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Nathaniel Rabb, Hiram Brownell, and Ellen Winner
Boston College

Aesthetic philosophers assume that a forged identical copy of an artwork is aesthetically worse than the original, and experimental evidence suggests that nonphilosophers share the intuition. This presents an apparent puzzle because visually identical artworks might be thought to be equally good works of art regardless of their histories. We examine this puzzle by presenting participants with side-by-side identical images of artworks, labeled “first” and “second” to convey original/duplicate status in morally neutral language, while indicating that the creator of the second was either the same artist, the artist’s assistant, or a forger. Forgeries were devalued relative to artists’ duplicates on all dimensions. Assistants’ duplicates were devalued on historical (e.g., originality) but not broadly evaluative (e.g., beauty) dimensions, even when both duplicates were the second of a series of 10 and thus were equally duplicative. The results are not explained by moral or monetary evaluations and were observed for painting as well as photography, a medium in which duplication is standard practice. The pattern of judgments is consistent with beliefs in individual artifact essences.

Keywords: aesthetic judgment, duplication, forgery, essentialism

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Duplication—the creation at time₂ of some object nearly identical to another object existing at time₁—is now ubiquitous. Images, words, and sounds meant to entertain or inform routinely reach us in copied form; mass-produced artifacts litter the landscape. Does the knowledge that an object is a duplicate affect how we respond to it? An early study of this question found that children valued cherished personal items and celebrity-owned artifacts more than objects believed to be novel identical duplicates, a tendency not seen for duplicates of mass-produced toys (Hood & Bloom, 2008; see also Gelman & Davidson, 2016). Under more realistic experimental conditions, adults judged duplicates of one-of-a-kind objects (paintings) but not mass-produced artifacts (cars) to be worth less money than originals (Newman & Bloom, 2012). These studies suggest that a unique object is perceived as more valuable than a nonunique one. Yet uniqueness alone may not account for such evaluations. People also prefer earlier copies of The Beatles White Album and Andy Warhol’s Campbell’s Soup Can, suggesting an effect of temporal priority independent of uniqueness that presumably would not hold for other sorts of artifacts like pens or phone chargers (Smith, Newman, & Dhar, 2015). Indeed, this preference for lower serial numbers was observed for mass-produced clothing designed by a fashion icon but not for the same article of clothing designed anonymously, showing that value can be imbued through indirect association with well-regarded people as well as through more obvious means like previous ownership (see also Frazier & Gelman, 2009; Frazier, Gelman, Wilson, & Hood, 2009). These considerations highlight a historically recent tension for art and other aesthetic pursuits: The products of these pursuits are often prized for their uniqueness and their relationships to their esteemed creators but are increasingly experienced as copies, often of varying fidelity. Yet little is known about how duplication affects aesthetic judgments.

One kind of duplication—forgeries—has long interested philosophers, who generally assume that given an original painting and a forged identical copy, the forgery is aesthetically worse (Danto, 1973; Dutton, 1983; Goodman, 1976; Irvin, 2007; Sagoff, 1976; see Hick, 2010, for discussion). This presents an apparent puzzle, as we might expect artworks that are visually identical to be equally good works of art.¹ Experimental evidence suggests that

¹ Philosophical accounts for the aesthetic deficiency of forgeries hold that a forgery has no aesthetic value because it is not a statement by an artist, and so is not an artwork in the first place (Danto, 1973); that performance and achievement are fundamental to the very concept of art, but forgeries misrepresent the performances and hence achievements of their creators (Dutton, 1983); that forgeries damage knowledge of art history by straining the trust that lay observers put in both expert critics and artists, a trust on which aesthetic understanding depends (Irvin, 2007); that perceptual experiences of known forgeries and original artworks necessarily differ, since the percever scrutinizes the forgery to find flaws, and so the aesthetic experience must also differ (Goodman, 1976, ch. 3); or that aesthetic properties are two-place predicates requiring membership in reference classes—a painting is beautiful only relative to other paintings but not relative to people or buildings—yet forgeries are not in the same reference class as artworks, so the comparison is meaningless (Sagoff, 1976).
the philosophical assumption is widely shared: People rate sculptures labeled “fake” as less appealing than the same sculptures labeled “genuine,” a pattern mirrored by differential EEG responses (Noguchi & Murota, 2013); they show increased BOLD responses in orbitofrontal cortex, a region associated with reward and positive evaluation, when viewing paintings described as authentic as opposed to copied or forged (Huang, Bridge, Kemp, & Parker, 2011); and they perceive forgeries as both worse on aesthetic dimensions and physically smaller than originals (Seidel & Prinz, 2017).

