Engineered Essence and Authenticity

CHELSEA GALONI

BRENDAN STREJCEK

KENT GRAYSON

Chelsea Galoni (c-galoni@kellogg.northwestern.edu) and Brendan Strejcek (b-strejcek@kellogg.northwestern.edu) are PhD candidates in Marketing at the Kellogg School of Management, Northwestern University, 2211 Campus Drive, Evanston, IL, 60208. Kent Grayson (k-grayson@kellogg.northwestern.edu) is Associate Professor of Marketing, Bernice & Leonard Lavin Professorship at the Kellogg School of Management, Northwestern University. The authors thank Derek Rucker, Alexander Chernev, Brian Sternthal, Aparna Labroo, and the Labroo lab for their comments on earlier versions of this article. Supplementary materials are included in the web appendix accompanying the online version of this article.

Contribution Statement

Past research on product essence has focused on how essence can be transferred into products via physical contact (e.g., Argo, Dahl, and Morales 2006, 2008; Fernandez and Lastovicka 2011; Morales and Fitzsimons 2007; Newman and Dhar 2014; Newman et al. 2011; Smith et al. 2016). This research has built on and extended work in psychology and anthropology that focuses on essence as a contagious entity that passes from one thing to the next. However, consumer research on product essence has largely ignored the idea people use essence to identify and categorize things. A large body of research in the social sciences focuses not on whether something has essence that has been contagiously transferred to it, but on whether something has a stable and inherent essence that makes it what it is. In this paper, we build on this past research to examine where a product's stable and immutable essence comes from. We propose that essence is not only rubbed off (as has been shown in previous research) but also built in. We also identify *original process* as a factor that can influence consumer perceptions of whether essence is built into the product. We show that these effects are separate from the contagious effects of essence demonstrated in past studies. We also compare the effects of built-in essence (versus rubbed-off essence) on consumer assessments of authenticity.

Abstract

Consumers often value products above and beyond the functional utility they provide. Consumer assessments of a product's additional value are often influenced by beliefs about whether the product has a particular essence. Much prior research has demonstrated that a major mechanism through which products acquire essence is contagious physical contact with original sources of value. In this paper, the authors introduce the idea of engineered essence, in which essence is not rubbed off from one thing to another, but rather built in. This paper investigates a mechanism that allows a product to have essence and therefore be considered authentic without contagious contact with other sources. Across three studies, the authors demonstrate that an original process is a key mediator between a creator's intent and a product with the creator's intended essence. The studies also demonstrate that process is more important to consumers with strong essentialist beliefs and is not affected by contagion sensitivity. The authors discuss the theoretical contribution of the concept of engineered essence and propose managerial implications.

Keywords: authenticity; branding; contagion; essence; product valuation

Products often hold value above and beyond the functional utility they are designed to deliver. A shirt touched by a physically attractive other increases the value of owning that shirt (Argo, Dahl, and Morales 2008). A pair of Levi's jeans made in an original factory location is thought to be more authentically Levi's – and therefore more valuable – than an identical pair of jeans made elsewhere (Newman and Dhar 2014). While a piece of chewing gum at a grocery store costs just a few cents, a piece of chewing gum used by Britney Spears (certainly with less functional utility than an un-chewed piece) sold at auction in 2004 for over $14,000 (Holguin 2004). In marketing and consumer behavior, the process through which products like these gain value above and beyond their functional utility is often described as a positive *contagious transfer* of "essence" from one thing to another (Argo, Dahl, and Morales 2006; Argo et al. 2008; Fernandez and Lastovicka 2011; Fuchs, Schreier, and van Osselaer 2015; Hingston, McManus, and Noseworthy 2017; Newman and Dhar 2014; Newman, Diesendruck, and Bloom 2011; Smith, Newman, and Dhar 2015). To the extent that the valence of the essence is positive, a product with essence is more valuable than a product without. But what is essence? How do things get essence in the first place? And is it always inherently contagious as has been previously assumed? We explore these questions in this paper. Here, we focus on when and how products acquire their own unique essence rather than attaining it via contagious transfer. We identify *original process* as a distinct and non-contagious way that essence can be built, or engineered, into a product. By "original process," we mean a creator's set of instructions codified in such a way that the outcome has built within it the creator's intended essence. In identifying this distinct mechanism, we contribute to theoretical discussions about product essence. These new insights highlight managerial practices that companies can use to influence

the perceived essence of the products they produce—practices that some research has suggested are not capable of influencing product essence.

Essence is a substance that people believe is central to defining things and understanding their value. Research on essence spans multiple disciplines, including social psychology (Demoulin, Leyens, and Yzerbyt 2006), sociology (Sayer 1997), philosophy (LaPorte 1996), and cognitive psychology (Ahn et al. 2001). Scholars who study essence acknowledge that essence does not really exist and that it is instead a "folk concept" that people use as they identify things in the world (e.g. Medin and Ortony 1989). On one hand, beliefs about essence are quite abstract. People's characterizations of essence are often vague (Newman and Dhar 2014) because essence is unspecifiable (Gelman and Wellman 1991), unknown in its properties (Schwartz 1980), and not just hidden (Putnam 1975) but also unobservable (Chaigneau, Castillo, and Martinez 2008). People can differ on the extent to which they believe in essence and use it to form judgments about things (Bastian and Haslam 2006; Chiu, Hong, and Dweck 1997; Levy, Stroessner, and Dweck 1998). On the other hand, despite the imaginary and intangible character of essence, people behave as if it is a real substance that has a tangible impact on objects (Medin 1989). Research has shown that people believe essence can be transferred by physical contact and can sometimes be washed off (e.g. Rozin and Nemeroff 1990). People also believe that the essence of an object has a tangible, causal influence on the object's external properties—for example, tiger essence is the reason tigers have stripes (e.g. Ahn 1998).

A significant stream of research on essence has focused on the transfer of essence from one thing to the next. This scholarship has its roots in anthropological studies of the cultural assumptions that underlie beliefs about magic (Frazer 1890; Mauss 1972). For instance, people believe that a voodoo priest can use someone's possession to gain control over that person

because they also believe that the person's essence has been transferred onto the possession. Psychologists have documented similar beliefs about essence transfer in contexts where magic is not assumed to be operating. For example, Rozin, Nemeroff and colleagues demonstrated that people are less likely to drink a cup of juice that has been touched by a sterilized cockroach (Rozin, Millman, and Nemeroff 1986) and are less likely to rate a sweater positively when it has been worn by a disliked person (Rozin et al. 1989). Results like these have led to the finding that people treat essence as if it can be transferred in a manner similar to the process by which microorganisms get transferred to objects and people (Nemeroff and Rozin 1994). When a cockroach contacts juice (even one that has been sterilized), people behave as if a germ-like substance from the bug physically contaminates the juice.

This "germ model" (Argo et al. 2008; Nemeroff and Rozin 1994) of essence transfer has dominated consumer and marketing research on essence. Studies have shown that celebrity contact can enhance the value of an object due to the transfer of the celebrity's essence to the object (Fernandez and Lastovicka 2011; Hingston et al. 2017; Newman et al. 2011; Smith et al. 2015). Research has also shown that physical contact with an artisan (Fuchs et al. 2015) or with an original location (Newman and Dhar 2014) can enhance the value of a product due to the transfer of the artisan's or brand's essence onto the product. Other consumer research has demonstrated that, when everyday consumers come in contact with an object (for example, when someone tries on a shirt but does not purchase it), their essence gets transferred to the object and influences its value (Argo et al. 2006, 2008). Essence transfer can also occur between products. In a study by Morales and Fitzsimons (2007), the value of a product changed as a result of touching another product in the grocery cart (see also Mishra 2009). Likewise, the value of a product can be influenced by the essence of the money purchasing it (Galoni and Noseworthy

2015; see also Levav and Mcgraw 2009). Taken together, this research sheds considerable light on how, why, and when essence can be contagiously transferred from one thing to the next, and on how that transferred essence influences how products are marketed and evaluated.

However, marketing and consumer behavior scholars have paid less attention to a second stream of research on essence. This research focuses on the role that essence plays in helping people to identify and categorize things. Because lay beliefs about essence hold that it is intrinsic, immutable, and stable, beliefs about something's essence assist people in judging things and making generalizations to other things with the same essence (Haslam 1998). Research (e.g., Bloom, 1996) has shown that, when assessing an object's essence, people pay attention to different cues depending on whether they believe the object is a "natural kind" (it came into being via relatively low human intervention) or an "artifact" (it was created by a person). Nonetheless, for both natural kinds and artifacts, essence operates in similar ways and has similar effects (Ahn, 1998; Gelman, 2013). Information about a natural kind's essence helps people make inferences about other natural kinds in the same category (Gelman and Wellman 1991), even when they are physically dissimilar (Rips 1989). Similarly, information about an artifact's essence helps people decide how to categorize it (Barton and Komatsu 1989), even when its original physical characteristics have been dramatically modified (Rips 2001).

Importantly, research on how essence helps identify and categorize things does not focus on the contagious transfer of essence. Instead, it focuses on the essence inherent to the object itself. Consider the essence of natural kinds like goats or cows. When deciding whether something is a goat, we do not wonder what essence may have been transferred onto it. Instead, we focus on the stable and immutable essence that we believe is inherent to the object—an essence that is built in, not rubbed off from something else. By age four, children already show a

tendency to believe calves are born with a cow essence that will not change even if the calves are raised—and potentially contaminated—by pigs (Gelman and Wellman 1991). Despite any beliefs about the contagious transfer of essence, a calf coming into physical contact with a pig is insufficient to make people believe the calf is—in essence—a pig.

People show a similar tendency to believe that artifacts have a built-in essence. When assessing this essence, people often focus on a *creator's intentions* (Bloom 1996; Chaigneau, Barsalou, and Zamani 2009; Chaigneau, Castillo, and Martinez 2008; Gutheil et al. 2004). A paper plate cut up and crushed to resemble trash is still considered a plate if people are aware that its creator intended it to be a plate (Gutheil et al. 2004). Likewise, imagine an inventor who creates a steel net to catch fish, which someone else uses it to carry rocks instead. Even when the tool is better at carrying rocks than catching fish, people still endorse that the tool is essentially a fish-catcher (Chaigneau et al. 2008). Just as is true for natural kinds, when deciding whether something is essentially a fish net or a paper plate, people do not consider what essence may have been transferred onto it from something else. Instead, they focus on the stable and immutable essence that they believe is inherent to the artifact as intended for it by its creator. This essence is built in and cannot be easily changed due to non-prescribed uses or physical transformation.

