Journal of Experimental Psychology: General

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George E. Newman and Paul Bloom
Online First Publication, November 14, 2011. doi: 10.1037/a0026035

CITATION
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George E. Newman and Paul Bloom
Yale University

Why are original artworks valued more than identical duplicates? The present studies explore 2 mechanisms underlying the special value of original artwork: the assessment of the art object as a unique creative act (performance) and the degree of physical contact with the original artist (contagion). Across 5 experiments, participants were exposed to hypothetical scenarios in which an original object was duplicated. The type of object varied across experiments (e.g., a painting vs. a piece of furniture) as did the circumstances surrounding the creation of the original object and the duplicate. Overall, the results support assessments of performance and contagion as key factors underlying the value of original artwork, and they are consistent with the conclusion that the discrepancy in value between original artworks and perfect duplicates derives from people’s lay theories about the domain of art, rather than from associations with particular kinds of art or certain cases of forgery.

Keywords: art, authenticity, valuation, contagion

In May of 2000, the two major auction houses, Christie’s and Sotheby’s, released their spring catalogues only to discover that both were selling the same painting, Paul Gaugin’s Vase de Fleurs (Lilas). The two paintings were sent to an expert who identified one as the real Gaugin and the other as a forgery. However, both were traced back to the same source, an individual named Ely Sakhai. As was later revealed by an FBI investigation, Sakhai had purchased a number of lesser known paintings by impressionist and postimpressionist artists, such as Paul Gauguin, Claude Monet, Pierre-August Renoir, and Marc Chagall. He then hired skilled forgers to copy the original paintings and would sell the duplicates with the genuine certificate of authenticity attached. After the duplicate painting had changed hands several times, Sakhai would often have the original painting re-authenticated and would sell it as well. When he was caught, Sakhai was sentenced to 4 years in prison and was ordered to pay a fine of $12.5 million (C. Thompson, 2005).

Why does the origin of an artwork matter so much? More specifically, why are original artworks valued more than identical duplicates? In this article, we explore the special value that people assign to original artwork as well as the underlying reasons for it. Across five experiments, we found that the value placed on originals is to some extent special to art—the drop in value for a duplicate artwork is more than the drop in value for a duplicate of a nonartistic artifact. This is true even when the original artwork and the original artifact are both one of a kind, their values are equated, and the method of production is identical. Our findings suggest, then, that the discrepancy in value between original artworks and identical duplicates derives from people’s lay theories about the domain of art, rather than from associations with particular kinds of art or certain cases of forgery.

This article also examines the psychological mechanisms underlying the special value of original artworks. We identify two key dimensions that are particularly important to the valuation of original artworks: the assessment of the art object as a unique creative act (performance) and the degree of physical contact with the original artist (contagion). These mechanisms and their proposed role in the valuation of art are discussed in the following sections.

Historical Sources of Value

The way in which one’s own personal history influences the value of objects is a major topic of interest within psychology (e.g., see Keys & Schwartz, 2007, for a review). For example, ownership matters; even though there may be no tangible difference between a mug that one owns and another identical mug, the owned mug tends to be more valued—the so-called endowment effect (e.g., Kahneman, Knetsch, & Thaler, 1990; Thaler, 1980). Choice also matters; a classic demonstration in the cognitive dissonance literature is that an object that a person chooses becomes more valuable simply by being chosen, whereas something that is rejected loses value (e.g., Brehm, 1956; Egan, Santos, & Bloom, 2007; Festinger, 1957). In addition, objects that play an important role for memory—for example, to document a special vacation with friends—may also acquire significant value (Zauberman, Ratner, & Kim, 2008).

Here we are concerned with a different though potentially related set of phenomena, in which the relevant historical properties extend outside the self. Examples of this are common in everyday life: People have paid considerable money for a tape measure owned by President Kennedy, an autograph by astronaut Neil Armstrong, and pop star Britney Spears’s chewed-up bubble gum (Bloom, 2004, 2010; Frazier, Gelman, Wilson, & Hood, 2009; Hood & Bloom, 2008; Newman, Diesendruck, & Bloom, 2009). Such objects are valued because of where they came from and the people they came into contact with and not because of their
tangible properties or presumed special utility. For example, if the buyer of the tape measure discovered that it was actually not from the Kennedy household, he would presumably be outraged and want his $48,875 back, though nothing perceptible or tangible about the object would have changed.

This phenomenon is not unique to objects that have been in contact with celebrities. People value items with personal significance, such as their child’s first baby shoes or their wedding rings (see Belk, 1988) and do not replace them with duplicates, even if they cannot tell the difference. Unlike objects such as hand-written Beatles lyrics or a gown worn by Princess Diana, however, adults are aware that the increased valuation of these personal objects does not lead to greater market value or public interest. People do not believe, for instance, that their child’s baby shoes should be in a museum (Frazier et al., 2009).

**Developmental Origins**

There is some evidence that the valuation of certain objects over perfect duplicates emerges spontaneously in development. Many young children become attached to so-called transitional objects, such as blankets or soft toys (Passman, 1987)—they hold them when stressed, sleep with them, and are miserable if they are lost.

In a recent set of studies, Hood and Bloom (2008) explored whether children’s attachments are locked on to those precise objects or whether they would extend to perfect duplicates. Three-to 6-year-old children were shown a special machine that was said to copy physical objects exactly. When asked to put everyday objects, such as toys and shoes, in the machine, children were more than willing, and when given the choice as to which one they would like to take home, children showed a slight preference to take home the duplicate object. However, when children with transitional objects were asked to place their object in the machine, many did not allow their attachment objects to be duplicated, and those who did usually preferred to bring home the original.

In another experiment, 6-year-old British children watched as a goblet that was said to have belonged to Queen Elizabeth was placed into the duplication machine. Children were then asked how much the original goblet and duplicate goblet should be worth. Many children said that the original was worth more than the duplicate—a pattern that did not ensue when the duplicated object was a goblet that was not owned by someone special (Hood & Bloom, 2008). These results suggest that for at least some types of objects, even young children may place a special value on originals as compared with perfect duplicates.