There are at least four plausible explanations for the assumed devaluation of forgeries. First, forgeries are deceptions (Currie, 1985), so their devaluation could be caused by moral disapproval attributed to the aesthetic domain—a conspicuous possibility given that moral valence affects many nonmoral judgments (Knobe et al., 2012) and even young children consider forgery to be wrong (Gilli, Ruggi, Gatti, & Freeman, 2016). Second, people judge both forgeries (Locher, Kruipsinski, & Schaefer, 2015) and nondeceptive duplicates made by someone besides the original artist (Newman & Bloom, 2012) to be worth less money than originals. Monetary assessments of duplicates correlate with highly general evaluative dimensions (Gjersoe, Newman, Chituc, & Hood, 2014), so the aesthetic devaluation of forgeries could be caused by misattributed monetary devaluation. Third, duplication is unusual in painting but standard practice in formats like photography, so authenticity norms may vary by medium (Margolis, 1983). As art forgeries are often paintings, their aesthetic devaluation could be due to misattributed dislike of authenticity norm violations (duplicate paintings seem “more fake” than duplicate photographs and thus are particularly undesirable). Finally, as noted in the preceding text, people are highly sensitive to object history in evaluative judgments, a tendency that some theorists attribute to beliefs in individual artifact “essences” (Gelman, 2013; Newman, 2016). Because forgeries are made by shoddy fraudsters rather than famous, prestigious artists and therefore lose their specialness once discovered, downgraded causal histories could drive aesthetic devaluations. As with monetary evaluations, this explanation applies to nondeceptive duplicates as well as forgeries. Moreover, it is unknown whether downgraded historical specialness dissociates from moral disapproval, since previous studies have compared special objects to similar but nonspecial counterparts (e.g., a rock from the moon vs. a rock from your backyard) rather than to identical counterparts intended to deceive (a moon rock vs. a fake moon rock; Frazier & Gelman, 2009; Frazier et al., 2009). Critically, all four factors are present in real cases of identical forgery.

A previous study on forgery (Wolz & Carbon, 2014) attempted to control for moral disapproval by labeling artworks either originals by famous artists or sanctioned copies made by their apprentices. The latter were rated lower on every evaluative dimension—quality, talent, emotional value, liking, desire to own, extraordinariness, visual rightness, importance, relevance, personal appreciation—but not on familiarity. This counts against the moral disapproval hypothesis but cannot rule it out given the within-participants manipulation (labeling the works “copy” or “original”). Children as young as five consider copying without deceptive intent to be immoral (Olson & Shaw, 2011), so negative label associations may have confounded moral disapproval with historical specialness. The study also cannot rule out the other candidate factors because perceived monetary value was not measured and all stimuli were paintings. Finally, because participants were simply shown each image once, presented as either an original or a copy, the experiment does not capture a key aspect of the forgery puzzle—that the same object’s evaluation changes over time due to altered beliefs about the identity of its creator.

Here we explore the effect of duplication on aesthetic judgments while manipulating (a) the moral character of the act of duplication, (b) the medium of the artworks (painting vs. photography), and (c) the causal-historical specialness acquired by being made by a famous artist. To capture the conditions of the philosophical puzzle without the response demand created by presenting the same artwork first as an original and later as a forgery, we showed participants two identical images presented simultaneously and varied their creators. The dependent variable was the degree of disfavor for the second artwork as a function of its creator and was measured through comparative judgments (which one is more x?). The two images were labeled “first” and “second” to minimize negative associations with the notion of copying. First artworks were described as made by a famous artist in all cases. In Experiment 1, second artworks were made by the same artist (C1, control), the artist’s assistant (C2, to examine special causal history without immorality), a forger who stole the artist’s procedure by photographing the same location (C3a, to examine immorality in a high-effort deception), or a forger who stole the artist’s image by taking the digital file (C3b, immorality in a low-effort deception). Medium (photography, painting) was varied in C1 and C2 to examine authenticity norms. Participants made judgments on dimensions chosen to capture a range of standard aesthetic predicates and also rated monetary value. Experiment 2 used a similar procedure with several design improvements and included a direct measure of moral disapproval.