In this paper, we build on and extend the idea that a creator's intention influences the inherent essence that people perceive in objects. We propose that the creator's intention for an object (and thus the object's essence) becomes built into the object via an *original process*—that is, a set of instructions codified by the creator in such a way that the outcome has built within it the creator's intended essence. We show that using an original process effectively builds a creator's intended essence into a product even without any physical intervention on the part of

the creator (and thus without any opportunity for the contagious transfer of essence). We therefore suggest that, in addition to believing in contagious essence transfer, consumers ascribe to an alternative "engineering model" of essence, where essence is built in rather than rubbed off. Because products are often built using a process that does not involve any physical intervention by the object's creator, we propose that this process builds essence into a product in a way that is fundamentally different from (and which can occur without) the contagious transfer of essence. In doing so, we identify a novel way through which products can acquire essence and provide an alternative strategy that marketers can use to influence consumer perceptions of their products.

ESSENCE AND AUTHENTICITY

One way that essence can influence the value of a product is by increasing consumer perceptions of its authenticity (Arough 2006; Beverland, Lindgreen, and Vink 2008; Clouse 2009; Fernandez and Lastovicka 2011; Fuchs, Schreier, and van Osselaer 2015; Gelman 2013; Hood and Bloom 2008; Jones 2010; Newman 2016; Newman and Dhar 2014; Spiggle, Nguyen, and Caravella 2012). Someone who believes that chocolates truly contain Godiva essence is also likely to believe that the chocolates are authentic Godiva chocolates (Newman and Dhar 2014). Someone who believes that a piece of art contains the essence of an artist named Roberts would also endorse the art as an authentic Roberts (Newman and Bloom 2012). While previous consumer research has focused on essence as a mediator for authenticity assessments, it has focused exclusively on essence that has been transferred contagiously. For example, Newman and Dhar (2014) show that the authenticity of Godiva chocolates can be enhanced by essence acquired via physical contact with an original location. We similarly use perceptions of authenticity as a dependent measure to test whether the engineered essence built into an object

can also have a positive impact on product value. In other words, we propose that an original process builds a creator's intended essence into products and increases judgments of their authenticity. This model (original process → engineered essence → authenticity) is distinct from the dominant model of essence transfer in consumer research to date (physical contact → contagious transfer of essence → authenticity).

Although essence and authenticity are related both empirically and theoretically, they are different constructs. First, beliefs about essence do not necessarily lead to judgments of authenticity. As Morales and Fitzsimmons (2007) demonstrate, rice cakes touched by lard are less liked because they have been contaminated by the essence of lard; however, a person would reasonably respond "no," if asked whether the rice cakes were authentically lard. That is, the contagious transfer of lard essence contaminates the rice cakes but does not influence judgments about authenticity. Second, other things beyond essence influence authenticity judgments. As Newman and Dhar (2014, Experiment 1) demonstrate, a pair of Levi's jeans sold at an authorized (versus unauthorized) retailer is more authentic—an effect due to perceptions of evidence and not essence transfer. Thus, while authenticity and essence are often correlated, they are independent constructs.

We also examine authenticity as a downstream consequence of essence to shed light on a frequently reported phenomenon in the authenticity literature. Past research has shown that knowledge about an original process often influences authenticity judgments. For example, in the wine and beer industries, authenticity is centrally linked to traditional production methods (Beverland 2005) and to the particular method of production used by the producer (Beverland 2006). In markets for one-of-a-kind arts and crafts, Littrell, Anderson and Brown (1993) identify artisans' production techniques and Newman and Bloom (2012) identify "unique creative

performance" as contributors to perceptions of authenticity. Peñaloza (2000) points to specific business practices, such as animal domestication processes, as a basis for the authenticity of national Western trade shows. Cohen and Avieli (2004) discuss the importance of consumer understandings about the process of preparation as an influence on perceptions of restaurant food authenticity.

While prior research has demonstrated that an original process often facilitates judgments of authenticity, the psychological process underlying the influence of an original process on authenticity is not well understood. One possibility is that consumers infer physical contamination of essence from knowledge about an original process, and are therefore using the germ model to understand the product's value. For example, the process of producing luxury wines often involves considerable physical contact between creator and object (Beverland 2005), providing ample opportunity for perceived transfer of contagious essence from an original producer to the product (see also Newman and Bloom 2011, Experiment 5). Alternatively, beliefs about process may grant authenticity to objects by guaranteeing maintenance of brand styles and quality standards (Spiggle, Nguyen, and Caravella 2012). Finally, Stavrova and colleagues (2016, p. 554) argued that creative intention prompts consumers to view objects as being symbolically part of the creator's extended self (Belk 1988), making intention alone sufficient to contagiously transfer the creator's essence to an object. In this sense, no particular process is critical for the transfer of essence from a creator to an object as long as creative intention is maintained.

We show that cues about an original process influence beliefs about authenticity beyond the physical or creative intention-based contagious transfer of essence. According to our hypothesized psychological mechanism, an original process engineers essence into products by

enacting the codification of the creator's intent. We show that the effect of an original process on essence and authenticity is independent of the contagious effect of an original location (Newman and Dhar 2014). We further show that creative intention alone (Stavrova et al. 2016; Valsesia, Nunes, and Ordanini 2016) is not sufficient for engineering essence within a product. Finally, we show that an original process can build essence into objects in the absence of physical contact between a product and an original piece of equipment or producer, can influence essence and authenticity in a way that is separate from ensuring product quality or standards, and is not influenced by individual consumers' sensitivity to contagion.

In addition to contributing to a theoretical understanding of essence and authenticity, our results have useful practical implications. Whereas previous research on authenticity has highlighted how physical contact with a valued source can enhance authenticity through contagious transfer (Beverland 2006; Newman and Dhar 2014), this tactic is limited in terms of how it can be leveraged to increase product value. For example, if Levi Strauss's marketers wished to use original location as a consistent source of authenticity for all its products, the physical capacity of the original location would constrain growth, and the company could not easily solve the problem by creating a new San Francisco to augment its original space (Newman and Dhar 2014). However, processes are less subject to the inherent scarcity of physical place (or the physical presence of the creator) and can enhance authenticity no matter the location, and no matter how many locations. For example, the many Apple products that are produced in China include a label saying "Designed by Apple in California, Assembled in China" (Saunders 2010). This message suggests that Chinese manufacturers are using an original process designed and dictated by the Apple organization. As another example, consider the largest McDonald's in the world, which is situated on the Champs-Elysées in Paris (McAteer 2016). As Newman and Dhar

(2014) have shown, this restaurant is so distant from the restaurant's origins in Illinois that consumers in Paris considering a Big Mac's authenticity are at best likely to believe that brand essence was weakly transferred contagiously to the French franchise and the food it sells. We argue that, rather than trying to emphasize how McDonald's essence has been contagiously transferred from Illinois to Paris, the French franchise can enhance authenticity by reinforcing consumer beliefs that the food was made via an original process, which ensures that the food produced by that process has built into it the creator's intended essence.

OVERVIEW OF STUDIES

Across three studies, we demonstrate that an original process increases perceived authenticity by building essence into the product or experience. In study one, we disentangle the independent effects of contagious essence transfer (rubbed off essence) and engineered essence (built-in essence) on authenticity judgments. In study two, we conceptually replicate the effect of an original process in a domain with very low contagion likelihood and demonstrate that neither creative intention nor differences in history are sufficient for building essence into a product. Finally, in study three, we demonstrate that the degree to which consumers believe artifacts can have essence in the first place influences beliefs about essence that is built in—but not essence that is rubbed off—and subsequent authenticity beliefs. In sum, we demonstrate that an original process can build essence into products. We further demonstrate that this built-in essence is distinct from rubbed off essence and can have an independent influence on consumer authenticity beliefs.

STUDY ONE

The purpose of study one was to demonstrate that an original process builds essence into a product and, in turn, increases consumer beliefs that the product is authentic. We also sought to demonstrate that an original process builds essence into products in a way that is separate and distinct from the contagious essence that is rubbed off on products from an original location. We therefore separately manipulated whether essence can be built in or rubbed off. If indeed built-in essence is distinct from rubbed-off essence, then an original process should have an effect on essence even in the absence of contagion opportunity. In other words, even when physical contact did not happen and was not possible, built-in essence should increase authenticity. In this study, we also measure (and thus control for) potential alternative explanations for effects on authenticity, including perceived evidence and perceived quality (Newman and Dhar 2014).

Method

Participants were 202 adults recruited from an online nationally representative panel in exchange for the chance to win gift cards. Participants were randomly assigned in a 2 (Contagion Opportunity: Location is Original vs. Location is New) by 2 (Process: Original vs. New) between-subjects design. In line with Newman and Dhar (2014, Experiment 1), participants first read a short vignette about the founding of Levi Strauss & Co. Participants then saw a picture of a pair of Levi's 501 Original Fit Jeans and were asked to imagine they were shopping online on the official Levi's website. To manipulate contagion opportunity (and thus the possibility that essence could be rubbed off), half of the participants read that the jeans were manufactured in the original factory in San Francisco (built in 1906). The other half read that the jeans were manufactured in a newer factory in San Francisco, built in 1996 (cf. Newman and Dhar 2014).

As Newman and Dhar (2014) demonstrated, consumers believe that an original location contains the essence of the founder and the brand, which is contagiously transferred to products made at that location. To manipulate the extent to which the process was perceived as being original, half of the participants read that the jeans were manufactured "using the original process designed by Levi Strauss in 1873," whereas the other half read that the jeans were manufactured "using a newer process designed by Levi Strauss's chief designer in 1973." As pre-established exclusion criteria, participants were then asked to recall the year the process was designed and location of the factory.

We then measured how authentic participants thought the jeans were and how much they valued the jeans. In line with Newman and Dhar (2014), participants were asked, "When you think of what it means to be truly authentic Levi's jeans, you would have to say this product is…" (1 = "inauthentic," to 9 = "authentic"). To measure valuation, participants were asked three items, "Would you be willing to pay a premium in order to own this particular pair of jeans?" (1 = "I would not pay a premium," to 9 = "I would pay a premium"); "How much would you be willing to pay for this particular pair of jeans relative to the average pair of Levi's jeans?" (1 = "I would pay substantially less," to 9 = "I would pay substantially more"); and "How likely would you be to purchase this particular pair of jeans?" (1 = "not at all," to 9 = "very much"). The three items were averaged to form a reliable valuation index that was used in subsequent analysis (α = .83).