**History and the Value of Art**

The focus of this current article is the domain of artwork, which provides perhaps the strongest example of the importance of history. For example, when *The Disciples at Emmaus* was discovered to have been painted, not by Vermeer, but by the master forger Van Meegeren, it went from being one of the most valuable paintings in Holland to a near worthless curiosity. None of the painting’s perceptible properties had changed, merely beliefs about the object’s history (for discussion, see Bloom, 2010; Dutton, 2003).

The role of history is also salient in many cases of contemporary art. In several instances, artists have presented relatively ordinary objects, such as a urinal (Marcel Duchamp), a white canvas (Robert Rauschenberg), vacuum cleaners (Jeff Koons), and a pile of broken glass (Robert Smithson), as works of art. These particular objects are valued at millions of dollars, whereas physically indiscernible displays that did not come into contact with the artist (e.g., an identical commercial vacuum cleaner) are of no aesthetic interest and are worth substantially less (Bloom, 2004, 2010; Dutton, 2009; D. Thompson, 2008).

Why are assessments of history relevant to the valuation of artwork? We consider three potential explanations.

**Assessments of Performance**

Dutton (2003, 2009) has argued that people assess artwork, even static artwork such as paintings, as the end point of performances. From this perspective, our assessment of an artwork is related to our intuitions about the processes that gave rise to its existence. Thus, an original is different from a forgery because it is the end point of a different sort of performance. The original is a creative work, whereas the forgery is not. Similarly, people assess an artwork differently if it was done by someone in the 19th century versus someone in the 21st century, by an experienced artist versus an outsider, or by an adult versus a child.

This proposal is supported by experiments that manipulate the circumstances under which an artwork has come into being. For example, Kruger, Wirtz, Van Boven, and Altermatt (2004) found that participants believe that a painting that took longer to paint is aesthetically superior and worth more money than one that was painted quickly, even though the two paintings are perceptually identical (also see Cho & Schwarz, 2008). From this perspective, art is much like any sort of performance, including music and sport. History matters for all of these domains. People care whether such performances are the result of practice versus innate skill and whether they are natural or artificially enhanced (e.g., Riis, Simmons, & Goodwin, 2008).

**Contagion**

Another explanation is rooted in the law of contagion (Frazer, 1890/1959; Mauss, 1902/1972; Newman et al., 2011; Rozin & Nemeroff, 2002; Tylor, 1897/1974). This is the belief that, through physical contact, objects can take on a special quality or essence. For example, people are reluctant to purchase a T-shirt if it was just tried on by a stranger (Argo, Dahl, & Morales, 2006). However, they are more likely to purchase a T-shirt if it was recently worn by someone attractive (Argo, Dahl, & Morales, 2008). Similarly, the possessions of celebrities, such as President Barack Obama or George Clooney, lose value if their physical contact with the celebrity is undermined, as when the object is sterilized (Nemeroff & Rozin, 1994; Newman et al., 2011).

This account extends naturally to art. An original Picasso may be valuable because Picasso actually touched it, and Picasso is a famous and well-known artist. In contrast, a forgery would not have been touched by Picasso and, therefore, would not contain any of his special essence. Such contagion effects are not limited to art; they extend as well to objects such as autographs, baby shoes, and the possessions of celebrities (e.g., Newman et al., 2011).
Intuitions About Market Value

A final explanation is that original artworks are valued because of intuitions about their market value—how much others will pay for them.

There are different versions of this claim. The simplest is that people associate originals with increased value. Typically, we often use the term original to refer to valued objects, and so people might assume that items that have the term applied to them are likely to be more valuable than other objects. For example, people may think that an original widget should be more valuable than a duplicate widget. This account, however, predicts no systematic difference in increased value of original artwork versus original artifacts. We explored this issue in the studies described later by directly comparing original artworks to original nonartistic artifacts.

Another version of the market value account has to do with scarcity. Original art objects are unique and, by definition, are a scarce commodity. It is clear that scarcity matters for the value of an artwork. For example, the more copies of a print there are, the less they are worth (Cialdini, 1985). Further, when an artist dies, the value of his or her creations often rises, most likely because there are not going to be any more of them. As with the version of this claim described earlier, this account predicts no difference between artwork and artifacts, because an original artwork is going to be just as scarce as an original artifact.

One limitation of this scarcity proposal is that it doesn’t explain why a unique painting may decrease significantly in value depending on beliefs about its history. For example, in the case of The Disciples at Emmaus, why is a painting believed to be a (one-of-a-kind) Vermeer worth far more than a painting believed to be a (one-of-a-kind) Van Meegeren?

Perhaps the answer is that people know that other people will pay more for the Vermeer than for the Van Meegeren. It is common knowledge, after all, that original artworks are more valuable than duplicates. People might, therefore, give more value to original artwork simply because they have observed this fact about the world; they are aware that, for whatever reason, people pay more for original artwork. As an analogy, a person might value gold more than silver just because he or she knows that others value gold more than silver, without having any theory of why gold would be worth more.

We see this as the most plausible version of the market value account. Note, however, that this theory just pushes the question back, as it does not explain why these other people would value original artwork. In other words, the observation that there is a market for original artwork does not explain why the phenomenon exists in the first place. More importantly, however, this proposal can be readily distinguished from the performance and contagion accounts presented earlier. The market value account predicts that the key factor to determining the value of an original artwork (relative to a duplicate) is its status as an original artwork. Thus, unlike the competing theories, contagion and performance, it makes no predictions about people’s sensitivity to subtle facts about an artwork’s history when they assess its value.

Is Art Special?

The factors just discussed are not unique to art. Of course, intuitions about market forces apply to the valuation of all consumer products. As noted earlier, beliefs about physical contagion can influence the value of clothing (Argo, Dahl, & Morales, 2008) and celebrity items (Newman et al., 2011), and beliefs about the history of creation likely underlie all sorts of consumer preferences. For example, in The Theory of the Leisure Class, Thorstein Veblen (1899/2007) observed that a hand-wrought silver spoon might be indistinguishable from one made by a machine but is far more valuable.

We suggest, however, that considerations of performance and contagion are particularly relevant for artwork. One reason for this hypothesis is that other human-made creations have functions and are valued, at least in part, on how well they fulfill them. Spoons help us drink liquids, clothes cover our bodies, and so on. These functions are why these artifacts exist in the first place and are an important consideration in why people possess them. However, art has no function of this sort. In the absence of utility, considerations such as contagion and performance become correspondingly more important (Hagtvedt & Patrick, 2008). To put it differently, these factors become more relevant for artwork simply because other factors do not apply.