**Experiment 1**

**Method.**

Participants. U.S. residents ($N = 481$; 42% female; $M_{age} = 33.88$, $SD = 10.51$; see the online supplemental material for complete demographic information) completed the study on Amazon’s Mechanical Turk in exchange for $.40$. The sample size ($n = 80$ per cell after collapsing across nuisance variables) was sufficient for good power given the large effect sizes ($\eta^2_p \geq .38$) reported by Wolz and Carbon (2014). The high- and low-effort forger conditions did not reliably differ on any scale; responses from the two forgery conditions are therefore combined in the analysis. Participants who failed an attention check ($n = 24$) were excluded, yielding final sample sizes of $C1 = 160$, $C2 = 149$, and $C3 = 148$.

Materials. We selected two artist-made photographs (Andreas Gursky’s “Rhine II,” Adrian Gordon’s “And/Or #9,”) and two highly realistic paintings (Richard Estes’ “Subway,” April Gornik’s “Light Before Heat”). All showed scenes without people or other moveable elements to make the C3a scenario plausible (an identical photograph of the same scene made by a forger at a later point in time). Besides this stipulation, the particular artworks are of no special importance since in each condition two identical images were shown, and the same images were presented across conditions.
Procedure. Participants were randomly assigned to one of four conditions. In all conditions, each artwork was presented twice in side-by-side format to emphasize that the two artworks were visually identical (see Figure 1). Images in each pair were labeled “first” and “second” to minimize label valence effects. Left/right locations of first and second images were counterbalanced to control for position effects. The study precluded the use of tablets or smartphones to ensure screen widths sufficient for side-by-side presentation.

In C1, photographs appeared below descriptions in the following form:

On the left is the first print of a photograph by a famous artist, Andreas Gursky. On the right is a second photo that Gursky carefully produced a week later from the original image file. Both have Gursky’s signature.

The critical manipulation appeared in the second sentence, which varied by condition to read “… that Gursky’s assistant carefully produced a week later from the original image file” (C2), “… that a very clever forger carefully produced a week later by going to the same location, taking a new photo, and attributing it to Gursky” (C3a), or “… that a very clever forger carefully produced a week later by hacking into Gursky’s server, making a print from the original image file, and attributing it to Gursky” (C3b; see the Appendix for complete texts). The two forger conditions were included to examine the role of perceived effort, which has been shown to influence aesthetic judgments (Jucker, Barrett, & Wlodarski, 2014; Kruger, Wirtz, Van Boven, & Altermatt, 2004). Artworks were said to be signed by the artist so that assistant-made seconds were considered legitimate instances rather than training exercises or defective iterations. Forgeries were said to have been discovered since judgments of undetected forgeries would be ambiguous.

Participants assigned to C1 and C2 saw one photograph pair and one painting pair; those assigned to C3a and C3b saw one photograph pair. Participants made comparative judgments (“Which one is more x?”) on eight randomly ordered dimensions (beauty, liking, quality, influence, creativity, originality, skill, value). We omitted paintings from C3a and C3b because comparable forgery scenarios were deemed implausible. Image pairs appeared above 7-point scales marked this one by far, this one moderately, or this one slightly for each image; a center point was marked both equally. Participants then answered an attention check question and reported art training, familiarity with the contemporary art world, recognition of the artworks presented, and demographic information.

Results and Discussion
Following Goldman’s (1995) taxonomy of aesthetic property types, we divided our scales into two groups distinguishing broadly evaluative from historical- evaluative characteristics (see Kulka, 1981, and Levinson, 1990, for similar distinctions). The broadly evaluative index averages across the scales most typically used in experimental aesthetics (beauty, liking, quality; α = .80 in these data). The historical-evaluative index includes dimensions determined in part by an object’s location in time (creativity, influence, originality; α = .79); an artist’s artwork will be deemed less creative, influential, and original if either that same artist or another artist had already made an identical work. Although these latter properties may not be paradigmatic of aesthetic judgments, we emphasize that they are ascribed to signal approval—otherwise, statements like “it’s original but I still don’t like it” would be unintelligible. They are therefore evaluative rather than merely descriptive properties. Experimental evidence suggests that non-philosophers frequently make both kinds of evaluations in their judgments of visual art, film, and music (Augustin, Carbon, & Wagemans, 2012).

