Reproduction in Museums

When visiting a museum, visitors assume that the objects exhibited in the museum are “authentic items of knowledge” (Morel-Deledalle, 2010, p. 124), otherwise known as “originals.” This assumption is due in part to the context in which visitors are seeing the objects. Museums are expected to display unique artifacts and objects that reveal and represent an aspect of a history and culture. Reproductions of these objects lack this “aura of authenticity” (Morel-Deledalle, p. 124). According to the Tate Modern “Art Term” dictionary, “aura” is “a quality integral to an artwork that cannot be communicated through mechanical reproduction techniques” (“Aura,” n.d.). The term “aura of authenticity” is best known for its use by Walter Benjamin in his 1936 essay *The Work of Art in the Age of Mechanical Reproduction*, in which he argues that “even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be” (Benjamin, 1935, p. 3). This “presence in time and space” is what Benjamin referred to as a work’s “aura” and its “presence as the original” was the requirement for the “concept of authenticity” (Benjamin, p. 3). Despite lacking this aura of authenticity, the practice of displaying reproductions in place of the original object or work in a museum is not uncommon.

Reproduction is defined as “the action or process of copying something” (Oxford English Living Dictionary, 2019). In a museum context, reproductions can come in the form of casts, copies, replicas, duplicates (both digital and analog), or facsimiles. When museums are
transparent about their practices, all of these terms can and are used interchangeably by museums to describe objects displayed that are not the original “authentic item of knowledge” (Morel-Deledalle, p. 124). Art, science, history, natural history, and archeological museums all use reproductions and have various reasons for displaying these reproductions in place of the original object. These reasons can include the original object being too fragile or valuable to be exhibited, the original object having been lost to time but still thought to represent something historically significant and important to have in a three-dimensional format for posterity, or the need for multiple copies of the object to exist, which is a common reason for reproductions in natural history museums. While reproductions in museums can take the form of digital virtual reproductions, three-dimensional printing, digital files, and copies of films, this report focuses on four examples of physical reproductions displayed in museums. Two of the four examples discussed in the report, Lynn Hershman Leeson’s “Lorna” and King Tut’s Tomb, use technology to achieve the reproduction. However, the report does not discuss film, digital, or moving image reproduction beyond Leeson’s “Lorna.” The other two examples of reproductions discussed in the report are the dinosaur bones displayed in natural history museums and Albrecht Dürer’s watercolor painting “Young Hare.”

While new technologies continue to expand what a reproduction in a museum can look like and what physical or digital form it can take, the practice of displaying reproductions in museums is not new. The practice of displaying reproductions dates back to the Kunst- und Wunderkammer of the sixteenth and seventeenth century. “Kunstkammer” means “cabinet of curiosities” or literally “art chamber (Bredekamp, 1995, p. 8).” They were microcosms of the world with encyclopedic collections of objects whose categorical boundaries were, in
Renaissance Europe, yet to be defined (Bredekamp, p. 8). The antiquities in these “cabinets of curiosities”

“were of interest primarily for the historical information they divulged…[M]ost owners of encyclopedic collections valued the ancient object—portrait bust, statue, cameo, or coin—for who or what it represented…The subject matter of the work and the historical associations it triggered in the mind of the beholder were key, and for these reasons **plaster copies of antiquities were easily accepted into a great many museums.**

**Copies, or miniature replicas, also served as substitutes for celebrated antiquities that could not be purchased at any price.** In this way the collector was able to have in his possession what were regarded as supreme achievements of ancient art. **It was the fame associated with the object, not its authenticity, that mattered most** (emphasis added) (Kenseth, 1991, p. 93).”

The concept of collecting objects to be displayed and seen by visitors began with the *Kunstkammer*. The multitude of objects on display “could bring the collector into contact with worlds separated from him either by time or geographical distance (Kenseth, pp. 90-91).” This want and need to glimpse into the past through objects is still a driving factor in modern museum collecting and a key reason visitors visit museums. As museums have become larger and institutionalized and made up of less personalized collections, the focus has shifted from amassing and displaying as many oddities and items as possible, to displaying select, unique, original items that cannot be found in many, if any, other places. The goal of these collecting institutions has shifted from individuals collecting a multitude of objects, sometimes replicas of the same objects, and displaying them for others to view, to museums collecting unique objects
that will not be replicated in other museums. All of these unique objects will at some point need to be conserved, preserved, and taken out of exhibition spaces. The reason for the removal, whether on purpose because of preservation concerns or unintentionally removed because of theft, varies. However, when the removal occurs, museums have the option of exhibiting a reproduction of the object. The rest of this report will attempt to argue that transparency on the part of the museum and delineating between originals and reproductions is the ultimate key when exhibiting reproductions in museums.