This is a negative account, focusing on what artworks lack. However, there is a corresponding positive explanation: The pleasure that people get from artwork might specifically draw on considerations of performance and personal contact. Under some accounts (Bloom, 2010; Dutton, 2009; Miller, 2000), the main reason people are drawn to works such as paintings is an instinctive interest in the creativity and skill of other individuals, possibly evolved as a way to assess them as friends, allies, or mates. This suggests that the specific history of creation should be particularly relevant for this domain.

Overview of Studies

The current experiments explored these issues by asking lay participants (i.e., individuals without expertise in art) for their estimations of an artwork’s value. Obviously, there are many domains for which perceptions of value are dependent on one’s expertise. For example, Buffalo-head nickels may range in value from a few cents to thousands of dollars, though what distinguishes one nickel from the next is clearly a matter of prior knowledge (Weaver & Frederick, 2009). We hypothesized, however, that unlike rare coins or stamps, even people who lack formal training about art possess fairly specific and reliable intuitions about art and what makes art objects valuable.

Experiment 1 provided an initial empirical demonstration that, controlling for the value of the originals, duplicate artworks are judged to be less valuable than duplicate artifacts. Experiment 2 replicated this pattern while controlling for a number of additional factors that are typically confounded across the domains of artworks and artifacts, including the scarcity of the original objects, inferences about the quality of the duplicates, and the belief that duplicate artifacts are simply more common than duplicate artworks. Experiment 3 looked at artworks specifically and tested an

1 We thank an anonymous reviewer for extended discussion on this point.
2 We thank Henrik Hagtvedt for raising this issue; the discussion of this issue is partially based on his comments.
alternative explanation that original artworks are valued more because they take more time, effort, and money to produce compared with identical duplicates. Experiments 4 and 5 tested the two key principles that were hypothesized to be important to the valuation of original artworks: the assessment of the art object as a unique creative act (performance) and the degree of physical contact with the original artist (contagion).

Experiment 1

Method

Thirty-three undergraduates read stories about either paintings or automobiles. Stimuli were presented in a $2 \times 2$ mixed-model design. Between subjects, we manipulated the domain of the objects (art vs. artifact). Within subjects, we manipulated whether the duplicate was created by the original manufacturer or by someone else. The stimuli presented to participants were as follows:

Art, original manufacturer: The Mill, a painting by a well-known artist named Roberts, is currently stored in Warehouse A. The painting is valued at $100,000. The artist agrees to make an exact duplicate personally. The duplicate is identical in every way. The duplicate is stored in Warehouse B.

Art, different manufacturer: Murder of Valentinian, a painting by a well-known artist named Smith, is currently stored in Warehouse A. The painting is valued at $100,000. The artist agrees to have an apprentice create an exact duplicate. The duplicate is identical in every way. The duplicate is stored in Warehouse B.

Artifact, same manufacturer: R-TL, a prototype car by a well-known manufacturer named Smith, is currently stored in Warehouse A. The automobile is valued at $100,000. The manufacturer agrees to make an exact duplicate. The duplicate is identical in every way. The duplicate is stored in Warehouse B.

Artifact, different manufacturer: RI-XP, a prototype car by a well-known manufacturer named Smith, is currently stored in Warehouse A. The automobile is valued at $100,000. The manufacturer agrees to have a subcontractor make an exact duplicate. The duplicate is identical in every way. The duplicate is stored in Warehouse B.

After reading each story, participants rated how much the duplicate painting (or car) was worth, using a 9-point scale ($0 = \text{a lot less than}$ $100,000, 8 = \text{a lot more than}$ $100,000$).

We predicted that, overall, duplicate artworks should be seen as less valuable than duplicate artifacts. We also predicted that participants would judge artworks made by the original artist to be more valuable than artworks made by the assistant, because of the value added by personal contact. Thus, we predicted an interaction between the domain of the object (art vs. artifact) and whether the duplicate was made by the original manufacturer versus someone else.

Results and Discussion

Results from this study are depicted in Figure 1. We conducted a mixed-model analysis of variance (ANOVA) with domain (art vs. artifact) as a between-subjects variable and contagion (same manufacturer vs. different manufacturer) as a within-subjects vari-

In addition to the predicted main effect of domain, we also observed a significant Domain $\times$ Contagion interaction, $F(1, 31) = 7.66, p < .01$. Duplicate works of art made by the same artist were judged as significantly more valuable ($M = 3.00, SD = 1.39$, $t(18) = 4.19, p < .001$). In contrast, the difference between duplicate automobiles made by the original manufacturer versus those made by a subcontractor was not statistically significant ($Ms = 3.64$ and 3.29, respectively).

Finally, we compared each of the four cells against the midpoint of 4 (i.e., the same value as the original). Consistent with the analyses described earlier, we observed that the duplicate painting was seen as significantly less valuable than the original, both when it was made by the same artist, $t(18) = 2.31, p < .05$, and when it was made by the assistant, $t(18) = 9.94, p < .001$. In contrast, both scenarios involving a duplicate automobile were not judged to be significantly less valuable than the original.

Thus, results from this initial study were consistent with the hypothesis that the concept of an original plays a special role in people’s reasoning about artworks. Participants judged a duplicate artwork to be significantly less valuable than a duplicate of a nonartistic artifact. As predicted, we also found that whether the duplicate was made by the same manufacturer or by someone else mattered more for artworks than for artifacts, which is consistent with the notion that contact with the original artist (contagion) may play a special role in the valuation of art.

Experiment 2

The previous study suggests that lay participants have unique intuitions about the domain of art. This includes the belief that duplicate artworks are worth less than duplicate artifacts as well as more auxiliary assumptions about the importance of contact with the same artist. One concern, however, was that these differences could have resulted from people’s familiarity with the categories of objects that were chosen. People may (correctly) believe that paintings tend to be one-of-a-kind items, whereas automobiles tend to be mass produced. This could, in turn, explain why people value
duplicate artworks less than duplicate artifacts. For example, the duplicate painting is less valuable because it is unfamiliar, whereas the duplicate automobile is expected.

