The Handmade Effect: What’s Love Got to Do with It?

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Abstract:
Despite the popularity and high quality of machine-made products, handmade products have not disappeared even in many product categories where machinal production is common. We present the first systematic set of studies exploring whether and how stated production mode (handmade vs. machine-made) affects product attractiveness. Four studies provide evidence for the existence of a positive handmade effect on product attractiveness. This effect is to an important extent driven by perceptions that handmade products “contain love”. This love account is validated controlling for alternative value drivers of handmade production (mere effort, product quality, uniqueness, authenticity, pride). The handmade effect is moderated by two factors that affect the value of love. Specifically, consumers indicate stronger purchase intentions for handmade than machine-made products when buying gifts for their loved ones, but not for more distant gift recipients and pay more for handmade gifts when they are bought to convey love than when buying the best-performing product.

Keywords: Handmade, machine-made, production mode, product attractiveness, love
In an era of technological advancement and widespread robotization, in which machines produce very high quality products to exacting specifications, it seems ironic that we see more and more products that are promoted as “handmade.” In fact, we find products explicitly advertised as handmade in many categories, such as sandwiches and bread (Pret A Manger, Udi’s), soaps and cosmetics (Lush), guitars (Candelas), sneakers (Vans), eyewear (Armani), knives (Cut Brooklyn), furniture and household products (Etsy), wine (Columbia Crest), or tableware (Gmundner). Some even speak of a “handmade revolution” (cf. the BBC television series entitled Paul Martin’s Handmade Revolution). It is interesting to us that in a time when machines produce excellent products in a precise and consistent way (Liebl and Roy 2003; Markoff 2012), many companies not only continue to rely on handmade production, but also actively advertise such an archaic mode of production to promote their products to consumers.

Considering the high quality of machinal production, it is not clear a priori if and why product attractiveness is increased by marketing a product as handmade (versus machine-made or not mentioning the production mode). Of course, one might argue that a positive handmade effect has to exist given the fact that marketers frequently choose to present their products as handmade. However, in our marketplace observations, whether a product is advertised as “handmade” tends not to be manipulated and can be confounded with many other factors such as price points, materials used, or design elements. Thus, we feel there is a need for a controlled empirical test of the existence of an effect of presenting a product as handmade on that product’s attractiveness. To our surprise, we found no such test in the literature.

In this manuscript, we therefore aim to assess the effect of stated production mode on product attractiveness by manipulating whether the same product is presented to consumers as handmade (vs. machine-made). We limit this first-of-type analysis to Western consumers (by drawing on diverse European and North American consumer samples) and discuss the
generalizability of our theory to non-Western societies in our General Discussion section.

Conditional upon the existence of a handmade effect, our second main objective is to explore one of the processes that might underlie the effect as well its boundary conditions and moderators. It is important to note that we focus on the way companies communicate the production mode (i.e., as handmade vs. machine-made) rather than the actual, physical production mode. As has been the case since the times of the ancient Assyrian loom (Barber 2013), and probably even before that, purely hand-made production is rare. Almost no production process currently involves no machines (e.g., a maker of handmade knives uses a machine to sharpen the knives). On the other hand, many “machinal” production processes involve some form of human contact. Thus, it is often difficult to objectively categorize a product as completely handmade or completely machine-made (Barber 2013). This provides marketing managers with considerable degrees of freedom whether to present their products as handmade (versus machine-made or not mentioning their product’s production mode). Thus, rather than the precise role of machines versus hands in the actual production process, what interests us is consumers’ perceptions of products that are marketed as being handmade (vs. machine-made). For our research purpose, we thus define a handmade versus machine-made product as one which is presented (e.g., by the producing company) to consumers as being made by hand or a hand-process and not by a machine or a machinal process.

The manuscript offers the following contributions. First and across a variety of product domains and samples from three Western societies, we find that consumers perceive handmade products to be more attractive. We define our focal dependent variable, product attractiveness, as consumers’ attitudinal and behavioral predisposition toward to the underlying product using both items assessing attitude towards the product and items probing the attractiveness of the product for purchase (cf. Sweldens, van Osselaer, and Janiszewski 2010). Notably, the handmade effect is
found to materialize against both a control group where the products were portrayed as machine-
made as well as one were no information regarding the production mode was provided (Study 1).