If an original process builds a creator's intended essence into a product, then the jeans made through an original process should elicit greater perceived essence and subsequent authenticity even in the absence of a contagion opportunity. We thus tested essence as a mediator by asking participants to respond to the four items used by Newman and Dhar (2014): "These

jeans contain the true essence of the Levi's brand," "These jeans reflect the heritage of the Levi's brand," "These jeans embody the pedigree and history of the Levi's brand," and "There is some special quality of the Levi's brand that these jeans embody," all ranked from 1 = "Strongly Disagree," to 9 = "Strongly Agree." The four items were averaged to form a reliable essence index ($\alpha = .89$).

Perceived evidence has been shown to be an alternative mediator for authenticity judgments (Grayson and Martinec 2004; Newman and Dhar 2014), and we therefore included measures of perceived evidence for two reasons. First, Newman and Dhar (2014) did not find that perceived evidence mediated the effect of original location on authenticity judgments and valuation, so we wanted to see if this null effect was replicated in our study. Second, given that having essence built into an object could make the object more evidential of its brand, we anticipated that this evidence could be an additional or alternative mediator for the effect of original process on authenticity judgments. Thus, we asked participants to respond to four perceived evidence items used by Newman and Dhar (2014): "There is evidence of a connection between these jeans and the Levi's brand," "In a factual sense, these are Levi's jeans," "It is accurate to say that these are a pair of Levi's jeans," and "It is legitimate to sell this product in a retail store as a pair of Levi's jeans," all measured on a scale from 1 = "Strongly Disagree," to 9 = "Strongly Agree." The four items were averaged to form a reliable perceived evidence index ($\alpha = .83$).

Quality is not necessarily linked to authenticity (our key dependent variable). For example, an original (versus new) process could produce a product that has higher authenticity (because of the original process) but lower quality (because of an inferior or less technologically advanced process). Nonetheless, it is possible that respondents will not only think that the

original and new processes produce products of different quality, but also that this could provide an alternative explanation for some of our results. For example, respondents may assume that producing a high-quality product was part of Levi Strauss's intention when designing the jeans and that a newer (superior) process better lives up to that intention. Furthermore if quality (instead of essence or evidence) were a significant mediator for the effect of process on authenticity, this might suggest that an original process guarantees authenticity by ensuring consistent product quality rather than by building essence into the product. We therefore asked participants to rate the product on a series of quality dimensions: "Durability," "Materials," "Craftsmanship," and "Overall Quality," which were averaged to form a quality index ($\alpha = .96$).

Lastly, because Newman and Dhar (2014) found that the effect of original location was stronger for those with higher contagion sensitivity, we also asked participants to complete a 3-item contagion sensitivity measure. We also measured participant demographics at the study's conclusion.

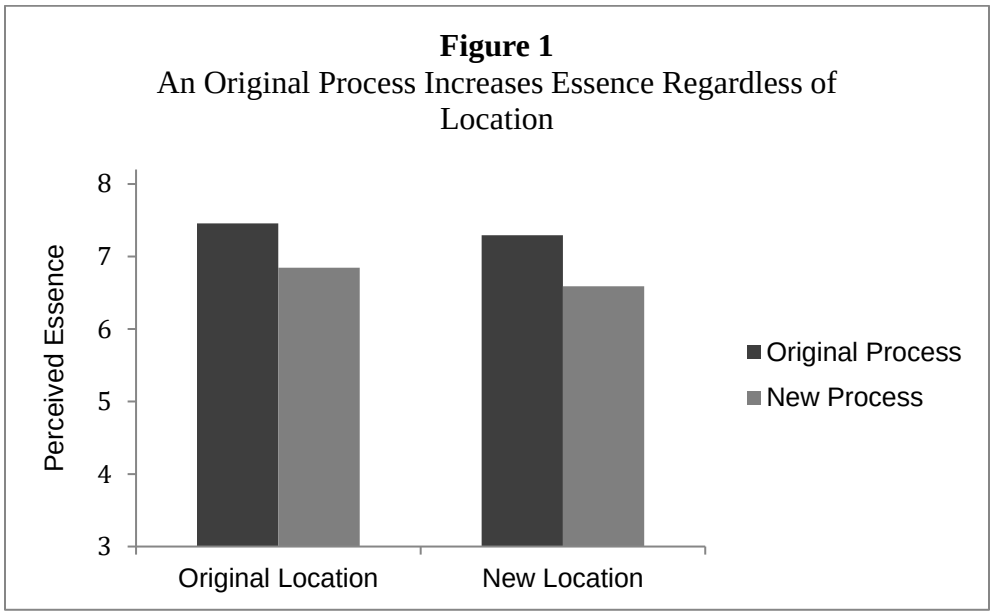
Results

Exclusion. Of the 202 participants collected, 37 failed both exclusion criteria and were discarded prior to all analyses. The remaining 165 participants ($M_{age} = 42.4$, 73.8% female) are included in the analyses below.

Perceived Essence. As anticipated, a two-way analysis of variance revealed a significant main effect of original process on perceived essence. The main effect was such that the original process designed by Levi Strauss elicited significantly higher ratings of perceived essence ($M = 7.38$) than the new process designed by someone else ($M = 6.72$; $F(1, 161) = 9.07$, $p < .003$). The

main effect of factory location and the location x process interaction were non-significant (*p*s > .34), indicating that an original location did not transfer more essence than a new factory location in this study.

Figure 1
An Original Process Increases Essence Regardless of Location



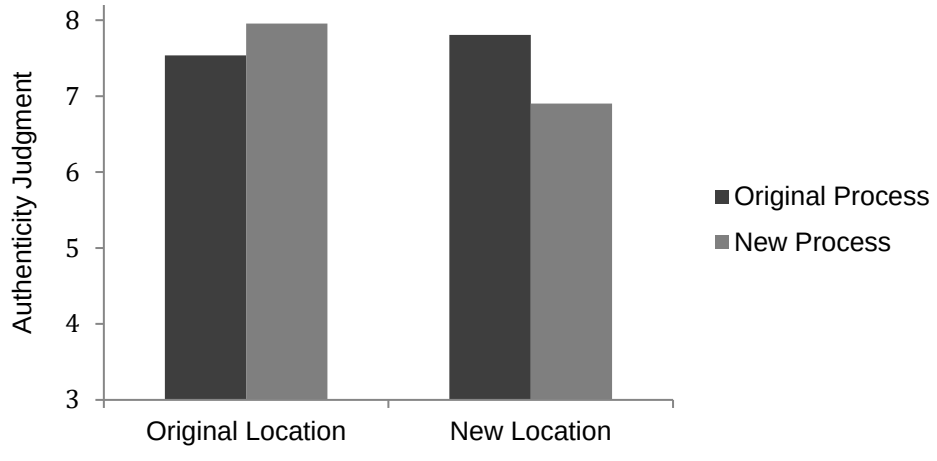
Perceived Evidence. A two-way analysis of variance revealed a significant main effect of original process as a predictor of perceived evidence. The main effect was such that the original process designed by Levi Strauss elicited significantly greater judgments of perceived evidence (M = 8.06) than the new process (M = 7.51; $F(1, 161) = 8.32$, $p = .004$). As was true for perceived essence, the main effect of factory location and the location x process interaction were non-significant (*p*s > .18).

Quality. There were no significant main effects or interactions on the quality index (*F*s < 1.62, NS.), indicating that the manipulations did not significantly impact perceived quality. Though original process may influence perceived quality in some contexts, it does not mediate the effect of an original process on judgments of essence or authenticity.

Authenticity. A two-way analysis of variance revealed a marginally significant main effect of factory location ($F(1, 161) = 2.67$, $p = .104$). This main effect was qualified by the

predicted location x process interaction ($F(1, 161) = 7.64$, $p = .006$). In support of our contention that an original process enhances authenticity by building essence into a product via a route other than contagion, the jeans produced at the new location (where the contagion opportunity was low or nonexistent) were deemed significantly more authentic ($M = 7.81$) when manufactured using Levi Strauss' original process than those made via a new process ($M = 6.90$; $F(1, 161) = 6.94$, $p = .009$). Planned comparisons also revealed that jeans produced at the original location (where the contagion opportunity was high) were deemed authentic regardless of whether the process was original ($M = 7.54$) or new ($M = 7.95$; $F(1, 161) = 1.57$, $p > .2$). In support of the notion that original process influences authenticity by building essence into the product rather than through contagion, contagion sensitivity did not moderate the relationship between process and judgments of authenticity; however it also did not moderate the relationship between location and authenticity.

Figure 2
Engineered Essence Increases Authenticity Without Contagion



Mediation. We tested three constructs (perceived essence, perceived evidence, and quality) as potential mediators of the effect of process perceptions on authenticity judgments

(Hayes 2012, Model 4)[1]. A bias-corrected bootstrap with 5,000 draws revealed a significant conditional indirect effect of process through perceived essence, 95% CI [.07; .50], as well as perceived evidence, 95% CI [.07; .49], on judgments of authenticity. However, the conditional indirect effects of location on judgments of authenticity after controlling for process were not significant for transferred essence, 95% CI [-.06; .29], nor were they significant for perceived evidence, 95% CI [-.04; .33]. As expected, perceived quality did not mediate the effect of location or process on judgments of authenticity. To summarize, an original process significantly increased perceived essence and perceived evidence, which each increased judgments of authenticity. However, an original location did not increase authenticity through perceived essence or evidence.

Finally, to test the relative influence of process information and location information in the full serial pathway model proposed in Newman and Dhar (2014), we ran two serial mediation analyses testing whether process (or location) led to an increase in essence, which increased authenticity and finally increased product valuation (Hayes 2012, Model 6). A bias-corrected bootstrap with 5,000 draws revealed a significant conditional indirect path from process → essence → authenticity → valuation, 95% CI [.18; .76]. However, the same path replacing original process with original location was not significant, 95% CI [-.16; .40]. These results indicate that, for our study one participants, knowing that an original process was used contributed to a product's perceived essence, leading to greater judgments of authenticity and

[1] Because we are simultaneously testing the three potential mediators, it is important to ensure that they are each sufficiently discriminant from the others. We therefore submitted the items for perceived essence, perceived evidence, and quality to a confirmatory factor analysis, and used the discriminant validity test recommended by Anderson and Gerbing (1988). For each pair of latent variables, there was a statistically significant decrease in fit when the correlation between them was constrained to one, indicating sufficient discriminant validity.

increasing valuation. Knowing that the product was made at an original location did not significantly influence these judgments. This supports the hypothesis that an original process builds essence into a product, making it more authentic and increasing the value consumers place on it.

Discussion

The results of study one support our claim that an original process can build essence into a product and increase perceptions of authenticity in a way that is distinct from the influence of the contagious transfer of essence from an original location. When the opportunity for contagion was low (when the jeans were manufactured in a new location), jeans made via an original process were viewed as having more essence of the Levi's brand and as being more authentic than jeans made with a new process. Also, in support of our notion that consumers view an original process as building essence into a product, perceived essence was a significant mediator of the effect of process on valuation as well as on judgments of authenticity.