To address this concern, we made two changes in the design. First, we explicitly told participants that the original artwork and the original artifact were each one-of-a-kind items. Second, we devised a scenario in which familiarity alone could not drive expectations about the value of duplicates. Previous theoretical work (Bloom, 2004; Danto, 1981) has suggested that in certain cases, an artist may “baptize” an object such that an ordinary artifact becomes art merely through the artist’s intent for it to be viewed as such (e.g., Marcel Duchamp’s urinal, or Jeff Koons’s vacuum cleaners).

In the present study, we capitalized on this type of example and examined cases in which an ordinary artifact (a chair) was intended to be either a piece of art or a piece of furniture. This allowed us to manipulate the superordinate category of the object (art vs. nonartistic artifact), while holding all other dimensions, especially familiarity with the basic-level category (e.g., painting vs. automobile), constant. We predicted that lay participants would be sensitive to this manipulation of the artist’s intentions and would judge a duplicate artwork to be less valuable than the duplicate artifact, even though the same object (a chair) was described throughout.

In this study, we also stated that the original object was destroyed and replaced with a duplicate. This too provides a stricter test of the hypothesis that originals are more important to the domain of art because in all cases there were no competitors to the original object (see Rips, Blok, & Newman, 2006). For example, in cases where the original exists, one might expect duplicates to be less valued simply for scarcity reasons. However, if the original has been destroyed, an account based solely on intuitions about economic value cannot explain the effect.

Additionally, in the previous study, we manipulated whether the duplicate object was created by the original manufacturer or by someone else and observed that this dimension mattered more for artworks than for artifacts. It may be, however, that these judgments were confounded with inferences about the quality of the duplicate. Therefore, we devised a new scenario in which the manufacturer of the duplicate and the circumstances surrounding its creation were held constant throughout all conditions.

Finally, to test the role of the artist’s intentions per se, participants read that once the item was purchased, the owner used the object either like a piece of art or like an artifact (either congruent with or the opposite of the manufacturer’s intentions, depending on condition). These factors were crossed in a 2 × 2 design so that we were able to directly compare the relative importance of the original manufacturer’s intentions (for the object to be viewed as art vs. an artifact) versus the importance of how the object was used once purchased.

Method

Participants and procedure. We recruited 115 adults ($M_{age} = 37$ years; 67% female, 33% male) from an on-line panel that is maintained by a private university. Participants were randomly assigned to one of four conditions in a 2 (intention) × 2 (use) between-subjects design. Participants read a scenario in which a manufacturer created a one-of-a-kind chair. Between subjects, we varied whether the chair was intended to be art (something that was purely for display) or an artifact (a piece of furniture). The chair was then sold for $1,000 to a private party, who used the object either in the way that was intended (i.e., as art or as furniture, depending on condition) or in a manner opposite to what was intended. Participants then read that the original was accidentally destroyed and was replaced with an identical duplicate that was manufactured by someone else. The specific wording of the scenario was as follows (with slightly different wordings depending on condition):

A skilled craftsman named Smith decided to make a chair. The chair was an original design and one of a kind, and he intended it to be a piece of art—something that people would display in their homes, but never actually sit in furniture—something that people would actually sit in, not just display in their homes.

Smith sold the chair to a family for $1,000. (However, unlike Smith wanted, the family did not treat the chair as art and, instead, they sat in it all the time./Like Smith wanted, the family treated the chair as art and never sat in it.)

One day, the family’s young son was playing on the chair and broke it. The chair couldn’t be repaired and the family liked it very much, so they hired a new craftsman that was not Smith to build an identical copy as a replacement. The craftsman made a new chair using the exact same kind of materials that Smith had. When it was finished its appearance was identical to the original.

After reading each story, participants rated how much the replacement chair was worth compared with the original, using a scale from 1 to 9 (1 = a lot less than $1,000, 5 = about $1,000, and 9 = a lot more than $1,000). Then, participants completed a forced-choice item responding to the question, “In your opinion, is the replacement chair worth less than the original, more than the original, or about the same?”

Results

Results from this study are depicted in Figure 2. We examined the ratings of the duplicate’s value through a $2 × 2$ ANOVA with intention (art vs. artifact) and use (art vs. artifact) as between-subjects variables. As predicted, when the original object was intended to be art, the duplicate was seen as significantly less
valuable ($M = 2.93$, $SD = 1.65$) than when the original was intended to be an artifact ($M = 3.86$, $SD = 1.75$), $F(1, 111) = 9.12$, $p < .01$. In contrast, there was no difference in the value of the duplicate when the original was used as art ($M = 3.12$, $SD = 1.79$) versus when it was used as an artifact ($M = 3.64$, $SD = 1.69$). No other main effects or interactions were observed. However, as seen in Figure 2, a duplicate of an artifact chair that was used as art was judged to be significantly less valuable ($M = 3.38$) than an artifact chair that was treated as an artifact ($M = 4.37$), $F(1, 54) = 4.78$, $p < .05$.

Results from the forced-choice item mirrored the earlier ratings (see Table 1). Comparing across the manipulation of intention revealed that when the original was intended to be art, the duplicate was judged to be less valuable than the original significantly more often ($N = 42$ out of $59$) compared with when the original was intended to be an artifact ($N = 30$ out of $56$), $\chi^2(1) = 3.81$, $p = .05$. In contrast, comparing across the manipulation of use revealed no difference between instances in which the chair was used as art ($38$ out of $57$ judged the duplicate to be less valuable) versus instances in which it was used like an artifact ($N = 34$ out of $58$). Thus, intentions of the creator but not those of the object’s owner dictated the value of the duplicate relative to the original.

**Discussion**

Results from this study replicated the finding that duplicate artworks are judged to be less valuable than duplicate artifacts. As predicted, when the original manufacturer intended the object to be a work of art, the duplicate was judged to be significantly less valuable compared with when the manufacturer intended the same object to be an ordinary artifact. In all conditions, the object was described as one-of-a-kind and the circumstances surrounding the creation of the duplicate were held constant across the two types of scenarios. This method controlled for a number of factors, including the initial value of the original object, inferences based on the quality of the duplicate, and the belief that duplicate artifacts are simply more common than duplicate artworks.