In natural history museums, two common reasons for the exhibition of reproductions is the possession of incomplete or partial specimens and the need for multiple copies of an object to exist. There exist relatively few full skeletons of dinosaurs in the collections of natural history museums. And those original skeletons that do exist should not have holes drilled through them in order to attach them and stand them up for exhibition in a museum. As a result, many dinosaur skeletons on display are casts, or copies of real bones.

To make a fossil replica, there are two phases: constructing the mold and making a cast out of the mold (Hone, 2017). Phase One involves putting the dinosaur bone in a clay bed, painting liquid rubber onto the bone and the clay, covering the clay with fiberglass sheets, and removing the fiberglass and rubber molds once the surface hardens (Hone, 2017). Phase Two includes filling the newly-assembled mold with liquid polyester or a similar substance and taking the mold apart to reveal the new cast of the dinosaur bone (Hone, 2017). Whole skeletons of dinosaurs can be created using these two phases, as well as individual pieces of skeletons that might be missing, too damaged, or too fragile to be exhibited.

Two natural history museums that display complete or partial reproductions of dinosaur skeletons are the Natural History Museum in London and the Field Museum in Chicago, Illinois.
The Natural History Museum in London has on display a full-size cast of a Diplodocus dinosaur skeleton, while the original skeleton is in the United States (Hone, 2017). A full Tyrannosaurus rex skeleton is exhibited at the Field Museum in Chicago. The skeleton is original save for the skull, which is a cast. This is because the original skull is too heavy to mount without risking damage to the fossil. For this reason, a cast of the skull is displayed with the rest of the original skeleton, while the original fossil head is displayed in a case below the skeleton (Hone, 2017). Both the Natural History Museum in London and the Field Museum in Chicago exhibit reproductions that replicate the original bones as accurately as possible, “often down to microscopic detail” (Hone, 2017). Both museums use some sort of method of identification to express to the museum visitors the elements of the skeleton that are reproductions. Other methods used in natural history museums to flag what is and is not real include creating keys on interpretive materials and creating casts that are distinctly different colors from the dinosaur bones to ensure there is no confusion about what is original and what is a reproduction (Hone, 2017). Natural history museums can honestly and transparently display reproductions by denoting on interpretive labels which skeletons or bones are real and which are casts.

In history museums, a common reason for the exhibition of a reproduction instead of the original, unique artifact is the irreparable damage human interaction with the artifact could cause. This was the reasoning behind Factum Arte’s facsimile of the tomb of Tutankhamun, who is more widely known as King Tut. Located in Valley of the Kings, Luxor, Egypt, the facsimile was built in 2014 by Factum Arte, a Madrid-based exhibition and facsimile production firm (Factum Arte, n.d.). The facsimile is meant to be identical to the original tomb. This reproduction is placed within a small museum that explains why the facsimile tomb exists and “why it is so
difficult to preserve something that was built to last for eternity but not to be visited” (Factum Arte, n.d.).

The creation of the reproduction of King Tut’s tomb utilized three-dimensional scanning and printing technology to create the exact facsimile. The Factum Arte team set up various imaging and recording equipment throughout the original tomb to capture the different elements necessary to create the identical facsimile. A specially designed laser scanner meant for use on antiquities recorded images depicted on the wall of the burial chamber (Factum Arte, n.d.). A three-dimensional structured light scanner was used to record the sides of the sarcophagus (Factum Arte, n.d.). To ensure accurate color matching during the production of the facsimile, a system was created that used specially prepared color sticks that were matched “to the exact tone and brilliance of the color on the original tomb walls” (Factum Arte, n.d.). All of the three-dimensional scanning and printing allowed for “texturally identical reproductions” (Factum Arte, n.d.).