With regard to the effect of an original location, our results were in some ways similar to Newman and Dhar (2014). Original location had a positive effect on authenticity judgments and valuation, and that effect was not mediated by perceived evidence or quality. However, while their work found that the effect of original location on authenticity judgments was mediated by perceived essence, our study did not replicate this result.

Although the influence of an original process on authenticity judgments was significant when contagion opportunity was low (i.e., at the new location), it was not significant when contagion opportunity was high (original location). We did not predict this interaction and it is

not important for our main premise, which is that (a) an original process can increase perceived essence and influence authenticity judgments and (b) this can happen in the absence of the contagious transfer of essence.

While study one helps to establish original process as a mechanism for building essence into a product, some alternative explanations need to be considered. First, when participants were told that an original process was used, they may have imagined that the founder had been in physical contact with the original process machinery. To the extent they imagined this, the higher ratings they gave to jeans made via the original process could be attributed to essence rubbed off by the founder through physical contagion (rather than built into the object by an original process). Thus, we designed study two to more clearly tease apart original process and physical contact as mechanisms that influence product essence. Second, when participants were told that the jeans were made by a new process developed by Levi Strauss' chief designer in 1973, they may have assumed that the designer's intention for the jeans was different than Levi Strauss's original intention, and that this difference (rather than merely a new process) can explain why participants gave lower ratings to jeans made via a new process (Stavrova et al. 2016; Valsesia, Nunes, and Ordanini 2016). We therefore designed study two so that intention was kept constant across all conditions. Finally, in study one, the original process was also older (designed in 1873) than the new process (designed in 1973). Heritage and appeals to history also increase perceptions of authenticity (Beverland 2006). Participants in the original process condition might have rated the jeans as more authentic in part because of the greater historical precedent in that condition. Study two rules out this alternative by holding constant when the process was designed.

STUDY TWO

Like the design for study one, this study employed a 2 by 2 between-subjects design, where one factor manipulates contagion opportunity and the other manipulates process. The "product" in the scenario for this study is a restaurant. In a service context, process refers not to physical equipment that creates a physical product but rather to a series of orchestrated interpersonal and person-object interactions that produce an experience for the consumer (de Ruyter et al. 1997). However, the definition of original process is the same: an original process is a set of instructions codified by the creator to ensure that the outcome has built within it the creator's intended essence. Restaurants are well suited for investigating the effects of physical contact versus original process as contributors to essence and subsequent authenticity. As Arough (2006) points out, the authenticity of a restaurant or meal can be driven as much by the presence of a particular chef in the kitchen (physical contagion) as by the belief that the restaurant is following a particular process defined by the chef (original process, Sherman 2008). Similarly, restaurants offering a particular type of regional cuisine can be prized for the ethnicity or background of those working in the kitchen (physical contagion) as much as for their adherence to traditional recipes or culinary techniques (original process, see Lu and Fine 1995). Thus, in a restaurant, the presence or absence of an original process or a source of contagion can be clearly delineated and independently manipulated. In this study we capitalize on this separability.

The restaurant scenario also allowed us to address the concern that participants in study one may have believed that the original process involved machinery that had been physically contaminated by the founder, potentially confounding the effects of physical contagion and original process. In a restaurant context, the founder's original process refers less to physical

machinery and more to how the wait staff interacts with customers and how the culinary staff prepares the food. When we explained to participants in this study that the original restaurant process was used in a newly built location where the founder had never visited, alternative explanations based on assumed physical contact with the founder are less plausible.

The restaurant scenario also allowed us to address the alternative explanation that a creator's intention alone – regardless of process – is sufficient to transfer essence into a product (Stavrova et al. 2016; Valsesia et al. 2016). In study one, the creator was long dead before the new process was established. As a result, it is unclear whether or not the creator would have endorsed the new process as aligning with his intent, and participants may have therefore inferred that there was a different intention for the product made using the new process. We address this alternative by holding constant the creator's intention for the product in all conditions of this study. In all conditions, the creator (chef) has the intention of opening a new version of his established restaurant in a new city and personally endorses the process used at the restaurant. We vary only whether the creator was physically present at the location (contagion opportunity), and whether the process was the creator's codification of his intent (his original process) or merely endorsed as satisfying his intent (a process another firm had developed and that the creator endorsed). If the results from study one were driven by differences in intention and not by differences in process, then changes in the nature of the process in this study should not influence essence or authenticity because in both cases the creator intends to create a version of his restaurant in New York City (and only the process differs). We instead predict that original process (versus a process not designed but endorsed by the creator) will have a differential and positive effect on perceived essence and authenticity because the creator codified the process to ensure that his intended essence is built into the service. As in study one (and in Newman and

Dhar 2014) we also predict that the physical presence (versus absence) of the founder will have a significant positive effect on perceived essence and authenticity, due to the contagious transfer of essence.

Method

Participants were 200 adults recruited from Amazon's Mechanical Turk in exchange for monetary compensation. Participants were randomly assigned in a 2 (Contagion Opportunity: Chef Physically Present vs. Absent) by 2 (Process: Original vs. Endorsed) between-subjects design. For this study we developed scenarios based on an actual restaurant, called El Vez, which is located in Philadelphia. Participants first read a short vignette about Jose Garces, a passionate chef who founded the original El Vez restaurant in Philadelphia in 2003 (for full text, see Web Appendix A). Participants then read that recently in partnership with an investment firm, Jose had opened a new El Vez restaurant in New York City and that we were interested in what they thought of the new restaurant.

In the physically present condition (high contagion opportunity), the scenario explained that Jose hired a new head chef for his original restaurant in Philadelphia so he could move to New York City to oversee the creation and launch of the new restaurant, and to act as the new restaurant's head chef. In the physically absent condition (low contagion opportunity), Jose wanted to stay with his family in Philadelphia. He therefore was never physically involved with the launch or operation of the restaurant and instead allowed the investment firm to do it. We manipulated original process by indicating whether the restaurant's design and operation followed a formula Jose had designed (original process), or an alternative formula developed by

someone else that he liked and agreed to follow (endorsed process). In the original process condition, participants read that the New York restaurant used a formula designed by Jose to replicate the Philadelphia El Vez restaurant. In the endorsed process condition, participants read that Jose had signed off on the investment company's formula for serving and satisfying the New York customer—a formula that was distinct from the one Jose used in Philadelphia. Following the manipulations, participants read that the new restaurant in New York was successful, productive, and of equal quality with the original El Vez in Philadelphia.

Participants then completed the same battery of dependent measures used in study one [and also used in Newman and Dhar (2014)], with wording adjusted slightly to match the context: authenticity (single item), valuation ($\alpha = .79$), perceived essence ($\alpha = .93$), perceived evidence ($\alpha = .89$), and quality ($\alpha = .95$). As pre-established exclusion criteria, participants were asked to choose the name of the founder and the original location's city. Participants also completed a three-item contagion sensitivity scale.

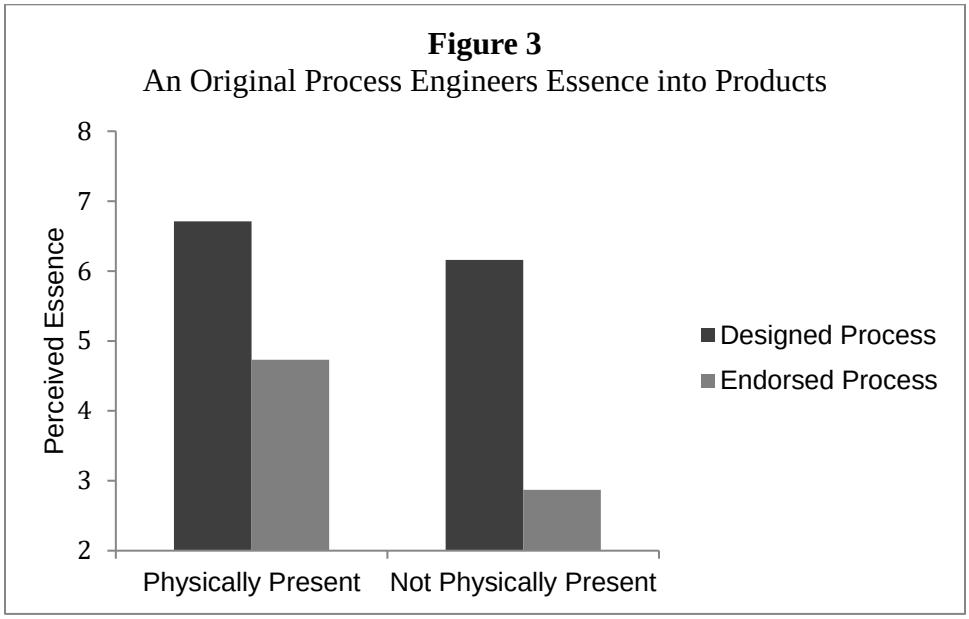
Results

Exclusion. Of the 200 participants collected, 22 failed both exclusion criteria and were discarded prior to all analyses. The remaining 178 participants ($M_{age} = 34.9$, 46.6% female) are included in the analyses below.