Our two groupings were supported by results of factor analyses showing that while all scales load positively onto the first factor, the broadly evaluative scales load positively and the historical scales load negatively onto the second factor (see the online supplemental material). Skill concerns the abilities of an object’s creator and thus arguably belongs in the latter group, but it is not historical in the relevant sense. For the sake of conceptual clarity, we do not discuss this variable further; its addition to the historical index does not alter the results for either experiment.

Although the experimental setup elicited comparative judgments, the results of concern are not whether participants showed any preference for first over second artworks (see the online supplemental material for frequencies). Rather, the critical measure is the magnitude of preference, as this expresses the degree to which the first artwork is favored on a given dimension and thus, conversely, the degree to which the second artwork is disfavored. Because the first artwork was created by the artist in all conditions while the creator of the second varied, condition effects reflect beliefs about the creators of the second work. For ease of interpretation, we recoded the scales to indicate the degree to which the second artwork was disfavored (3 = highest possible penalty to the second artwork, 0 = no preference, −3 = highest possible penalty to the first artwork).

Item, presentation order, and left/right position had no measurable effects on judgments, so we collapse across these variables in what follows. Art knowledge, image recognition, education, and gender were not significantly correlated with either judgment type, and none of these variables reliably differed across conditions. Interestingly, a small but significant correlation between age and historical-evaluative judgments hints at younger participants showing less concern over duplication in general (painting: r[309] = .169, p = .003; photography: r[457] = .10, p = .033).

Means by condition are shown in Figure 2. For historical-evaluative judgments, second paintings were more strongly disfavored when created by the artist’s assistant (M = 1.74) than when made by the artist (M = 1.12), t(307) = 4.93, p < .001, Cohen’s d = .56. Historical-evaluative judgments of photographs followed the same pattern and allowed comparison with forgeries. Second photographs were more strongly disfavored when made by the assistant (M = 1.35) or the forger (M = 1.53) than when made by the artist (M = .87), F(2, 454) = 14.70, p < .001, η_p^2 = .061, artist-made < assistant-made (p < .001, d = .47), artist-made < forger-made (p < .001, d = .59), p values for these and all subsequent pairwise comparisons were adjusted for multiple comparisons using the Bonferroni correction (least significant difference p × 3). Forger-made and assistant-made photographs were not reliably distinguished (p = .5, Bonferroni-adjusted, d = .15).

By contrast, broadly evaluative judgments did not reliably differ between the artist-made and assistant-made conditions for paintings (M_{assistant} = .35, M_{artist} = .22), t(307) = 1.40, p = .162, d =
On the left is the first print of a photograph by a famous artist, Andreas Gursky. On the right is a second photo that [Gursky's assistant/a very clever forger/a very clever forger] carefully produced a week later [from the original image file/from the original image file/by going to the same location, taking a new photo, and attributing it to Gursky/by hacking into Gursky's server, making a print from the original image file, and attributing it to Gursky]. Both have Gursky's signature. [C3 & C4 only: The trick was discovered by a contemporary art expert in August, 2007.]

![Image](Image)

(first print)

![Same image](Same image)

(second print)

Which one is more x?

- this one by far
- this one moderately
- this one slightly
- both equally
- this one slightly
- this one moderately
- this one by far

Here are two images of “Rhein,” a planned series of 10 perfectly identical photographs attributed to the famous artist Andreas Gursky. On the left is the first photograph that Gursky made. On the right is the second photograph, [also made by Gursky/which was made by Gursky’s assistant/which in fact was made by an art forger who stole Gursky’s digital file].

Gursky relies on a team of assistants to make his work, which is common among contemporary and classical artists. The official Gursky studio stamp is on each photograph, so each one is equally valued on the art market. [C3 only: In August, 2007, an art historian noticed the poorly copied stamp and exposed the forgery in a report for the magazine Artforum.]

![Image](Image)

(first image)

![Same image](Same image)

(2/10 estimated price at auction: $53,000

(C3: estimated price at auction: $200)

Which one is more x?