As Charney states in his article “A fake of art,” the facsimile of King Tut’s tomb presents an interesting case study “where you can pay less to see better [sic] this copy of the original, or pay more to see the original, damaged site, which you cannot see as well, and which, by visiting, you add to its degradation” (Charney, 2016). Charney’s comment on human interaction with historical artifacts supports the reasoning behind exhibiting reproductions of artifacts that are easily harmed by human interaction with them. Human interaction with historical artifacts can be destructive to the artifact, which then leads to additional human interaction, in the form of reproductions, to attempt to curb any additional negative interaction. Yet, in order to create the reproduction, additional human interaction with the artifact must occur to ensure the
reproduction is as accurate and near to identical to the original artifact as the reproduction can be.

The facsimile of King Tutankhamun’s tomb is a grand, large-scale example of how reproductions can be used transparently in history museums. The museum in which the reproduction is housed uses the reproduction as an opportunity to educate visitors about the conservation and preservation of historical artifacts. While it is evident the tomb is a replica, as a result of it being housed inside a museum, other reproductions of historical artifacts may not be so evident. History museums can ensure they are transparent about when reproductions are on display by labeling the reproduction as such on the wall label and using the display of a reproduction as an opportunity to educate visitors on both the positive and negative history of human interaction and intervention with historical artifacts.

In art museums, there is a greater expectation from the visitor that what is displayed in the galleries are the original works of art. Despite the assumption by visitors that original artworks are displayed, there are possible reasons to display a reproduction in place of the original work of fine art. One such reason is to ensure the original work of art is not damaged over the course of an exhibition to the extent that the original work cannot be recovered. This is common in works of art that utilize technology, especially works that include film, video, optical, or digital media. These reproductions are often referred to as “exhibition copies.” However, most often, this use of a reproduction is not communicated to the public museum visitor, either via a wall label or any other kind of publicly-accessible and viewable method. One such example of creating an “exhibition copy” reproduction of an art work was the Whitney Museum of American Art’s actions taken when exhibiting Lynn Hershman Leeson’s Lorna (1979-1984). Lorna is a multimedia artwork comprised of a 17 minute color video with a
television monitor, DVD player, Laserdisc player, two speakers, modified remote control, remote control instruction manual, television stand, nightstand, two chairs, goldfish, goldfish bowl, blouse, women’s boot, women’s sandal, check, magazines, flow chart, comic book, Uncle Sam Pecan Cookie package, miniature images, and photographs (Whitney Museum of American Art: New Acquisitions, September 2017–September 2018, 2018, p. 43). When installed, the work resembles a portion of a living room, with the chairs facing the television and the table with goldfish and goldfish bowl placed in between the two chairs. Lorna was the first interactive video art disc and the work “explores privacy in an era of surveillance, the relationship between real and virtual worlds, and the mutability of identity in an increasingly mediated society” (Lorna (the first interactive video art disc), n.d.).

In 2018, the Whitney Museum of American Art acquired Leeson’s Lorna. The work was immediately installed in the “Programmed: Rules, Codes, and Choreographies in Art, 1965-2018” exhibition (Neary, 2018). A large part of the work is the interaction of the viewer with the content depicted on the television monitor. The content depicted is stored on a DVD. Several months into the exhibition, the Whitney’s Media Preservation Initiative (MPI) team learned that the only copy of the DVD the Whitney had was the DVD on view. Concerned about the lack of a backup DVD and the relative instability of optical discs in general, the Whitney MPI staff imaged the disc, made multiple “exhibition DVDs,” and replaced the artist-provided DVD with one of the new exhibition DVDs (Neary, 2018). The original DVD was put into storage for preservation. This means the original artist-provided DVD was replaced with a reproduction. For a visitor to the museum, there would be no way of knowing that the DVD carrying the content depicted on the screen was not the original artist-provided DVD. In addition, the physical DVD itself is not a visible component of the artwork. The visible element of the DVD is the content
playing on the television monitor. Knowing the DVD is a reproduction of the original does not change the viewer’s experience. However, for transparency and museum best practices, art museums should ensure that the generation, such as original or exhibition copy, is recorded on the wall label for the art work. The museum could also use their inclusion of a reproduction of an optical disc as an opportunity to educate visitors on the dangers of storing data on optical discs and the necessity to have multiple copies of files and works.