Theoretically, this newly identified handmade effect can be understood in light of positive
contagion and consumer labor theory (Argo, Dahl, and Morales 2008; Newman, Diesendruck,
and Bloom 2011; Norton, Mochon, and Ariely 2012; Rozin and Nemeroff 2002). Specifically,
this line of research as well as informal observations of handmade products’ marketing materials,
consumers’ on-line comments (e.g., in consumer blogs), and interviews with handmade producers
led us to suspect that love may be an important driver of the handmade effect. Products labeled as
handmade might be perceived as containing (and perhaps even as transmitting) the artisan’s
“essence” in the form of his or her love for a product and production process in a way that
machine-made products could not (see the video series “Made by Hand” on
bureauofcommongoods.com). Perceived love, in this context, refers to a consumer’s perception
of an artisan’s emotion of a strong attraction and passionate attachment to the product and its
production process (see also Carroll and Ahuvia 2006) which becomes embedded in the product.

Our first suspicion based on informal marketplace observation as well as positive contagion
and consumer labor theories that love might play a role in the handmade effect was further
corroborated by an exploratory pilot study. In this open association pilot study we asked 114
participants to write down their thoughts and feelings about handmade products. Love, either in
the form of the love a handmade producer puts into the production process or in the form of love
imbued in the product, emerged as a frequent robust theme (e.g., “Handmade products are …
built with care and love” [#101], “I like it [handmade product] and especially the fact that it is
hand made. It is made with love” [#53], “There is something else in that product. …it is love”
[#25]). Thus, results suggested that love might indeed be worth studying as a potential driver of a
handmade effect on product attractiveness.
As with virtually every empirical phenomenon of substantial practical importance, however, the handmade effect is unlikely to be exclusively driven by a “one and only” process. It is important to identify these potential co-determinants so they can be controlled for in our attempt to isolate the role of love as one significant driver of the potential handmade effect. Thus, we also used the open association pilot to find other factors that might co-determine a handmade effect on product attractiveness. We found that handmade products were perceived by some respondents to require more time to produce, which might increase perceived quality, and through increased perceived quality yield higher attractiveness. Thus, handmade production might increase attractiveness through the effort heuristic (Kruger et al. 2004). Some respondents also associated handmade products with expensiveness and quality per se. Finally, respondents sometimes suggested that handmade products were more attractive due to their uniqueness. Thus, the pilot study suggested a need to test mediation of the handmade effect by love while controlling for perceived effort, quality, expensiveness, and uniqueness.

In the remainder of this manuscript, we provide a more extensive discussion of theoretical background, followed by four empirical studies. In Study 1, we demonstrate the existence of the basic handmade effect, showing increased product attractiveness for products presented as handmade over the same products presented as machine-made or presented without mentioning production mode. In Study 2, we find that love mediates the handmade effect while controlling for the alternative processes identified in the open association pilot. Study 2 further contributes by exploring the handmade effect and the role of love as one of its drivers through moderation. We find that the handmade effect is stronger for a gift intended for a recipient who is emotionally closer rather than more distant. This is because the love imbued in the handmade product increases the attractiveness of a gift product more when the recipient is closer to the gift giver. In Study 3, we again moderate the link from love to product attractiveness by showing that the
handmade effect is stronger when consumers’ gift giving is motivated by a desire to convey love rather than to give the best-performing product. Thus, this study provides support for the idea that handmade products imbued with love are valued because they can convey love to the consumer receiving the product. Finally, Study 4 demonstrates the handmade effect through an incentive-compatible experiment and shows mediation by love while controlling for a number of alternative processes kindly graciously suggested to us by three anonymous reviewers (pride, happiness, contentment, and authenticity). We close with a general discussion that focuses on the managerial and theoretical implications of the studies, limitations, and directions for future research. In sum, these four studies show the existence of a handmade effect, show the effect is driven to a significant extent by artisanal love, and show boundary conditions of the handmade effect.