A result that was not predicted, however, was that a duplicate artifact that was used as art was judged to be significantly less valuable than a duplicate of an artifact that was used simply as an artifact. One explanation for this result is that participants may categorize any object that it is labeled art as such. In other words, either the creator’s intent or the special regard of an owner may elevate an object’s status to the domain of art, which in turn, makes the original object particularly important. A second possibility is that used as art may signal something particular about the owner’s preferences (e.g., that they found the original item to be, in some sense, irreplaceable). In either case, together these results suggest that there is something special about an object being categorized as art that makes originals particularly important and valuable. Moreover, lay participants appear to hold the view that at least one of the critical dimensions distinguishing artworks from nonartistic artifacts is the intention of the original manufacturer.

**Experiment 3**

The previous studies indicated that duplicate artworks are judged to be significantly less valuable than duplicate artifacts. This effect was obtained even when both the original artwork and the original artifact were one of a kind and when the method of production was the same. Moreover, Experiment 2 demonstrated that the mere categorization of the same object (a chair) as either a work of art or a nonartistic artifact determined whether or not the duplicate was judged to be significantly less valuable than the original. This result is consistent with the notion that the discrepancy in value between original artworks and perfect duplicates derives from people’s lay theories about the domain of art and from the more general theoretical proposal that original artworks are valued because of their histories and the processes that led to their creation, rather than for their ability to satisfy a particular function or use.

An alternative explanation, however, is that perhaps original artworks are judged to be more valuable than duplicates because of people’s intuitions about the cost of the production required to create original artworks versus duplicates. For example, people may believe that original artworks reflect a significant expenditure of resources (e.g., materials, labor, time in planning, effort, etc.) and duplicate artworks do not. In addition, they might infer from this that originals are of greater value. This would provide an alternative explanation for Kruger et al.’s (2004) finding noted earlier, where subjects believed that a painting that took longer to paint was worth more—people may value a high-effort painting solely because it reflects a greater expenditure of resources and not because they believe it to be a superior artistic performance.

The same intuition may not hold for duplicate artifacts, because in this case, people may instead assume that the resources that produced the original are the same as those needed to produce any duplicates. For example, when designing a new computer model, a company will design the creation process so that many identical products can be produced using the same amount of resources. In this case, the original is simply the first product that passed through the production line and does not require special materials or effort.

One problem with this explanation is that artistic originals are not always more difficult to create than artistic duplicates. For instance, the time required to identically duplicate an abstract painting by Jackson Pollack may be greater than the time that it took to produce the original. Indeed, a good forgery is often far more difficult to create—requiring a greater expenditure of resources—than many extremely valuable originals. Another con-

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3 We thank an anonymous reviewer for this suggestion.
cern is that it is unclear whether, outside of the specific issue of artistic performance, people really do attribute more value to an object if they believe that it costs a lot to create. When faced with two otherwise identical computers, will people pay more for the one that they believe cost more money and time for the company? If so, then this phenomenon would itself be in need of explanation.

Nevertheless, the hypothesis is worth exploring: Do intuitions about the cost of production explain why people judge original artworks to be more valuable than duplicates?

We tested this alternative by presenting participants with an original artwork, which was described as either taking a significant amount of time and effort to produce or taking relatively little time and effort. We then described a duplicate artwork that required either a significant amount of time and effort to produce (identical to the high-effort original artwork) or very little effort to produce (identical to the low-effort original artwork). These factors were fully crossed such that in some cases, the effort required to produce the duplicate was identical to the effort required for the original, whereas in other conditions, the relative effort was either higher or lower, depending on condition.

Consistent with our general proposal, we expected that even when the effort required to create the original artwork was the same as the effort required for the duplicate, participants should see the original as more valuable because the value of the original stems from factors such as contagion and the valuation of the original artwork as a unique creative act. Importantly, this effect should be obtained even when the effort required to create both the original and the duplicate was low. In the condition in which the original required high effort and the duplicate required low effort, we expected the original to be valued more (which is consistent with both our account and an account based on the cost of production). Finally, in the condition in which the effort required to produce the original was low, but the effort required to produce the duplicate was high, we expected the two artworks to be rated as equivalent in value because both represent the products of unique creative acts: one that resulted in the original design and one that utilized an entirely new and more effortful process to replicate that design. In contrast, an alternative explanation based on the cost of production should predict equivalent judgments of value when the effort needed to create the original and the duplicate is the same and should predict greater valuation of the high-effort object, regardless of whether it was the original or a duplicate.

**Method**

**Participants and procedure.** We recruited 150 adults ($M_{age} = 33$ years; 68% female, 32% male) from the same online panel as in Experiment 2. Participants were randomly assigned to one of four conditions in a 2 (effort original) × 2 (effort duplicate) between-subjects design.

Participants read a scenario in which an artist created a one-of-a-kind sculpture. The sculpture appeared to be a bicycle fork with front wheel mounted upside down on a wooden stool. This sculpture was based on an actual artwork originally created by Marcel Duchamp in 1913. To make the sculpture, the artist quickly took a bicycle wheel and put it on top of a stool. The sculpture took him only a few hours to complete. The finished product is pictured on the left.

The instructions presented to participants across the various conditions were as follows:

> An artist decided to make a sculpture. The sculpture was an original design and like nothing else that existed (pictured left).

**Low effort, original:** To make the sculpture, the artist quickly took a bicycle wheel and put it on top of a stool. The sculpture took him only a few hours to complete. The finished product is pictured on the left.

**High effort, original:** To make the sculpture, the artist painstakingly crafted each piece by hand to resemble the parts of a bicycle and an ordinary stool. Each piece of metal, rubber, and wood was specially crafted for this sculpture. The sculpture took him several weeks to complete. The finished product is pictured on the left.

A few years later, someone else saw the sculpture and decided to make an identical copy (pictured right).

**Low effort, duplicate:** To make the duplicate, the second artist quickly took a bicycle wheel and put it on top of a stool. The sculpture took him only a few hours to complete. The finished product is pictured on the right.

**High effort, duplicate:** To make the duplicate, the second artist painstakingly crafted each piece by hand to resemble the parts of a bicycle and an ordinary stool. Each piece of metal, rubber, and wood was specially crafted for this sculpture. The sculpture took him several weeks to complete. The finished product is pictured on the right.

Participants were then asked to estimate the value of both the original and the duplicate artworks in dollars. Because the sculpture used in this study was created by a well-known artist, we also asked participants if they had ever seen the sculpture before and, if so, where. Only two participants indicated that they had seen the sculpture before, but they were unable to recall where they had seen it. Inclusion of these two participants did not change the results in any way. Therefore, their data were included in the final analyses.