- this one by far
- this one moderately
- this one slightly
- both equally
- this one slightly
- this one moderately
- this one by far

*Figure 1.* Schematic of display in Experiment 1 (top) and Experiment 2 (bottom). Text in brackets varies by condition.
The results of Experiment 1 show the importance of beliefs about object creators in aesthetic judgments. Duplicate artworks made by forgers were generally devalued relative to duplicates, and forged paintings were included to create a fully crossed design. Experiment 2 was designed to address each of these concerns: Participants’ moral judgments of the act of duplication were measured, the sale values of the artworks were explicitly stated to be equal for artist-made and assistant-made duplicates, and forged paintings were included to create a fully crossed design.

Experiment 2

Method

Participants. U.S. residents (N = 480; 52% female; M_{age} = 36.26, SD = 12.04) who did not participate in Experiment 1 completed the study on Amazon’s Mechanical Turk in exchange for $4.00. Participants who failed an attention check or took the experiment more than once (n = 40) were excluded, yielding final sample sizes of C1_{painting} = 71, C1_{photography} = 75, C2_{painting} = 76, C2_{photography} = 72, C3_{painting} = 75, and C3_{photography} = 71.

Materials. Experiment 1 showed no differences due to item, and besides maintaining consistency in subject matter to avoid semantic effects, the choice of artworks was essentially arbitrary. We therefore simplified the design and used one photograph (Gursky’s “Rhein II”) and one painting (Gornik’s “Light Before Heat”).

Procedure. Participants were randomly assigned to one of six conditions (Painting/Photography × Artist/Assistant/Forger). As in Experiment 1, each artwork appeared twice side-by-side, but the accompanying background information differed in several ways (see Figure 1). First, to reduce any hint of immorality in the assistant condition, the typicality of assistants producing work for famous artists was explicitly stated. Second, to reduce the perception that the second artworks were not legitimate, both images were described as members of a planned series and labeled “1/10”
Participants saw either one photograph pair or one painting pair and made comparative judgments on the same dimensions as in Experiment 1 (with the exception of value, which was omitted since the values were stated). Left/right location was not varied since Experiment 1 showed no position effects. After completing the ratings, participants answered four follow-up questions in a fixed order without the artworks displayed. Participants first rated the degree to which they found the duplicator’s action immoral (7-point scale intermittently marked not at all moral, minor moral concern, some moral concern, or very immoral). To explore possible mechanisms for the apparent transfer of specialness, we then asked participants to rate the degrees of physical contact, creative involvement, and technical involvement that the artist had with the duplicate (e.g., no contact at all, a little contact, a lot of contact, maximum contact possible, etc.; these questions were adapted for the forgery conditions for consistency of task length but are not analyzed since in the case of forgery, the artist would have had zero contact and involvement with the duplicate). All other aspects of the design were the same as in Experiment 1.

**Results and Discussion**

Demographic and art knowledge variables did not correlate with aesthetic judgments, and these variables did not reliably differ across conditions. Scales were again averaged into historical-evaluative judgments (creativity, influence, originality; \( \alpha = .75 \)) and broadly evaluative judgments (beauty, liking, quality; \( \alpha = .72 \)). Means by condition are shown in Figure 3. An ANOVA on historical-evaluative judgments with medium as a between-participants factor revealed a main effect of condition, \( F(2, 434) = 69.42, p < .001, \eta^2 = .242 \). As in Experiment 1, a second artwork was disfavored more on this measure when created by the artist’s assistant (\( M = 1.08, p < .001 \), Bonferroni-adjusted, \( d = .69 \)) or by a forger (\( M = 1.83, p < .001 \), Bonferroni-adjusted, \( d = 1.40 \)) than when created by the artist (\( M = .44 \)). In contrast to Experiment 1, the assistant/forgery difference was also reliable, with a larger penalty for forger-made than assistant-made second artworks (\( p < .001 \), Bonferroni-adjusted, \( d = .68 \)). A small effect of medium was again observed, \( F(1, 434) = 8.90, p = .003, \eta^2 = .02 \), indicating a stronger preference for first paintings (\( M = 1.26 \)) than for first photographs (\( M = .97 \)). Medium did not interact with condition, \( F(2, 434) = .50, p = .608, \eta^2 = .002 \).