THEORETICAL BACKGROUND

Machine-made versus Handmade

Since the industrial revolution, more and more products have been made by machines, with human activity often limited to repetitive actions where each human is involved in only one or a few steps in the production process (cf. Smith 1776/2003; Toffler 1980). Recently, widespread robotization has reduced the role of humans in the production process even more (Brynjolfsson and McAfee 2011) to such an extent that humans may not touch the product at all during its production (Markoff 2012). Machinal production has many advantages. Machines tend to be consistent and can be highly precise, often yielding consistently high-quality products (Liebl and Roy 2003; Markoff 2012). Nevertheless, we see that there are still many products that are sold as being “handmade” even in categories, such as soap and ceramic tableware, where high-quality machinal production is omnipresent. In this manuscript, we investigate if, when, and why products marketed as handmade are perceived to be more attractive than products marketed as
being machine-made. To do this, we first have to discuss a factor that we hypothesize to be a core driver of a possible handmade effect, love.

**Love**

Our main hypothesis is that handmade products may often be more attractive, at least in part, because they are perceived as being made with artisanal love, and even as containing love. Love is broadly defined in terms of a “passionate affection for another person” and “a feeling of warm personal attachment” (dictionary.com). In our context, we refer to love in a more specific way. We refer to love in terms of the love that originates with a producer and that has the product and its production process as its object rather than another person. Love for one’s work on the part of the producer has been recognized as a main motivational source in the work psychology literature (Baum and Locke 2004; Locke 2000). We retain the core elements of love and passion from this literature, and define love as the warmhearted passion a producer has for a product or its production process, and that as a result is embedded in the product. This conceptualization consists of the love in the production process (the product is made with love) and the love that is imbued in the product (the product contains love). We hypothesize that love is a core mediator of a possible handmade effect. Specifically, we reason that consumers perceive handmade products to be made with love and that this perception of being made with love makes consumers perceive the product is imbued with love. To explain our reasoning behind this hypothesis, we go back to Karl Marx and the time of the industrial revolution.

*Alienated versus Artisanal.* Since the mechanization of production during the industrial revolution, several authors have described the disadvantages of a shift away from handmade, artisanal production. For example, Karl Marx (1844/2007) deplored the alienation deriving from a mode of production in which human producers and machines engage in an endless repetition of
the same actions that constitute only a single step in a multi-step production process and that provide little intrinsic satisfaction. This mode of production stands in stark contrast to a process (1) in which one artisan controls and executes the entire production of a product, (2) in which artisans often devote years to master their craft, and (3) in which artisans invest some of their selves in their craft and their products, deriving intrinsic satisfaction from the production process and from the product of their labor.

Artisanal Love. In our informal survey of information about handmade producers and their products as well as in the free association pilot study, we found frequent references to this emotional investment of handmade producers in their production process and in their product. Although not to the exclusion of several other terms, emotional investment is frequently referred to as “love” (Boatwright and Cagan 2010; Csikszentmihalyi and Rochberg-Halton 1981; Norton et al. 2012; Locke 2000), both in terms of love for the production process (the craft) and of love for the product (Csikszentmihalyi and Rochberg-Halton 1981). In fact, passion or love for one’s work has been identified as an important phenomenon in the organizational behavior literature. For example, passion or love of one’s work is a main motivation for people to engage in the creation of new enterprises (Baum and Locke 2004; Locke 2000). Our informal and pilot observations, as well as the previous section on Alienation versus Artisanal, suggest that love for the production process and/or product might be particularly strong in the context of handmade production. This seems broadly consistent with recent findings in the consumer realm showing that when consumers make something themselves, by hand, they become emotionally attached to the fruit of their labor, that is, handmade “labor leads to love” (Norton et al. 2012). Although professional handmade production may be quite different from the occasional putting together of Ikea furniture by consumers, it seems possible that professional handmade production begets “love” by the producer, too. In addition, it seems possible that consumers, who themselves have
often created things with their bare hands and presumably experienced artisanal love themselves (e.g., through the Ikea effect, cooking food, or making ornaments for Christmas) infer such artisanal love by the producer when told that a product is handmade. In sum, we expect that promoting products as handmade leads consumers to infer that those products were “made with love.”