Essence and Evidence. A two-way analysis of variance revealed a significant main effect of contagion such that the restaurant had more essence when Jose was present ($M = 6.27$) than when he was absent ($M = 5.08$; $F(1, 173) = 17.97$, $p < .001$). In line with the hypothesis that an original process builds essence into the product, the analysis revealed a significant main effect of

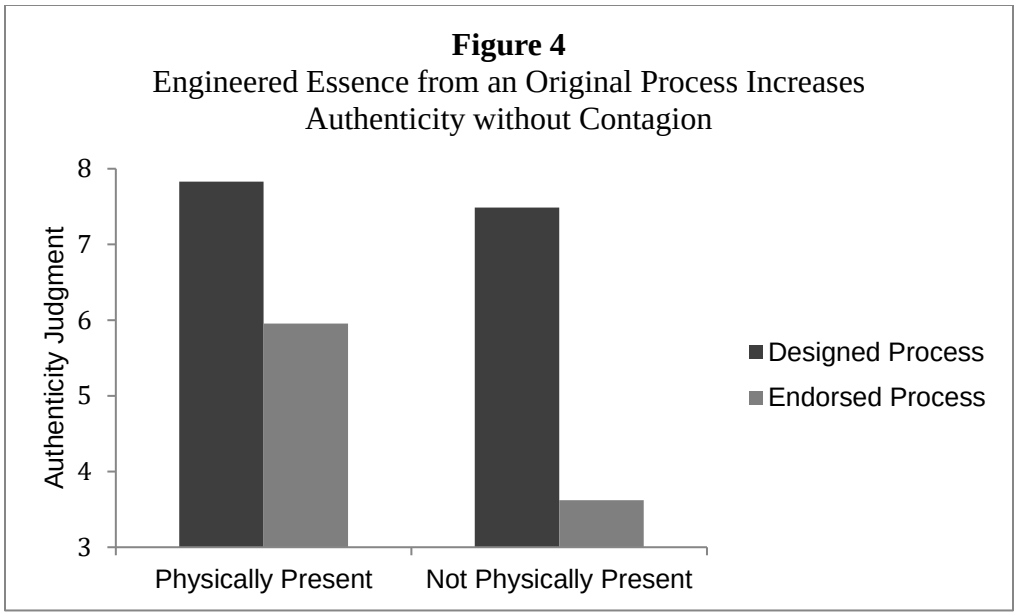
process such that Jose's original process imparted more essence (M = 7.00) than the investment firm's process (M = 4.35; $F(1, 173) = 87.75$, $p < .001$). The analysis also revealed a significant contagion x process interaction ($F(1, 173) = 5.79$, $p = .017$), which conceptually replicates study one. Planned comparisons revealed that when physical contagion opportunity was nonexistent (that is, when Jose was never present at the new restaurant), the restaurant experience delivered via the original process was seen as having significantly more essence (M = 6.16) than the restaurant utilizing the process he endorsed (M = 2.87; $F(1, 173) = 68.06$, $p < .001$). When contagion opportunity was high (that is, Jose was present at the new restaurant), using the original process also increased perceived essence, albeit to a lesser extent than when contagion opportunity was low ($M_{designed}$ = 6.71 vs. $M_{endorsed}$ = 4.73; $F(1, 173) = 24.68$, $p < .001$). Likewise, there were significant main effects of contagion and process, and a marginally significant (p = .06) contagion x process interaction on perceived evidence. In line with those of perceived essence, the main effects and interactions were such that Jose's presence and the use of his original process contributed additively to the perceived evidence of the new restaurant.

Figure 3
An Original Process Engineers Essence into Products



Authenticity. A two-way analysis of variance revealed significant main effects for both contagion opportunity and process. The main effect of contagion opportunity was such that the New York City restaurant was considered more authentic when Jose was physically present (M = 6.89) than when he was absent (M = 5.56; $F(1, 173) = 20.29$, $p < .001$). Likewise, the analysis revealed a significant main effect of process such that the service delivered by the original process (M = 7.66) was more authentic than the service delivered by the new process Jose endorsed (M = 4.79; $F(1, 173) = 93.16$, $p < .001$). As in study one, these two main effects were qualified by a significant contagion x process interaction ($F(1, 173) = 11.20$, $p = .001$). As predicted, planned comparisons revealed that when physical contagion opportunity was low (that is, when Jose was never present at the new restaurant), the restaurant experience delivered via the original process was seen as significantly more authentic (M = 7.49) than the restaurant utilizing the process he endorsed (M = 3.62; $F(1, 173) = 82.11$, $p < .001$). When contagion opportunity was high (that is, Jose was present at the new restaurant), using the original process also increased authenticity judgments, albeit to a lesser extent than when contagion opportunity was low ($M_{designed}$ = 7.83 vs. $M_{endorsed}$ = 5.95; $F(1, 173) = 20.47$, $p < .001$). Replicating study one, contagion sensitivity did not moderate the relationship between physical contagion opportunity or process on judgments of authenticity.

Figure 4
Engineered Essence from an Original Process Increases Authenticity without Contagion



Mediation. Replicating study one, a bias-corrected bootstrap with 5,000 draws revealed a significant conditional indirect effect of original process through perceived essence, 95% CI [1.55; 2.76], and perceived evidence, 95% CI [.52, 1.32] on judgments of authenticity. Likewise, there was a significant conditional indirect effect of Jose's physical presence through perceived essence, 95% CI [.52; 1.74], and this time also perceived evidence, 95% CI [.06; .91] on judgments of authenticity.

Finally, we conducted a moderated mediation analysis using a bias-corrected bootstrap with 5,000 draws to determine whether Jose's contagious presence was more or less impactful for perceived essence and judgments of authenticity depending on whether or not participants were aware that the restaurant operated using Jose's original process (Hayes 2012, Model 8). The confidence interval of the overall index of moderated mediation did not contain zero, indicating that the model was appropriate, 95% CI [-1.90; -.22]. Overall, Jose's physical presence increased essence judgments (effect = 1.92, 95% CI [1.14; 2.70]), as did using Jose's original process (effect = 3.37, 95% CI [2.57; 4.17]). However, when participants were aware that Jose's original process was used, the effect of Jose's physical presence on perceptions of essence was

significantly reduced (effect = -1.41, 95% CI [-2.52; -.29]). This indicates that the essence built into the restaurant from the original process is more central to judgments of a product's essence than the transferred essence resultant from contagious contact in this study.

This result also extends to authenticity judgments. When participants were aware that the restaurant used Jose's original process, the essence elicited from his physical presence was not sufficient to confer any significant additional benefit to the restaurant's authenticity (conditional indirect effect 95% CI [-.07; .83]). In other words, when participants knew that the restaurant used Jose's original process, Jose's physical presence did not influence judgments of authenticity through increased essence. On the other hand, when the restaurant used a new process that Jose endorsed, his physical presence did increase judgments of authenticity by increasing perceived essence (conditional indirect effect 95% CI [.73; 2.12]).

We ran this same mediation analysis using product valuation as the outcome variable to provide convergence with study one and to demonstrate more practical managerial relevance of the findings. The results mirror those of the previous moderated mediation analysis. The overall index of moderated mediation was significant, 95% CI [-1.28, -.14]. When participants were aware that the restaurant used Jose's original process, the essence elicited from his physical presence was again not sufficient to add any value to the restaurant's authenticity (conditional indirect effect 95% CI [-.04; .61]). When participants knew that the restaurant used Jose's original process, his physical presence did not increase value by increasing essence. On the other hand, when the restaurant used a process that Jose endorsed, his physical presence did increase value by increasing essence (conditional indirect effect 95% CI [.47; 1.46]). These findings suggest that once participants were assured that the new restaurant was created and operated using a process that built Jose's intended essence into the final product, whether or not the

creator was physically present was no longer as central to judgments of essence and subsequent authenticity and product valuation. That is, judgments of authenticity in this study were influenced more by the essence built into the product through Jose's original process than by the contagious transfer of essence from the physical presence of the creator.

Discussion

We replicate study one (and previous research) showing that physical contact can cause essence to rub off from one thing to another. Study two also replicates study one's finding that an original process builds essence into a product and increases judgments of authenticity in a manner separate and distinct from the influence of physical contagion. Even at a restaurant where the creator was never physically present and had no physical opportunity to transfer his essence, the use of his original process increased authenticity perceptions by building essence into the new restaurant. Indeed, even in the absence of physical contagion opportunity, participants believed that the restaurant operating through Jose's original process had more essence than the restaurant operating through the endorsed process. Unlike study one, but still supportive of our theorizing, original process and physical contact had not only separate influences on perceived essence and authenticity but also an additive influence. Original process had an effect when contagion opportunity was both low (Jose not present) and high (Jose present).

Likewise, if intention alone was sufficient to confer essence transfer from the creator to the new restaurant (Stavrova et al. 2016; Valsesia et al. 2016), then both the original process and the endorsed process should have increased perceived essence and authenticity because, in both

cases, Jose intended to open a successful restaurant in New York and endorsed the process for doing so. Instead, only Jose's original process conferred essence and subsequent authenticity.

Taken together, studies one and two demonstrate in both a product and service context that an original process builds essence into the outcome. As a result, outcomes made through an original process are perceived as more authentic. Likewise, both studies support the notion that an original process provides an independent route to judgments about essence and authenticity that is not driven by physical or intention-based contagion.

STUDY THREE

So far, we have shown that artifacts produced by original processes increase perceptions of essence and authenticity, and that this effect cannot be explained by changes in quality or perceived physical or creative intention-based contagion. Based on these results, we have argued that consumers believe an original process builds essence into products. To further test this argument, we take advantage of the fact that people differ in terms of essentialist beliefs. Essentialist beliefs are beliefs about whether objects and people have a fixed underlying nature ("essence") and whether this nature causally determines object properties (Bastian and Haslam 2006). Those with strong essentialist beliefs are more likely to endorse and apply stereotypes (Bastian and Haslam 2006), are more likely to make inductive inferences (Gelman and Markman 1986), and pay greater attention to object history (Gelman 2013). With respect to our work, if an original process is important because it is the creator's set of instructions codified in such a way that the outcome has built into it the creator's intended essence, then process cues should have a stronger influence on those who are more likely to believe that objects can have a built-in

essence in the first place. Those less likely to believe that objects have a built-in essence should be less influenced by cues indicating that essence was built into the product.

In this study, we again compare the effect of high (versus low) contagion opportunity with the effect of original (versus new) process. While we predict that those with strong and weak essentialist beliefs will be differentially sensitive to cues about built-in essence, we do not predict that they will be differentially sensitive to cues about rubbed off essence. This is because essentialist beliefs and contagion sensitivity are theoretically orthogonal. For example, people with strong essentialist beliefs will not necessarily be strongly sensitive to the contagious transfer of essence. As Gelman and Wellman (1991) demonstrate, people with strong essentialist beliefs view a biological calf as being in essence a cow even when it had exclusive physical contact with animals of a different species. To someone with strong essentialist beliefs, the cow's essence is not determined or altered by this potentially contagious contact with pigs, but rather by its own built-in properties. On the other hand, people with weak essentialist beliefs can still believe something is contagious without believing in essence. For example, weak essentialists can believe they will catch a cold from someone who is sick without having to make the inference that the germs have essence.

Method

We randomly assigned 240 participants (M_{age} = 36.41, 44.6% female) in a 2 (Contagion Opportunity: Location is Original vs. Location is New) by 2 (Process: Original vs. New) by continuous (measured essentialist beliefs scale) design. Similar to our other studies, participants first read a short vignette about the foundation of Budweiser beer by Adolphus Busch in St.

Louis, Missouri in 1876. Participants then saw a picture of a bottle of Budweiser beer and were given information about where and how it had been manufactured. Participants in the original location condition were told that the beer had been made in the original brewery in St. Louis (established in 1879), whereas participants in the new location condition were told that the beer had been made in a new brewery in St. Louis (established in 2001). Participants in the original process condition were told that the beer had been made using the original process designed by Adolphus Busch in 1876, whereas participants in the new process condition were told that the beer had been made using a new process designed by Budweiser's chief brewer in 2006. There were no manipulation checks in this study and no participants were excluded in any analysis.