**Results and Discussion**

Results from this study are depicted in Figure 3. We performed a series of paired-sample t tests comparing the value of the original artwork to the value of the duplicate across each of the four conditions. When a high amount of effort was required to create both the original and the duplicate, participants reported that the original ($M = $181.17, $SE = 44.92$) was worth significantly more than the duplicate ($M = $98.94, $SE = 25.37$), $t(35) = 2.94, p < .001$. Similarly, when a low amount of effort was required to create both the original and the duplicate, participants still said that the original ($M = $74.83, $SE = 14.38$) was worth significantly more than the duplicate ($M = $44.85, $SE = 8.47$), $t(39) = 3.57, p = .001$. Not surprisingly, when a high amount of effort was required to create the original, but a low amount of effort was required to create the duplicate, participants said that the original ($M = $172.41, $SE = 49.08$) was worth significantly more than the duplicate ($M = $61.00, $SE = 26.56$), $t(37) = 3.62, p = .001$.

However, when a low amount of effort was required to create the original and a high amount of effort was required to create the duplicate, participants rated the two artworks as equally valuable. 

4 Interestingly, the original sculpture, Bicycle Wheel, created in 1913, was lost and was recreated by the artist in 1951.

5 This analysis excluded one participant who was a statistical outlier and reported a value for the original that was over 3.5 SD from the group mean ($2,500). The effect remained significant when this participant’s data were included.
and $96.67, respectively), \( p = .73 \). Using ANOVAs, we also observed a main effect of effort (high vs. low) for estimations of the original artwork’s value, \( F(1, 146) = 6.18, p < .05 \), and estimations of the duplicate’s value, \( F(1, 146) = 4.64, p < .05 \). Thus, participants did incorporate effort into their assessments of value. However, this factor was not responsible for the difference in value between the original and the duplicate (as indicated by the earlier analyses).

In sum, even when controlling for the amount of time, effort, and materials required to produce an artwork, original artworks were judged to be more valuable than duplicates. Importantly, this effect was obtained even when the effort required to create both the original and the duplicate was low (a bicycle wheel was merely attached to a stool). The one exception was when the effort required to produce the original was low, but the effort required to produce the duplicate was high (the second artist re-created the sculpture using new materials and a much more laborious and creative process). In this case, the original and duplicate were seen as equivalent in value because both represented the products of unique creative acts: one that resulted in the original design and one that used an entirely new process to replicate that design.

It is an open question, incidentally, whether it is effort per se that influenced participants’ assessments of value. The increase in value for the high-effort items may have been solely due to the extra time and work involved. However, it might instead reflect intuitions about the superior skills that were involved—it is a lot more impressive to craft metal, rubber, and wood than to place a bicycle wheel on top of a stool.

Regardless, the results from this study do not appear to support the alternative explanation that original artworks are valued more than duplicates because they are perceived as requiring more effort and resources to produce (cost of production). First, when the effort/materials required to produce both the original and duplicate were equated, participants still judged the original to be more valuable. Second, and perhaps more importantly, we did observe a main effect of high versus low effort/materials, but that effect was independent of the difference in value between originals and duplicates. In other words, people do seem to assign value based on the amount of effort/materials that went into making something. However, that source of value appears to be distinct from the special value afforded to original artworks.

Finally, it may be that participants use a more general heuristic that original artworks are valued more solely because they are originals. That is, people may value original artworks because they know that other people value original artwork (cf. the market intuitions account presented in the introduction). However, this account is unable to explain the result that when the original required low effort/fewer materials to produce and the duplicate required high effort/fewer materials to produce, participants rated the objects as equally valuable. In other words, these conditions included the labels original and duplicate (as in the other conditions), and yet no difference in value was found. This result suggests that participants are sensitive to an artwork’s history when assessing its value and are not biased to always see original artworks as more valuable.

**Experiment 4**

The remaining studies tested two key principles that were hypothesized to be important to the valuation of original artworks. Specifically, the present experiment examined how assessments of an artwork as a unique creative performance may influence judgments of value independently of considerations of scarcity (Bloom, 2010; Dutton, 2003). We presented participants with a scenario in which two very similar landscape paintings were created. In one scenario, participants were told that one artist painted the landscape first, while another artist decided to make a very similar painting after seeing the original (i.e., a duplicate was made with knowledge of an original, an intentional copy). In another scenario, participants read that the two artists each painted the same scene without knowledge of the other—the similar paintings happened merely as a coincidence. Thus, this study controlled for the total number of similar paintings in existence (scarcity), yet we predicted that the manipulation of whether the similar painting was an intentional duplicate or a coincidental duplicate would significantly influence judgments of value.
**Method**

Participants were a new sample of 180 adults (Mage = 36, 64% female, 36% male) that were recruited from the same online panel as in Experiments 2 and 3 to take part in an online study for academic purposes. Participants were randomly assigned to either the copy condition or the coincidence condition.

Participants read stories about two similar landscape paintings (see Figure 4). In both conditions, the paintings were described as being painted by two different artists who lived in the same town and painted a similar landscape from the same vantage point. In the copy condition, one artist was said to have painted the landscape first, while the other artist decided to make a copy after seeing the original. In the coincidence condition, each artist was said to have painted the same scene without knowledge of the other, and the similar paintings were said to have happened merely as a coincidence. To control for any differences in the actual appearance of the paintings, we counterbalanced which painting was Painting A and which was Painting B between participants.

After reading the scenario, participants were asked to estimate the value of each of the paintings. We asked participants, Compared to the average painting, how much money is the painting on the left worth? We then asked, “Compared to the average painting, how much money is the painting on the right worth?” Participants responded using a scale from 1 to 9 (1 = a lot less and 9 = a lot more).