**Imbued Love and Product Attractiveness.** Our next assumption is that consumers’ inference that handmade products are made with love will also imbue the product itself with love. That is, being made with love will make the product “contain love.” This is clearly a non-obvious step in our argumentation, but it does not appear out of thin air either. Our idea that an inferred emotion (i.e., love) of the producer would transfer to the produced object seems broadly consistent with earlier speculation by Csikszentmihalyi and Rochberg-Halton’s (1981). These authors speculated that through the manual production of objects, the psychic energy of the creator might be perceived to become part of the emerging object. Thus, part of the “essence” of the handmade producer (the love for the product and/or the production process) may become associated with the product; hence, the product might be perceived to be imbued with love.

We further expect that being imbued with love can influence the attractiveness of a product. Through basic processes such as evaluative conditioning (Sweldens et al. 2010) in which the concept love was paired with positive experiences and feelings throughout a consumer’s life, products imbued with love should be evaluated more positively. In addition, we expect that a product that is associated with both a gift giver and imbued love should be particularly attractive as a way to convey love.

This “love story” might seem strange and irrational, even a bit far-fetched, but the idea that a product’s attractiveness can be influenced through physical contact by a person other than the consumer is well-supported by research on contagion. For example, Argo, Dahl, and Morales
(2006) showed that a T-shirt’s attractiveness is reduced when it was tried on by an unspecified other consumer. The same authors (2008) showed positive contagion (i.e., increased attractiveness) when the other consumer that tried on the T-shirt was a specific, physically attractive person. Similar effects occur for friends and well-known celebrities such as US President Barack Obama or singer Madonna (Rozin, Millman, and Nemeroff 1996; Newman et al. 2011). In addition, Newman and Bloom (2011) recently found that lay people’s estimate of the dollar value of an art piece, particularly if created by a well-known artist, is positively influenced by the amount of direct physical contact of the creator with the object during its production process. Thus, it seems possible that handmade (vs. machine-made) production mode impacts product attractiveness through contagion. Although the literature does not clearly indicate the direction of such a contagion effect—an unspecified handmade producer may yield negative contagion much like an unspecified consumer trying on a T-shirt (Argo et al. 2006)—it seems quite possible that unspecified handmade producers have a positive contagion effect on the attractiveness of the fruits of their labor. In sum, we predict that even if the underlying producer is anonymous and not known to the consumer (as is often the case with products promoted as handmade), consumers may infer that the handmade producer produces products with love and may believe that the producer’s love for the production process and/or the product imbues the emerging object with love. If handmade products are indeed endowed with such “love”, they should become more attractive for consumers as they gain a special status, both for themselves and as gifts to loved ones. Thus, we hypothesize that:

**Hypothesis 1:** Presenting a product as handmade (vs. machine-made) can increase its attractiveness to consumers.

**Hypothesis 2:** This handmade effect is driven, at least in part, by consumer perceptions of love imbued in the product.
Before we proceed to testing the love explanation for a potential handmade effect, it is necessary to assess whether the handmade effect exists in the first place. We do this in Study 1.

**STUDY 1**

In Study 1 we test for the existence of the proposed handmade effect – that is, whether presenting a product as handmade makes that product more attractive to consumers. To perform this test, we employed two control conditions: one where the same product is presented as machine-made and one where no production mode is mentioned at all. The experiment is a 3 (production mode: handmade vs. machine-made vs. no production cue) x 4 (product replicates: greeting cards, jewelry, scarf, knives) mixed-model design where the first factor was manipulated between-participants and the second was manipulated within-participant.