Another possible reason for an art museum to display a reproduction in place of the original work of fine art is the fragile nature of the original work. As Anne Smith, Jill Swiecichowski and Beth Patkus explain in their manual about historical repositories (2010), “permanent exhibition of original collections can cause irreparable damage” (p. 53). They suggest using “reproductions of originals for long term or permanent exhibits” (Smith, Swiecichowski, & Patkus, 2010, p. 53). An example of this reproduction methodology is the display of Albrecht Dürer’s proto-Realist watercolor Young Hare (1502) at the Albertina Museum in Vienna, Austria. Young Hare is the Albertina’s most famous possession (Charney, 2016). As a result, it is meticulously looked after and is only displayed to the public for 3-month periods every few years (Charney, 2016). Any other time, the watercolor is in well-monitored storage, residing in a temperature-, light- and humidity-controlled Solander box, and a high-quality, high-resolution reproduction of Young Hare is displayed in its stead (Charney, 2016). “Today’s printing technologies make it difficult to distinguish high-quality facsimiles from originals, at least not without taking them out of the frame and examining the back (which holds a wealth of clues about an object’s age and provenance), or looking at the surface in detail, without the interference of protective glass” (Charney, 2016). The issue with the Albertina’s reproduction method is that there is no transparency to the public about displaying a reproduction
of an artwork. The wall label next to the watercolor never changes, always identifying the work hanging on the wall as the original, with no indication that for most viewers what is shown is a reproduction. As Charney (2016) states, “quality reproductions, clearly labelled so that no one is fooled” should be the requirement when displaying reproductions.

Knowing the work is a reproduction changes the visitor’s experience, as the visitor is not viewing the original. Unlike in Lynn Hershman Leeson’s *Lorna*, where the visitor is not viewing the physical DVD, but instead is viewing the content of the DVD, which is considered the work of art, for *Young Hare*, the physical painting is itself the object of value and the work of art. The museum displaying a reproduction is not the issue, as there is no denying that continuously exhibiting artworks is detrimental to the longevity of an artwork, especially works on paper, including books and documents. Works on paper are incredibly sensitive to light and must be stored and able to “rest” after an extended amount of time on display. The Northeast Document Conservation Center (NEDCC) recommends that museums “use copies whenever possible, do not display a valuable paper artifact permanently, … [and] keep light levels as low as possible” (Glaser, 1999). The issue that the Albertina Museum creates is the fact that the museum does not clearly inform viewers and visitors that, most likely, the *Young Hare* they are viewing is not the original work created by Albrecht Dürer, but is instead a high-quality reproduction. There would be no issue with displaying the reproduction if the museum simply informed the viewer, via the wall label, that the work was not the original. If the museum wanted to be further transparent, and perhaps use the presence of the replica as a chance to educate the public about conservation, the museum could explain, either on the same wall label or on a separate one, why the original work of art was not shown and best practices for caring for works on paper.
The use of casts to make fossil replicas for dinosaur bones, building a facsimile of King Tut’s tomb, creating exhibition copies of an optical disc used in the multimedia artwork *Lorna*, and displaying a high-quality, high-resolution print of Albrecht Dürer’s *Young Hare* are all examples of reproductions exhibited in museums. In general, displaying reproductions of artifacts is a good practice for the conservation and preservation of the world’s treasures. Arguments can be made on both sides about whether museums should even display original objects any more, as Steven Conn explores in his book “Do Museums Still Need Objects?” However, this is outside the scope of this report and is a topic for another report, worthy of discussion but still requiring more research and attention.

While sometimes necessary, reproductions in museums are often surprising for visitors to encounter. As Charney states, “there is an implicit trust that…museum visitors have in the museum to display original works. The idea of a…reproduction [or] copy… do[es] not tend to enter visitors’ minds” (Charney, 2016). It is the role of the museum to actively delineate between originals and reproductions, label all reproductions, casts, copies, facsimiles, and replicas as such, and remain transparent about the museum’s reasons for displaying reproductions.
Bibliography


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