**Results**

Results from this study are depicted in Figure 5. There was no effect of which painting was said to be created by which artist, so we collapsed across this dimension for all subsequent analyses. To examine ratings of value, we used a mixed-model ANOVA with condition (copy vs. coincidence) as a between-subjects variable and painting (Painting A vs. Painting B) as a within-subjects variable. This analysis revealed a significant Condition × Painting interaction, $F(1, 178) = 32.85, p < .001$. As predicted, in the copy condition, the original was judged to be significantly more valuable ($M_{original} = 5.58$, $SD = 1.65$) than the duplicate ($M_{duplicate} = 3.91$, $SD = 1.63$), $t(89) = 6.36, p < .001$. However, when each of the paintings was created independently, the two paintings were judged to be equivalent in value ($M_{painting A} = 4.81$ and $M_{painting B} = 5.10$, respectively), $t(89) = 1.32, p = .19$, ns.

Interestingly, manipulating the uniqueness of performance had a secondary effect on the value of the original. As expected, Painting B went down in value when it was said to be a copy ($M = 3.91$, $SD = 1.44$) versus when it was said to be created by coincidence, ($M = 5.10$, $SD = 1.65$), $F(1, 178) = 26.86, p < .001$. However, the opposite was true of Painting A. Painting A went up in value when it was said to be the original ($M = 5.85$, $SD = 1.44$) compared with when it was said to also be created by coincidence ($M = 4.81$, $SD = 1.65$; i.e., the basis for the copy) compared with when it was said to also be created by coincidence ($M = 4.81$, $SD = 1.44$), $F(1, 178) = 11.60, p < .001$.

**Discussion**

This study manipulated the uniqueness of performance through a subtle distinction between whether two very similar paintings were created as a copy (one duplicating the other) or as a mere coincidence. Results indicated that the act of intentionally duplicating a performance both lowered the value of duplicate and raised the value of the original. The first finding was predicted; the second was not. One explanation for this increase in value is that our participants inferred that if someone is going to take the trouble of copying a painting, it is likely to be a good painting; another is that participants inferred that if two artists coincidentally draw very similar paintings of the same landscape, then neither painting is likely to exhibit much creativity. Additionally, this
effect demonstrates that the influence of the viewers’ perception of the artwork as original versus duplicate is independent of how many similar or identical copies exist (scarcity), because the number of similar paintings was held constant throughout.

Experiment 5

Our goal in Experiment 5 was to examine the influence of contagion and its interaction with scarcity. Results from previous experiments found some support for the role of contagion: Whether or not the duplicate was made by the same person was more important for artworks than for artifacts. This pattern is at least consistent with what might be predicted by a contagion account. However, these studies did not manipulate the amount of physical contact directly and may have been confounded with additional inferences about quality (e.g., the work of an assistant vs. the original artist). Therefore, in Experiment 5, we independently manipulated contagion through the degree of physical contact that the original creator had with the artwork (or artifact) and scarcity through the number of originals in existence. We hypothesized that whereas scarcity should impact judgments of value for artworks and artifacts alike, manipulations of physical contact should have a greater impact for artworks than for artifacts.

Method

Participants were 256 adults (M_age = 35 years; 63% female, 37% male) that were recruited from the same online panel as in the earlier studies. This experiment used a 2 (domain) × 2 (contagion) × 2 (scarcity) design. There were eight different scenarios in total, which were all presented between subjects, such that each participant evaluated only one scenario. As in the previous studies, participants read stories about either an artwork (a sculpture) or an artifact (furniture). In addition to the domain of the object (art vs. artifact), we also varied how many identical objects were created (1 vs. 100) and how the items were made (either by a hands-on process where the manufacturer had a lot of physical contact with the item, or a hands-off process where the manufacturer used a lot of machinery and did not have much direct physical contact). To control for the inference that a lower number of originals and/or the hands-on process required more time and effort, we explicitly stated that each object took the manufacturer several days to complete. Participants read the following scenarios with different wordings depending on condition (alternate wordings are in parentheses):

Art: A well-known artist was working late one night, when he came up with a new design for a large piece of furniture, a dresser. After he sketched out a few ideas, he began working on the template. Using the same mold, a craftsman can make several pieces of furniture, and in each case the finished product is identical.

Artifact: A well-known craftsman was working late one night, when he came up with a new design for a large piece of furniture, a dresser. After he sketched out a few ideas, he began working on the template. Using the same template, a craftsman can make several pieces of furniture, and in each case the finished product is identical.

In this case, the artist decided to make only 1 sculpture (100 identical sculptures). The particular process that he used was very “hands-on”—meaning that he spent a long time physically touching the sculpture during the manufacturing process (“hands-off”—meaning that he used a lot of machinery and had very little physical contact with the sculpture). The sculpture (each sculpture) took him several days to complete.

In this case, the craftsman decided to make only 1 dresser (100 identical dressers). The particular process that he used was very “hands-on”—meaning that he spent a long time physically touching the dresser during the manufacturing process (“hands-off”—meaning that he used a lot of machinery and had very little physical contact with the dresser). The dresser (each dresser) took him several days to complete.

After reading the scenario, participants were asked to estimate the value of the item in dollars (cf. Experiment 3). To try to equate the dollar estimations across the artwork and artifact, participants were told, “Typically, sculptures (dressers) can sell from anywhere between a few hundred dollars to several thousand dollars.”

Results and Discussion

The results from this experiment are reported in Table 2. All data are reported in hundreds of dollars. To analyze estimations of value, we used a 2 × 2 × 2 ANOVA with domain (art vs. artifact), contagion (high vs. low) and scarcity (1 vs. 100) as between-subjects variables. This analysis revealed a significant main effect of domain such that overall, artworks (M = 10.28, SE = 1.08) were judged to be more valuable than furniture (M = 6.65, SE = 0.49), F(1, 248) = 11.40, p = .001. We also observed a significant Domain × Contagion interaction, F(1, 248) = 4.09, p < .05. For artworks, when the artist had a high degree of physical contact (i.e., hands-on contact), the sculpture was judged as more valuable (M = 14.24, SE = 1.91) than when there was a low degree of contact (M = 6.66, SE = 0.91), F(1, 130) = 13.55, p < .001. In contrast, the difference between artifacts made with a high degree of physical contact (M = 8.12, SE = 0.76) versus those made with a low degree of contact (M = 5.18, SE = 0.57) was smaller (as revealed by the interaction), though still statistically significant, F(1, 122) = 9.55, p < .01.