Participants then completed the same body of authenticity, essence, evidence, and quality measures as in our prior studies drawn mainly from Newman and Dhar (2014). The quality measure was modified to fit the attributes of the beer category and included ratings of the beer's taste, ingredients, craftsmanship, and overall quality and, as in our previous studies was not predicted by our manipulations (*p*s > .2), indicating that quality is an unlikely explanation of our effects. To capture participants' essentialist beliefs, participants also responded to an 8-item essentialism scale adapted from Levy, Stroessner, and Dweck (1998). Four of the items were biased toward those with weak essentialist beliefs (e.g. "People can substantially change the world around them."), whereas the other four were biased toward those with strong essentialist beliefs (e.g. "Things are a certain way and they can't be changed much."). All eight items were presented in a random order and were measured on a 7-point scale from 1 = "Strongly Disagree" to 7 = "Strongly Agree". Finally, participants completed the 3-item contagion sensitivity measure used in prior studies along with some demographics.

Results

Essence and Evidence. In line with prior studies, a two-way analysis of variance revealed a significant main effect of process on perceived essence ($F(1, 236) = 13.51$, $p < .001$), such that participants who read the beer was made using an original process rated it as having significantly more essence ($M = 7.61$) than the beer made using a new process ($M = 6.76$). There was a significant main effect of location on perceived essence such that the original location elicited greater essence ($M = 7.44$) than a new location ($M = 6.94$; $F(1, 236) = 4.69$, $p = .031$). As in study one, the process x contagion opportunity interaction was non-significant ($p > .25$).

Authenticity. In line with studies one and two, a two-way analysis of variance revealed a significant main effect of factory location on authenticity, such that a bottle of beer manufactured in the original location was seen as more authentic ($M = 7.56$) than a bottle manufactured in a new location ($M = 6.96$; $F(1, 236) = 5.17$, $p = .024$). Likewise, there was a significant main effect of process on authenticity, such that a bottle of beer made with the original process was deemed more authentic ($M = 7.76$) than a bottle of beer made using a new process ($M = 6.76$; $F(1, 236) = 14.50$, $p < .001$). The factory x process interaction was non-significant ($F < 1$), indicating that the benefits of original process and original location were once again additive rather than substitutive in this particular product category.

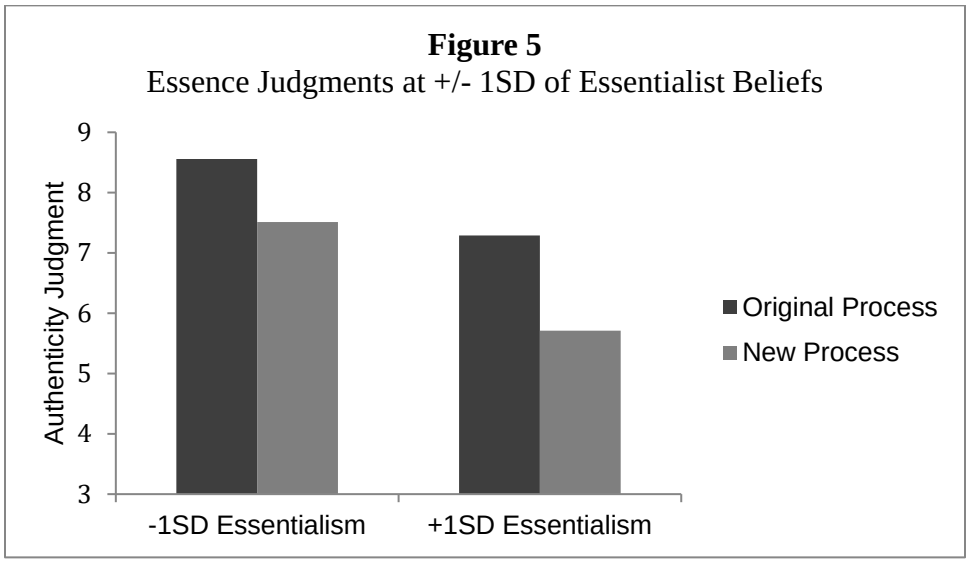
Essentialist Beliefs, Perceived Essence, and Evidence. In line with Levy, Strossner and Dweck (1998), the four weak essentialist beliefs items ($\alpha = .82$) were averaged to form an index and the four strong essentialist beliefs items ($\alpha = .89$) were averaged and to form an index. As expected, the two indices were negatively correlated ($r = -.57$). A regression including an effects-coded factory location variable (-1 = new, 1 = original), an effects-coded process variable (-1 =

new, 1 = original), a mean-centered essentialist index (wherein a higher value represents greater essentialist beliefs), and all two- and three-way interaction terms revealed a significant main effect of essentialist beliefs on essence, such that people with weak essentialist beliefs generally ascribed more essence to the product than people with strong essentialist beliefs (B = -.527, t(232) = -5.10, $p < .001$). Central to our hypothesis, the regression also revealed the predicted process x essentialism interaction (B = .213, $t(232) = 2.06$, $p = .041$). When participants were told that the beer was made using an original process, people with both strong and weak essentialist beliefs endorsed that the beer had essence. However, when participants were told that the beer was made using a new process, participants with strong essentialist beliefs thought the beer had significantly less essence than participants with weak essentialist beliefs. Thus, participants with strong essentialist beliefs were more sensitive to cues about process, and were more likely to endorse that a product made using a new process did not have essence built into it. In line with our theorizing that essentialist beliefs and contagion are orthogonal, the location x essentialist beliefs interaction and the three-way interaction were non-significant ($ps > .37$). Given that essentialist beliefs should not influence how evidential an object is, the same regression on perceived evidence did not reveal this same interaction ($ps > .19$)

We also used the reverse-coded items indicating weak essentialist beliefs and averaged them with the items indicating strong essentialist beliefs to form an overall index wherein a higher score again represented stronger essentialist beliefs. Using this index mean-centered in the analysis also revealed a significant main effect of essentialist beliefs on essence, such that people with weak essentialist beliefs gave higher judgments of essence overall (B = -.224, $t(232) = -3.68$, $p < .001$). Likewise, the regression revealed a marginally significant process x essentialism interaction in line with using the strong essentialist items alone (B = .183, $t(232) = 1.80$, $p =$

.073). Again, the factory location x essentialist beliefs interaction and the same regression on perceived evidence were non-significant (*p*s > .28). The same regression replacing essentialist beliefs with a mean-centered contagion sensitivity index revealed no significant main effects or interactions (*p*s > .185).

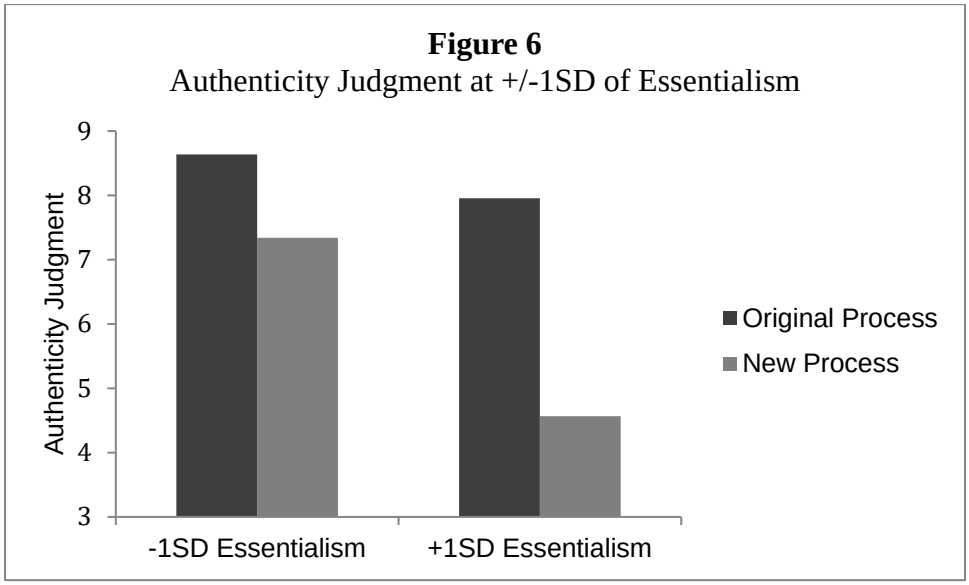
Figure 5
Essence Judgments at +/- 1SD of Essentialist Beliefs



Essentialist Beliefs and Authenticity. The impact of essentialist beliefs on authenticity judgments was the same as the effect of these beliefs on essence judgments. We found a significant main effect of essentialist beliefs on authenticity such that the beer was generally seen as more authentic by people with weak essentialist beliefs (B = -.473, $t(232) = -3.95$, $p < .001$). We also found the predicted process x essentialism interaction (B = .279, $t(232) = 2.33$, $p = .021$). For the beer made with the original process, those with weak and strong essentialist beliefs did not differ. For the beer made with the new process, participants with strong essentialist beliefs thought the beer was significantly less authentic than those with weak beliefs. In line with the notion that essentialist beliefs and contagion are independent constructs, the location x essentialism interaction was non-significant.

We also ran this regression using the overall index wherein a higher score once again represented stronger essentialist beliefs. Using this index mean-centered in the analysis again revealed a significant main effect of essentialist beliefs on authenticity, such that people with weak essentialist beliefs gave higher judgments of authenticity overall (B = -.351, $t(232) = -2.89$, $p = .004$). Likewise, the regression revealed a marginally significant process x essentialism interaction in line with using the essentialist items alone (B = .190, $t(232) = 1.56$, $p = .119$). Again, the factory location x essentialist beliefs interaction was non-significant.

Figure 6
Authenticity Judgment at +/-1SD of Essentialism



Mediation. Replicating our prior studies, a bias-corrected bootstrap with 5,000 draws revealed a conditional indirect effect of original process on judgments of authenticity through perceived essence, 95% CI [.17; .60], as well as perceived evidence, 95% CI [.12; .39] (Hayes 2012; Model 4). Likewise, replicating Newman and Dhar (2014), perceived essence mediated the relationship between original location and authenticity, 95% CI [.05; .44], but perceived evidence did not, 95% CI [-.06; .22].

