences, and accessibility. The possibilities are endless!

Make sure to take a look at the 3D printer, the Ultimaker, in the exhibition and watch the time lapse video to see the complete printing process. It can take many days to finish a 3D print; the *Sleeping Pig* for example, took over 107 hours to print.

Up For Debate

List below what might be some of the benefits of using 3D printing:

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List below what might be some of the drawbacks from using 3D printing:

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Make Your Case

What side do you take based on your own experiences? Does one outweigh the other?

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