Broadly evaluative judgments also showed the same pattern as in Experiment 1. The main effect of condition, \( F(2, 434) = 20.54, p < .001, \eta^2 = .086 \), was due to second artworks being more strongly disfavored when made by a forger (\( M = .62 \)) than when made by the artist (\( M = .01, p < .001 \), Bonferroni-adjusted, \( d = .69 \)) or by the assistant (\( M = .21, p < .001 \), Bonferroni-adjusted, \( d = .43 \)). Artist and assistant second artworks were not reliably distinguished (\( p = .110, \eta^2 = .01 \)). There was no main effect of medium, \( F(1, 434) = .20, p = .657, \eta^2 < .001 \), and medium did not interact with condition, \( F(2, 434) = 1.90, p = .151, \eta^2 = .009 \). The results again show preferences for special creators independent of the monetary value of the created object or the conventionality of its duplication.

This preference would also seem to be independent of moral evaluation, since the typicality of assistants creating artists’ work was emphasized in the descriptions. However, ratings of the immorality of the duplicators’ actions displayed the same pattern as historical-evaluative judgments, with the assistant’s actions (\( M = 2.96 \)) rated morally worse than the artist’s (\( M = 2.23 \)) and the forger’s actions rated considerably worse than both (\( M = 5.89 \)), \( F(2, 434) = 183.66, p < .001, \eta^2 = .458, \eta^2 < .001 \). There was no main effect of medium, \( F(1, 434) = .06, p = .94, \eta^2 < .001 \), and Condition × Medium interaction, \( F(2, 434) = .789, p = .455, \eta^2 = .004 \). This suggests that participants found the use of assistants morally objectionable despite being told that such use is common practice. We therefore conducted a linear regression on historical-evaluative judgments with condition (artist-made/assistant-made) and immorality ratings as predictors (\( R^2 = .102 \), \( F(3, 290) = 12.12, p < .001 \)) (see Table 1 for details). The analysis shows that condition significantly explains the systematic variance in these judgments; the greater disfavoring of the assistant-made than the artist-made artwork was not predicted by moral disapproval.

Finally, we examined the follow-up measures in the assistant-made condition to explore possible mechanisms for the transfer of specialness from creator to object. Participants could have devalued an assistant’s second artwork because they believed it reflected the artist’s ideas to a lesser degree (creative involvement), did not appreciate the artist’s skill (technical involvement), or was simply touched less by the artist (physical contact). Remarkably, for paintings, preferences for a first artwork were negatively correlated with the artist’s physical contact with the second work (historical-evaluative, \( r(76) = -.261, p = .023 \); broadly evaluative, \( r(76) = -.249, p = .033 \)), but this did not occur for photographs (\( r < .07, p > .5 \)). Creative involvement and technical

![Figure 3](image-url)
involvement showed no associations. Thus for painting, a medium in which duplication is unusual, the more the artist was thought to have touched the assistant-made second artwork, the greater the preference for it. For photography, a medium in which duplication is standard, no such pattern was seen. Although the association was modest, the possibility that physical contact is sufficient but not necessary for transfer of specialness is consistent with other findings (Smith et al., 2015).

**General Discussion**

Philosophers have long been interested in the puzzle of forgery, and consistent with philosophers’ assumptions, laypeople devalue artworks that they believe to have been forged. We found that the second of two identical artworks was rated lower on all evaluative dimensions when made by a forger as opposed to a famous artist, replicating previous results (Noguchi & Murota, 2013; Seidel & Prinz, 2017). The question we explored here was why forgeries are devalued.

Identical forgeries constitute a special case of the more general phenomenon of duplication (Currie, 1985), an observation that highlights the many factors present in real cases of forgery. A forged painting previously thought to be by a famous artist is not just a duplicate but a deception and thus the product of an immoral action. Moreover, a forged painting is worth considerably less money than an original, introduces duplication in a medium that normally involves one-of-a-kind objects, and loses its historical specialness by eliminating its previously thought association with a great artist. Any of these factors could plausibly account for its perceived deficiency.