We then examined whether essentialist beliefs moderated the relationship between process and perceived essence, subsequently influencing judgments of authenticity. That is, if

those with strong essentialist beliefs are more sensitive to changes in process, then they should see less essence in objects made using a new process and should subsequently find them less authentic. To test this hypothesis, we ran a moderated mediation model of process on judgments of authenticity through perceived essence, with the path between process and essence and the direct effect moderated by essentialist beliefs (Hayes 2012; Model 8). Supporting this hypothesis, a bias-corrected bootstrap with 5,000 draws revealed a significant index of moderated mediation, 95% CI [.002; .40]. In other words, people with strong essentialist beliefs were more likely to see essence in a product made with an original process and less essence in a product made with a new process, which subsequently impacted judgments of authenticity. Those with weak essentialist beliefs were unaffected by information about process. When we replaced original process with original location, the index of moderated mediation became non-significant 95% CI [-.13; .31] indicating that essentialist beliefs did not influence the impact of an original location on essence and authenticity.

Discussion

Study three provides further evidence that an original process increases authenticity by building essence within a product. It demonstrates that those with strong essentialist beliefs—people who believe in a fixed and causal underlying nature of things—see process as more central to essence, and exhibit greater sensitivity to information about process toward judgments of essence and authenticity. The authenticity judgments of people with weak essentialist beliefs were not affected by information about process. In contrast, people with strong essentialist beliefs judged products as having essence and being authentic only when given knowledge that

an original process was used. In line with the notion that the effects of original process and contagious location are independent and the notion that essentialist beliefs and contagion sensitivity are orthogonal, essentialist beliefs did not influence the impact of information about location and contagion sensitivity had no significant effects.

GENERAL DISCUSSION

Across three studies, we consistently demonstrate that cues about an original process increase authenticity by building essence into products. We show that information about an original process increases essence and authenticity judgments independently of information about contagious location and physical or creative intention-based contagion opportunity. All three studies provide convergent evidence that an original process builds essence into the objects it creates and that this essence subsequently grants the objects authenticity. Study three further shows that people with strong essentialist beliefs – those who endorse that products can have essence built into them – are the most sensitive to information about process. That is, when people are more likely to rely on essence as a central feature identifying and categorizing things, they are much more sensitive to the essence built into an object, and use this information to infer authenticity.

We contribute to the literature on essence and essentialism in two ways. First, we provide convergent evidence that a process can build essence into objects. This is important because it demonstrates that artifacts do not just get their essence from coming into physical contact with other things. While much research outside of marketing and consumer behavior suggests that judgments about artifact essence are driven by attention to the intent of the artifact's creator

(Bloom 1996, 1998; Chaigneau et al. 2008; Chaigneau, Puebla, and Canessa 2016), little research has considered *how*, in people's minds, a creator's intention becomes central to the essence of created object. While some studies have suggested that this can be merely a symbolic transfer of essence from creator's intention to artifact (Stavrova et al. 2016; Valsesia et al. 2016), our results identify an alternative and more tangible potential contributor: original process as an important guarantor that the creator's original intent is built into the artifact.

Second, we provide preliminary evidence that sensitivity to contagion and essentialism are distinct and orthogonal constructs. Much prior research on contagion has labeled the element of contagious transfer "essence," on the assumption that it is the core causal features of the objects that transfer to each other (e.g. Nemeroff and Rozin 1994; Newman and Dhar 2014; Stavrova et al. 2016). However, if even a weak essentialist can be sensitive to the contagious effects of contact, this calls into question whether the essence involved in contagious contact is indeed or is always the same essence core to essentialist beliefs. For example, when lard essence is contagiously transferred to rice cakes (Morales and Fitzsimons 2007), it seems likely that the rice cakes retain much or all of their essential rice cake essence." While the present studies cannot address whether the types of essence being ascribed to the products are fundamentally different from each other, the notion of different kinds of essence has interesting implications for future research. For example, future research could examine how weak essentialists with high contagion sensitivity make inferences about feature transfer when they are given cues about contagious contact. Likewise, it is possible that people with weak and strong essentialist beliefs draw different conclusions when they witness contagious contact. Finally, the dimensions of contagious contact - namely, permanency, negativity bias, and dose insensitivity (Rozin and Nemeroff 1990) – may differ on the basis of essentialist belief.

Our results also contribute to the authenticity literature by showing that physical contagious contact is not necessary for consumers to believe that a product has essence and is therefore authentic. Previous research has emphasized contagion as a key mechanism for transferring essence into a product and enhancing authenticity (e.g. Newman and Dhar 2014). We show that, rather than believing that essence has been rubbed off on a product from a valued source, consumers can also believe that essence has been built into the product. We demonstrate that original process is a key mechanism that allows essence to be built into a product and that original process is distinct from the physical contact required for contagious transfer of essence. We further show that, in some cases (study two), the essence built into a product through an original process can override the importance of contagious contact on judgments of essence and authenticity. In some cases, built-in essence is more core and important to a product than the essence rubbed off on it from other things. This helps explain prior findings in the authenticity literature that an original process is an important guarantor of authenticity.

Our results also have practical and managerial implications. While previous research has highlighted physical contact as an important route for enhancing authenticity, we introduce original process as an alternative mechanism available to companies that market the authenticity of their products. Our research highlights why original process may be uniquely important on the list of potential tactics that companies can use and highlights why that is the case. Since a process can be reproduced in a variety of locations, authenticity via cues about original process is not limited to the confines of physical space. If Levi's or Budweiser were restricted to a contagious account of authentic jeans and beer, the physical capacity of the original location would constrain growth. Instead, firms can use cues about an original process across multiple locations to confer judgments of authenticity.

The present research also suggests directions for future study. If process indeed builds essence into a product, then a new or different process should also imbue an object with essence, just not the essence that grants original brand authenticity. The three studies presented here were all concerned with essence and authenticity on the basis of brand origin. Levi's, El Vez, and Budweiser have been making jeans, Mexican food, and beer since their inception by an original founder. However, certain brands and product categories are only authentic if they build and develop over time. Consider, for example, technological industries. If cellphones were still produced via the process established by original founders in the 1980s, perhaps they would be considered authentic vintage artifacts, but they certainly would not be useful, and are certainly not considered authentic to the present day mobile phone brands. Indeed, an authentic technological firm is one whose process allows for innovation, and perhaps whose essence is centered in change and improvement over time. This presents an interesting distinction for future work. For example, might certain industries have to trade off the authenticity originating from an original creator's intention in favor of remaining authentic to a changing brand? Or is the essence of innovative industries less rooted in creator intention as the essential property of more established product categories? Are there particular elements of a process that are more central to essence than others? How can a firm manage intentional change to processes?

Likewise, while we operate exclusively in the domain of an original process developed by a valued creator, there are many products and experiences that gain authenticity through beliefs about original process where the process was developed by a more abstract entity like a country or an organization rather than a particular valued individual. For example, cultural objects and performances are often granted cultural essence and authenticity through judgments about adherence to a particular process, such as the appropriate performance of dance

movements or the appropriate tool use (Chhabra 2005; Cornet 1975; Martin 2010). The processes in these cases are established collaboratively over time within a culture and often cannot be traced back to a particular individual. Similarly, certain products gain their essence and authenticity through process in the absence of any particular individual. For example, champagne is in part authentically champagne if it was manufactured using the method Champenoise– however this method is more tied to a regional set of traditions than to a specific creator. This raises philosophical and practical questions for the definition and role of intention in judgment of object essence and authenticity. Can brands, organizations, or cultures act with intention? If so, are they, too, arbiters of essence and object authenticity?

In conclusion, we propose that essence can be built into products through an original process. Physical contact with an original location does confer authentic value by transferring essence onto an object. However, information about an original process also confers authentic value by ensuring that a product has essence built into it even in the absence of contagious contact. These two routes are independent and function through distinct psychological mechanisms.

References

Ahn, Woo-kyoung (1998), "Why Are Different Features Central for Natural Kinds and Artifacts?: The Role of Causal Status in Determining Feature Centrality," *Cognition*, 69, 135–78.

Ahn, Woo-kyoung, Charles Kalish, Susan A. Gelman, Douglas L. Medin, Christian Luhmann, Scott Atran, John D. Coley, and Patrick Shafto (2001), "Why Essences Are Essential in the Psychology of Concepts," *Cognition*, 82(1), 59–69.

Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103(3), 411–23.

Argo, Jennifer J, Darren W Dahl, and Andrea C Morales (2006), "Consumer Contamination: How Consumers React to Products Touched by Others," *Journal of Marketing*, 70(2), 81–94.

——— (2008), "Positive Consumer Contagion: Responses to Attractive Others in a Retail Context," *Journal of Marketing Research*, 45(6), 690–701.

Arough, Albert (2006), "Food as Art and the Quest for Authenticity," in *Authenticity in the Kitchen*, ed. Richard Hosking, Devon, UK: Prospect Books.

Barton, Michelle E. and Lloyd K. Komatsu (1989), "Defining Features of Natural Kinds and Artifacts," *Journal of Psycholinguistic Research*, 18(5), 433–47.

Bastian, Brock and Nick Haslam (2006), "Psychological Essentialism and Stereotype Endorsement," *Journal of Experimental Social Psychology*, 42(2), 228–35.

Belk, Russell (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15(2), 139–68.

Beverland, Michael B. (2006), "The 'Real Thing': Branding Authenticity in the Luxury Wine

Trade," *Journal of Business Research*, 59(2), 251–58.

——— (2005), "Grafting Brand Authenticity: The Case of Luxury Wines," *Journal of Management Studies*, 42(5), 1003–29.

Beverland, Michael B., Adam Lindgreen. and Michiel W. Vink (2008), "Projecting Authenticity Through Advertising," *Journal of Advertising, 37*, 5-15.

Bloom, Paul (1996), "Intention, History, and Artifact Concepts," *Cognition*, 60(1), 1–29.

——— (1998), "Theories of Artifact Categorization," *Cognition*, 66(1), 87–93.

Chaigneau, Sergio E., Lawrence W. Barsalou, and Mojdeh Zamani (2009), "Situational Information Contributes to Object Categorization and Inference," *Acta Psychologica*, 130(1), 81–94.

Chaigneau, Sergio E., Ramon D. Castillo, and Luis Martinez (2008), "Creators' Intentions Bias Judgments of Function Independently from Causal Inferences," *Cognition*, 109(1), 123–32, http://dx.doi.org/10.1016/j.cognition.2008.07.009.

Chaigneau, Sergio E., Guillermo Puebla, and Enrique C. Canessa (2016), "Why the Designer's Intended Function Is Central for Proper Function Assignment and Artifact Conceptualization: Essentialist and Normative Accounts," *Developmental Review*, 41, 38–50, http://dx.doi.org/10.1016/j.dr.2016.06.002.