There was also a main effect of scarcity, F(1, 248) = 11.58, p < .001. However, this factor did not interact with domain. For artworks, when there was only one original (M = 13.24, SE = 1.98), the sculpture was judged as more valuable than when there were 100 originals (M = 7.42, SE = 0.78) F(1, 130) = 7.67, p < .01. Similarly, when there was only one original dresser (M = 7.57, SE = 0.80), it was judged as marginally more valuable than when there were 100 originals (M = 5.73, SE = 0.55), F(1, 122) = 3.58, p = .06. Finally, there was a significant two-way Contagion × Scarcity interaction, where the effect of high versus low

<table>
<thead>
<tr>
<th>Contact level</th>
<th>Art</th>
<th>Artifact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>7.53 (9.32)</td>
<td>5.83 (5.53)</td>
</tr>
<tr>
<td>High</td>
<td>19.12 (19.07)</td>
<td>9.31 (6.60)</td>
</tr>
</tbody>
</table>

Table 2
Mean (Standard Deviation) Values (in Hundreds of Dollars) Reported in Experiment 5
contact was much larger when there was only one original ($M_S = 14.29$ and $6.71$, respectively) compared with when there were 100 ($M_S = 8.07$ and $5.25$, respectively), $F(1, 248) = 4.34, p < .05$.

Results from this study were consistent with the prediction that manipulations of scarcity and contagion would differentially impact the valuations of artworks versus artifacts. Specifically, we found that although scarcity impacted estimations of value for both artworks and artifacts, manipulations of physical contact with the original manufacturer had a larger impact for artworks than for artifacts, a pattern that is consistent with results observed in Experiment 1.

**General Discussion**

The present studies were motivated by the observation that original artworks can sell for vast sums of money, whereas identical duplicates of those originals are worth substantially less. Moreover, this effect appears to be somewhat special to art—that is, the drop in value for a duplicate artwork is more than for a duplicate artifact. Although this pattern is readily observable in the world, its explanation is unclear. Typically, there are a number of factors that are confounded across the domains of artworks versus artifacts. For example, artworks are generally one of a kind, whereas artifacts are mass produced; artworks and artifacts are manufactured using different types of methods and may require different amounts of time and effort to produce. Therefore, our first aim was to demonstrate that the intuition that originals are especially important in the domain of art is robust across a number of different manipulations and scenarios. Our second aim was to explore multiple hypotheses as to why this occurs.

The first two studies provided an initial demonstration that duplicate artworks are judged to be less valuable than duplicate artifacts. We observed this effect even when both the original artwork and the original artifact were one of a kind and were equivalent in value. Experiment 2 helped to further rule out the potentially confounding inferences based on the relative quality of a duplicate artwork versus a duplicate artifact, as well as on the belief that duplicate artifacts are simply more common than duplicate artworks. Finally, the results of Experiment 3 address the alternative explanation that original artworks are valued because they are perceived as requiring more effort and resources to produce. The robustness of these results across a range of scenarios (many of them novel to participants) supports the view that the difference in perceived value between original artworks and perfect duplicates derives from people’s lay theories about the domain of art, rather than from preexisting familiarity with only certain types of art or from any number of factors that are typical of artworks but atypical of nonartistic artifacts.

Our second aim was to explore why originals may be so central to people’s concept of art. Throughout the article, we explored two dimensions that seem to be particularly important to the valuation of original artwork: the assessment of the art object as a unique creative performance and the degree of physical contact with the original artist (contagion). The role of contagion was supported in Experiment 1 and more directly in Experiment 5, where artworks made with a hands-on process were judged to be more valuable than those made with a hands-off process. In addition, contagion had a larger impact for artworks than for artifacts. Support for uniqueness of performance as an important dimension came primarily from Experiment 4, where the act of intentionally duplicating a painting (as opposed to accidentally making a similar-looking painting) had a twofold impact on judgments of value in driving down the value of a duplicate, while driving up the value of the original. Thus, controlling for the total number of similar artworks in existence, we find significant effects of both contagion and the assessment of the artwork as a unique creative performance on the valuation of original artworks. We suggest that people’s sensitivity to these quite subtle considerations shows that the skeptical account discussed in the introduction—that people value original artworks solely because they observe that other people value originals more than duplicates—cannot be entirely correct. Note also that the findings of Experiment 3 suggest that, under some special circumstances, originals are not always worth more than duplicates.

Our studies, then, draw attention to two key factors in the valuation of original artwork. These dimensions, however, may also apply more generally to assessments of at least some nonartistic artifacts. Previous research has documented how contagion beliefs can impact the valuations of everyday consumer goods. For example, the mere proximity between two items in a shopping cart or on a table may be sufficient to trigger inferences about contamination, which can raise or lower value (Mishra, 2009; Mishra, Mishra, & Nayakankuppam, 2009; Morales & Fitzsimons, 2007). Similarly, everyday artifacts can gain value through contact with certain special individuals, such as celebrities (e.g., Newman et al., 2011). Finally, assessments of a performance as effortful or unique may apply to wide array of objects and events, such as evaluations of sports or scholastic achievement (Kruger et al., 2004; Riis et al., 2008; see Bloom, 2010, for a discussion).

We suggest, then, that the difference between artworks and nonartistic artifacts might be more a difference of degree than a difference of kind. That is, the factors of contagion and performance might always be relevant, or at least potentially relevant, when evaluating the value of objects. However, these factors may be particularly salient in the domain of art in part because artworks do not have any functional value (whereas artifacts clearly do), and this salience explains why authenticity matters so much in this domain (Hagtvedt & Patrick, 2008). This suggests at least one avenue for future research, which could directly examine how the salience of an object’s functional value is related to the valuation of historical properties, such as contagion and assessments of performance. One prediction from the studies reported here is that these processes may have a compensatory relationship, such that increases in the importance of functional value decrease the importance of historical factors (such as contagion or performance), and conversely, that decreases in the importance of functional value increase the importance of these historical factors.

To sum up, we have documented several of the ways in which originals may be particularly important to people’s theories of art. We demonstrate the basic effect that duplicate artworks are perceived to be significantly less valuable than duplicate artifacts. Moreover, we shed light on at least two of the underlying psychological mechanisms (i.e., beliefs about physical contact with the original artist and assessments of the artwork as a unique creative performance). We hope that the research here will engender interest on the broad topic of art within psychology as well as more specific questions regarding the role of authenticity in judgments of value.
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Received May 2, 2011
Revision received August 29, 2011
Accepted August 29, 2011