Wolz and Carbon (2014) sought to pry apart dislike of forgeries and disapproval of deception by describing paintings as works by famous artists or copies by their apprentices. But the artworks were presented singly, as either by a famous artist or by an assistant. This design therefore did not capture a key component of the forgery puzzle—that beliefs about the provenance of a single object change from time1 to time2. To capture this puzzle, we did not ask participants to evaluate the same artwork twice, the second of two identical artworks was rated lower on all evaluative dimensions when made by a forger as opposed to a famous artist, replicating previous results (Noguchi & Murota, 2013; Seidel & Prinz, 2017). The question we explored here was why forgeries are devalued.

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In contrast to Wolz and Carbon’s (2014) findings, we did not detect any meaningful difference between ratings of second artworks by artists or assistants on broadly evaluative properties (e.g., beauty), an outcome likely attributable to the nature of the task given that our experiments had high power for detecting effects of the size that they report. On the face of it, this outcome seems unsurprising given the task—it is especially odd to call one of two simultaneously presented identical images better or more beautiful, but perhaps less odd to call it more original or creative. Our findings show that the global disapproval reported in other studies shifted to more specific dimensions, since assistant-made duplicates were disfavored more than artist-made duplicates only on historical-evaluative properties. And this effect was consistent across mediums, unaffected by monetary value, and independent of moral disapproval.

The disfavoring of assistant-made duplicates on historical dimensions merits further remark. For there is no rational sense in which the second of 10 photographic prints or identical paintings could be more influential, creative, or original simply because it was printed or painted by the artist rather than the artist’s sanctioned assistant. Both images were conceived by the same person (the artist) and created at the same juncture in history (second), so the two objects’ histories were identical in every way except for who physically fabricated them. Yet this was sufficient to influence historical-evaluative judgments. (Note that the between-participants design precludes condition differences being attributable to demand.) We suggest that this pattern of judgments is best explained by the belief that artists imbue their creations with some special quality at the moment of origin.

Convergent evidence for this possibility comes from Smith et al. (2015), who reported preferences for copies of famous musicians’ albums and famous artists’ screenprints that have lower rather than higher serial numbers. This preference was also independent of monetary value and disappeared when temporal order and serial number were de-confounded. Moreover, physical contact was seemingly unnecessary unless participants believed that the musicians or artists directly handled copy #100000 more than copy #1111111, which is unlikely. The fact that preferences for temporally prior items cannot be explained by differences in items (albums are exactly the same) or by physical contact again implicates beliefs about the moment of origin, when the first of a series is imbued with a special quality that diminishes with iterations. The possibility that physical contact is not necessary for an artwork to acquire its specialness was seen in our data as well because the degree to which an artist touched a duplicate photograph made by his assistant was not associated with judgments of the duplicate, even though it was for duplicate paintings. In a related study of identity over time, people were less likely to agree

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**Table 1**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.749</td>
<td>.057</td>
<td>13.22</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Artist vs. assistant</td>
<td>-48.337</td>
<td>8.324</td>
<td>-.328</td>
<td>-5.807</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Immorality</td>
<td>-.008</td>
<td>.057</td>
<td>-.008</td>
<td>-.146</td>
<td>.884</td>
</tr>
<tr>
<td>Artist vs. Assistant × Immorality</td>
<td>-10.831</td>
<td>8.369</td>
<td>-.072</td>
<td>-1.294</td>
<td>.197</td>
</tr>
</tbody>
</table>

Note. Condition remains the only reliable predictor when the interaction term is omitted.
that a duplicate sculpture or painting was the same object as the original when it was made by someone other than the original creator (Newman, Bartels, & Smith, 2014). Qualitative data in that study were consistent with the present explanation: Participants suggested that duplicates made by others lacked the creator’s “heart” or “soul.”

All the foregoing supports Gelman’s (2013) proposal that individual artifacts (e.g., my personal coffee mug) but not artifact kinds (the class of all coffee mugs) are thought to have internal essences causally responsible for their properties, much like natural kinds (see also Newman, 2016). The special quality transferred from artist to artwork resembles the “placeholder” aspect of the representations posited by psychological essentialism—one need not know in what the essence consists in order to believe that it exists and has real causal powers (Medin & Ortony, 1989). In the current experiments, this essence was sufficient to increase evaluative judgments having to do with object history. Interestingly, this essence transfer does not seem to be positive contagion on the standard construal (Nemeroff & Rozin, 2000) since physical contact is not necessary. And as essentialism predicts, other studies have found that the transferred quality supports inductive inferences about paintings and sculptures but not artifacts with no connection to special creators (e.g., mugs or backpacks; Newman, 2016, Experiment 3).