Chhabra, Deepak (2005), "Defining Authenticity and Its Determinants: Toward an Authenticity Flow Model," *Journal of Travel Research*, 44(1), 64–73.

Chiu, Chi-yue, Ying-yi Hong, and Carol S. Dweck (1997), "Lay Dispositionism and Implicit Theories of Personality Behavior in One Situation New," *Journal of personality and social psychology*, 73(1), 19–30.

Clouse, Abby (2009), "The Repatriation of a Southern Cheyenne Burial and the Contingencies of Authenticity," *Journal of Material Culture, 14*, 169-188.

Cohen, Erik and Nir Avieli (2004), "Food in Tourism - Attraction and Impediment," *Annals of Tourism Research*, 31(4), 755–78.

Cornet, Joseph (1975), "African Art and Authenticity," *African Art*, 9(1), 52–55.

Demoulin, Stéphanie, Jacques-Philippe Leyens, and Vincent Yzerbyt (2006), "Lay Theories of Essentialism," *Group Processes & Intergroup Relations*, 9(1), 25–42, http://journals.sagepub.com/doi/10.1177/1368430206059856.

Fernandez, Karen V. and John L. Lastovicka (2011), "Making Magic: Fetishes in Contemporary Consumption," *Journal of Consumer Research*, 38(2), 278–99.

Frazer, James George (1890), *The Golden Bough: A Study in Magic and Religion*, Oxford, UK: Oxford University Press.

Fuchs, Christoph, Martin Schreier, and Stijn M. J. van Osselaer (2015), "The Handmade Effect: What's Love Got to Do with It?," *Journal of Marketing*, 79(2), 98–110.

Galoni, Chelsea and Theodore J. Noseworthy (2015), "Does Dirty Money Influence Product Valuations?," *Journal of Consumer Psychology*, 25(2), 304–10, http://dx.doi.org/10.1016/j.jcps.2014.11.002.

Gelman, Susan A. (2013), "Artifacts and Essentialism," *Review of Philosophical Psychology*, 4(3), 449–63.

Gelman, Susan A. and Ellen M. Markman (1986), "Categories and Induction in Young Children," *Cognition*, 23(3), 183–209.

Gelman, Susan A. and Henry M. Wellman (1991), "Insides and Essences: Early Understandings of the Non-Obvious," *Cognition*, 38(3), 213–44.

Grayson, Kent and Radan Martinec (2004), “Consumer Perceptions of Iconicity and Indexicality and Their Influence on Assessments of Authentic Market Offerings,” *Journal of Consumer Research*, 31(2), 296–312.

Gutheil, Grant, Paul Bloom, Nohemy Valderrama, and Rebecca Freedman (2004), “The Role of Historical Intuitions in Children’s and Adults’ Naming of Artifacts,” *Cognition*, 91(1), 23–42.

Haslam, Nick (1998), “Natural Kinds, Human Kinds, and Essentialism,” *Social Research*, 65(2), 291–314.

Hayes, Andrew F. (2012), “PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling [White Paper],” 1–39.

Hingston, Sean T., Justin F. McManus, and Theodore J. Noseworthy (2017), “How Inferred Contagion Biases Dispositional Judgments of Others,” *Journal of Consumer Psychology*, 27(2), 195–206, http://dx.doi.org/10.1016/j.jcps.2016.09.005.

Holguin, Jaime (2004), “Britney’s Spent Gum for Sale,” *Associated Press*.

Hood, Bruce M. and Paul Bloom (2008), “Children Prefer Certain Individuals over Perfect Duplicates,” *Cognition*, 106(1), 455–62.

Jones, Sian (2010), "Negotiating Authentic Objects and Authentic Selves," *Journal of Material Culture*, 15, 181-203.

LaPorte, Joe (1996), “Chemical Kind Term Reference and the Discovery of Essence,” *Nous*, 30(1), 112–32.

Levav, Jonathan and A. Peter Mcgraw (2009), “Emotional Accounting: How Feelings About Money Influence Consumer Choice,” *Journal of Marketing Research*, 46(1), 66–80, http://journals.ama.org/doi/abs/10.1509/jmkr.46.1.66.

Levy, Sheri R., Steven J. Stroessner, and Carol S. Dweck (1998), "Stereotype Formation and Endorsement: The Role of Implicit Theories," *Journal of Personality and Social Psychology*, 74(6), 1421–36.

Littrell, Mary Ann, Luella F. Anderson, and Pamela J. Brown (1993), "What Makes a Craft Souvenir Authentic?," *Annals of Tourism Research*, 20(1), 197–215.

Lu, Shun and Gary Alan Fine (1995), "THE PRESENTATION OF ETHNIC AUTHENTICITY: Chinese Food as a Social Accomplishment," *Sociological Quarterly*, 36(3), 535–53.

Martin, Keir (2010), "Living Pasts: Contested Tourism Authenticities," *Annals of Tourism Research*, 37(2), 537–54, http://dx.doi.org/10.1016/j.annals.2009.11.005.

Mauss, Marcel (1972), *A General Theory of Magic*, ed. Robert Brian, London, UK: Routledge Classics.

McAteer, Ollie (2016), "The World's Biggest McDonald's Doesn't Look Like a McDonald's At All," *Metro UK*, *DMG Media*.

Medin, Douglas L. (1989), "Concepts and Conceptual Structure.," *American Psychologist*, 44(12), 1469–81, http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=1990-09021-001&lang=ko&site=ehost-live.

Medin, Douglas L. and Andrew Ortony (1989), "Psychological Essentialism," in *Similarity and Analogical Reasoning*, ed. Stella Vosniadou and Andrew Ortony, Cambridge, UK: Cambridge University Press.

Mishra, Arul (2009), "Influence of Contagious versus Noncontagious Product Groupings on Consumer Preferences," *Journal of Consumer Research*, 36(1), 73–82.

Morales, Andrea C. and Gavan J. Fitzsimons (2007), "Product Contagion: Changing Consumer Evaluations Through Physical Contact with 'Disgusting' Products," *Journal of Marketing*

Research, 44(2), 272–83.

Nemeroff, Carol and Paul Rozin (1994), "The Contagion Concept Adult Thinking in States : In the United Transmission of Germs and Influence of Interpersonal," *Ethos*, 22(2), 158–86.

Newman, George E. (2016), "An Essentialist Account of Authenticity," *Journal of Cognition and Culture*, 16(3–4), 294–321.

Newman, George E. and Paul Bloom (2012), "Art and Authenticity: The Importance of Originals in Judgments of Value," *Journal of Experimental Psychology: General*, 141(3), 558–69.

Newman, George E. and Ravi Dhar (2014), "Authenticity Is Contagious: Brand Essence and the Original Source of Production.," *Journal of Marketing Research*, 51(3), 371–86, http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=96391576&site=bsi-live.

Newman, George E., Gil Diesendruck, and Paul Bloom (2011), "Celebrity Contagion and the Value of Objects," *Journal of Consumer Research*, 38(August), 215–28.

Peñaloza, Lisa (2000), "The Commodification of the American West: Marketers' Production of Cultural Meanings at the Trade Show," *Journal of Marketing*, 64(4), 82–109.

Putnam, Hillary (1975), "The Meaning of Meaning," in *Mind, Language, and Reality: Philosophical Papers*, ed. Hillary Putnam, Cambridge, UK: Cambridge University Press.

Rips, Lance J. (2001), "Necessity and Natural Categories," *Psychological Bulletin*, 127(6), 827–52.

——— (1989), "Similarity, Typicality, and Categorization," in *Similarity and Analogical Reasoning*, ed. Stella Vosniadou and Andrew Ortony, Cambridge, UK: Cambridge University Press.

Rozin, Paul, Linda Millman, and Carol Nemeroff (1986), "Operation of the Laws of Sympathetic Magic in Disgust and Other Domains.," *Journal of Personality and Social Psychology*,

50(4), 703–12, http://doi.apa.org/getdoi.cfm?doi=10.1037/0022-3514.50.4.703.

Rozin, Paul and Carol Nemeroff (1990), "The Laws of Sympathetic Magic: A Psychological Analysis of Similarity and Contagion," in *Cultural Psychology: Essays on Comparative Human Development*, ed. James W Stigler, Richard A Shweder, and Gilbert Herdt, New York, NY: Cambridge University Press.

Rozin, Paul, Carol Nemeroff, Marcia Wane, and Amy Sherrod (1989), "Operation of the Sympathetic Magical Law of Contagion in Interpersonal Attitudes among Americans.," *Bulletin of the Psychonomic Society*, 27(4), 367–70, http://psycnet.apa.org/psycinfo/1990-01232-001.

Saunders, Stephen G. (2010), "Consumer-Generated Media and Product Labelling: Designed in California, Assembled in China," *International Journal of Consumer Studies*, 34(4), 474–80, http://doi.wiley.com/10.1111/j.1470-6431.2010.00897.x.

Sayer, Andrew (1997), "Essentialism, Social Constructionism, and beyond," *Sociological Review*, 45(3), 453–87, http://dx.doi.org.librouter.hud.ac.uk/10.1111/1467-954X.00073%5Cnhttp://www3.interscience.wiley.com.librouter.hud.ac.uk/cgi-bin/fulltext?ID=119146666&PLACEBO=IE.pdf&mode=pdf.

Schwartz, Stephen P. (1980), "Natural Kinds and Nominal Kinds," *Mind*, 89(354), 182–95.

Sherman, Lauren (2008), "Who's Really Cooking Your Celebrity Chef Meal?," *Forbes*, http://www.forbes.com/2008/12/23/celebrity-chef-assistants-forbeslife-cx_ls_1223food.html.

Smith, Rosanna K., George E. Newman, and Ravi Dhar (2015), "Closer to the Creator: Temporal Contagion Explains the Preference for Earlier Serial Numbers," *Journal of Consumer Research*, 42, 653–68, http://jcr.oxfordjournals.org/cgi/doi/10.1093/jcr/ucv054.

Spiggle, Susan, Hang T. Nguyen, and Mary Caravella (2012), "More Than Fit: Brand Extension Authenticity," *Journal of Marketing Research*, XLIX(December), 1–17.

Stavrova, Olga, George E. Newman, Anna Kulemann, and Detlef Fetchenhauer (2016), "Contamination without Contact: An Examination of Intention-Based Contagion," *Judgment and Decision Making*, 11(6), 554–71.

Valsesia, Francesca, Joseph C. Nunes, and Andrea Ordanini (2016), "What Wins Awards Is Not Always What I Buy: How Creative Control Affects Authenticity and Thus Recognition (but Not Liking)," *Journal of Consumer Research*, 42(6), 897–914.