The European company Factum Arte really knows how to fake it—with the best of intentions. In 2014, they unveiled a replica of Caravaggio’s *Nativity with Saint Francis and Saint Lawrence* where the original painting once stood, before it was stolen in 1969 from the Oratory of San Lorenzo in Palermo. After digitally reconstructing the painting based on available photographic evidence, the team worked towards a “re-materialization” of the work: On a canvas coated with animal glue, pigment, and calcium carbonate (the type of ground Caravaggio would have used), the painting was digitally printed in several layers, retouched by hand to add texture, then stretched, varnished, and hung in its frame. It may only be an optical illusion, but visitors to the church can now forget, if only for a moment, what the space has lost.
Caravaggio’s *Nativity* was uniquely challenging—in most cases, Factum Arte works from originals. The company has developed its own technology, or modified existing tools to capture every detail of an artwork with zero contact. Their Veronica Chorographic Scanner, for example, was custom made to record faces and busts at 360 degrees in just a few seconds, using photogrammetry. Meanwhile, their 3D scanners are able to capture the surface of an artwork to a tenth of a millimeter. “This information can then be translated to create 3D renderings, which can be used for research purposes, to monitor the state of a work before and after its restoration, or to study the object’s history,” writes the company’s publicist, Jessica Corneille, in an email to The Creators Project. Sometimes, the work stops there—the goal being only to conserve the object or site in digital form for generations to come, especially in cases where it is “threatened with destruction, or compromised by nature, tourism or vandalism.”

Other times, scanning is only the first step in the production of a facsimile. Factum Arte has produced a facsimile of the tomb of Tutankhamun, and is working on replicas of other pharaonic tombs that visitors will be able to tour instead of the originals, halting any further decay of the actual sites. “Facsimiles can also serve other purposes, such as uniting disparate pieces, or as a new means of repatriation,” explains Corneille. Veronese’s *Wedding at Cana*, which was taken by Napoleon in the 1700s from
the San Giorgio Monastery in Venice, hangs today in the Louvre. The massive canvas was scanned while a color expert mixed hundreds of reference swatches at the museum, and today, Factum Arte’s painstaking reproduction hangs inside the monastery’s refectory.

Carlos Bayod and Aliaa Ismail from Factum Arte scanning the Tomb of Seti I with the Lucida 3D scanner. Image © Gabriel Scarpa

As digital reproductions get closer and closer to the real thing, more institutions may opt to make use of the technology. So what is gained, and what is lost? In the case of missing objects, or works that are too fragile to be exhibited, we ought to be thankful for reproductions. They allow us to see something where there would normally be nothing. And yet, it’s always a bit disappointing to read a museum label and realize that you’re admiring a reproduction rather than the original—suddenly, you feel differently about the object. You can appreciate it from a rational standpoint, but part of its power is gone. The question is: why? If you’d never known, would it have made a difference?

When it comes to ancient Egyptian tombs—and similar sites around the world that were never meant to be tourist attractions—it’s much easier to cast those disappointments aside and clearly understand the value of facsimiles. In the words of Factum Arte founder Adam Lowe, “a tomb was built to last an eternity, but it wasn’t built to be visited.” Digital reproductions allow for an educational experience, and perhaps even an emotional one, while leaving be those sacred spaces that were never conceived for public viewing. If the goal of conservation is to preserve original intent, then in this regard, facsimiles offer a unique opportunity to uphold that commitment.
Using drones to record the mosque at Kala-Koreysh in Dagestan. Image © Ksenia Sidorova
Factum Arte's facsimiles retain the paint texture and every single mark or crack on the surface of the original images. Image © Factum Arte

Surface texture of a painting by Kirchner, recorded with Factum Arte’s Lucida 3D Scanner. Such surface renderings isolate and highlight information that conservators may not see when inspecting the actual painting. Image © Factum Arte
Facsimile of the Louvre’s Teschen Table. Compare with the original here. Image © Factum Arte