Questions of boundary conditions remain, such as when a given object is considered a token (and thus imbued with an essence) as opposed to a type. The answer may depend in part on the communicative context of the task (Malt & Sloman, 2007), but patterns robust across tasks would be informative. And the generalizability of our findings to other aesthetic pursuits awaits investigation; would Adele’s mp3 of her own song be considered more creative than a mp3 copied by her engineer, for instance? In any case, the philosophical thought experiment of comparing an artwork with its duplicate sculpture or painting was the same object as the original when it was made by someone other than the original creator (Newman, Bartels, & Smith, 2014). Qualitative data in that study were consistent with the present explanation: Participants suggested that duplicates made by others lacked the creator’s “heart” or “soul.”

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**Appendix**

**Descriptions by Condition and Dependent Measures for Experiments 1 and 2**

<table>
<thead>
<tr>
<th>Medium</th>
<th>C1: Artist second</th>
<th>C2: Assistant second</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Photography</strong></td>
<td>On the left is the first print of a photograph by a famous artist, Andreas Gursky. On the right is a second photo that Gursky carefully produced a week later from the original image file. Both have Gursky’s signature.</td>
<td>On the left is the first print of a photograph by a famous artist, Andreas Gursky. On the right is the second photo that a very clever forger carefully produced a week later by going to the same location, taking a new photo, and attributing it to Gursky. Both have Gursky’s signature. The trick was discovered by a contemporary art expert in August, 2007.</td>
</tr>
<tr>
<td><strong>Painting</strong></td>
<td>On the left is a painting by a famous artist, Richard Estes. On the right is a second painting that Estes carefully painted a week later from the original canvas. Both have Estes’ signature.</td>
<td>On the left is a painting by a famous artist, Richard Estes. On the right is a second painting that Estes’ assistant carefully painted a week later from the original canvas. Both have Estes’ signature.</td>
</tr>
<tr>
<td><strong>C3: Forger second, high effort</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Photography</strong></td>
<td>On the left is the first print of a photograph by a famous artist, Andreas Gursky. On the right is the second photo that a very clever forger carefully produced a week later by hacking into Gursky’s server, making a print from the original image file, and attributing it to Gursky. Both have Gursky’s signature. The trick was discovered by a contemporary art expert in August, 2007.</td>
<td></td>
</tr>
<tr>
<td><strong>C4: Forger second, low effort</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Photography</strong></td>
<td>On the left is the first print of a photograph by a famous artist, Andreas Gursky. On the right is the second photo that a very clever forger carefully produced a week later by hacking into Gursky’s server, making a print from the original image file, and attributing it to Gursky. Both have Gursky’s signature. The trick was discovered by a contemporary art expert in August, 2007.</td>
<td></td>
</tr>
</tbody>
</table>

**Measures**

Which one is more beautiful?
Which one do you like more?
Which one is the better work of art?
Which one required more skill?
Which one is more likely to be influential?
Which one is more creative?

(Appendix continues)
Appendix (continued)

<table>
<thead>
<tr>
<th>Medium</th>
<th>C1: Artist second</th>
<th>C2: Assistant second</th>
<th>C3: Forger second</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photography</td>
<td>Here are two images of “Rhein,” a planned series of 10 perfectly identical photographs attributed to the famous artist Andreas Gursky. On the left is the first photograph that Gursky made. On the right is the second photograph, also made by Gursky. Gursky relies on a team of assistants to produce his work, which is common among contemporary and classical artists. The official Gursky studio stamp is on each photograph, so each one is equally valued on the art market.</td>
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</tr>
<tr>
<td>Painting</td>
<td>Here are two images of “Light Before Heat,” a planned series of 10 perfectly identical paintings attributed to the famous artist April Gornik. On the left is the first painting that Gornik made. On the right is the second painting, also made by Gornik. Gornik relies on a team of assistants to produce her work, which is common among contemporary and classical artists. The official Gornik studio stamp is on each painting, so each one is equally valued on the art market.</td>
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Measures

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