**Method**

147 students ($M_{age} = 19$ years, 49% female) based in the Netherlands volunteered to participate in a product concept test study in exchange for course credit. Participants were randomly assigned to one of the three experimental conditions. In all three conditions, a participant was exposed to a color picture of a product along with a label of the product (e.g., scarf), its price (e.g., 70 euros), and at least two attributes further describing the product (e.g., 100% wool, unisex; see the Web Appendix for more detailed descriptions of methodology for all four studies). After seeing the product, the product’s attractiveness was measured using six items following the preamble “How do you evaluate this product?” (dislike/like, bad/good, not appealing/appealing, unlikely to buy/likely to buy, I would not/I would be happy to receive [product] as a gift, I would not take/I would take more care of this [product] than of other [products]; scales from 1 to 7; $\alpha = .89$). The same procedure was then used for the other three
products. The only difference between conditions was the provision of the information about how
the focal products were made; they were described as being “handmade” or “machine-made”, or
no such production cue was provided. After evaluating all four products, we asked participants to
complete the PARH scale (Rubin, Paolini, and Crisp 2010) measuring participants’ perceived
awareness of the research hypotheses. Finally, respondents completed an open-ended suspicion
probe in which they were asked what they thought the study was about.

Results and Discussion

Preliminary Analyses. As the product attractiveness scales contained a variety of diverse
attitudinal and behavioral intention items, we first ran a confirmatory factor analysis (CFA) to
assess the psychometric properties of the scale. Importantly, we find that all indicator loadings
are positive and highly significant ($p < .001$); moreover, the model’s fit indices (CFI = .96, NFI
= .94, SRMR = .05) and the average variance extracted (AVE = .65) are adequate. These results
support the psychometric quality and the unidimensional operationalization of the product
attractiveness scale. Second, we tested whether a potential handmade effect depended on the
product replicate factor. We therefore conducted a repeated-measures ANOVA with production
mode as the between-participants factor and product replicate as the within-participant factor.
Inspection of the corresponding two-way interaction reveals a non-significant effect ($F < 1$, see
Web Appendix for details). This indicates that attitudes across product replicates did not
significantly differ as a function of our manipulation. We therefore aggregated the data across
products and formed an overall product attractiveness index which served as our dependent
variable.

Main Analyses and Hypothesis Test. We first tested whether product attractiveness ratings
differed between the two control conditions (machine-made vs. no cue). We find a non-
significant effect; product attractiveness scores were almost identical \((M_{\text{machine}} = 3.39, M_{\text{no cue}} = 3.38, t < 1)\). This finding is important as it indicates that the machine-made cue, as one could have argued, did not produce a negative effect compared to the baseline condition (no production cue provided). For our formal hypothesis test we therefore collapsed the data across the two control conditions. In support of H1, we find that respondents report significantly higher product attractiveness scores in the handmade vs. the control conditions \((M_{\text{hand}} = 3.65, M_{\text{control}} = 3.38, t_{(145)} = 2.41, p < .05)\). The insignificant interaction between production mode and product replicate \((F < 1)\) points to the generalizability of this effect. Overall, these results provide initial evidence for the existence of the handmade effect – i.e., that presenting products as handmade can make those products more attractive to consumers than presenting those same products as machine-made or than not mentioning the mode of production at all (note that the handmade effect is also significant if we contrast product attractiveness scores in the handmade vs. the two control conditions separately: handmade vs. machine-made: \(t_{(144)} = 1.97, p = .05\); handmade vs. no cue: \(t_{(144)} = 2.17, p < .05\)). Finally, our results do not seem to be driven by experimental demand. Controlling for hypothesis awareness (as measured by the PARH scale or by excluding the very few participants who guessed the goal of the study) did not change results and the handmade effect did not interact with either measure of hypothesis awareness.

Discussion. In sum, Study 1 provides evidence for the existence of a handmade (vs. machine-made or no production-cue) effect on consumers’ perceived product attractiveness (H1). We furthermore find that results for the condition in which no production cue was present closely tracked results in the machine-made condition. Given that machine-made and no cue conditions yielded similar evaluations and contrasting handmade with machine-made avoids confounding the specific production mode with mentioning production mode per se, we will use machine-
made production as our control in subsequent studies. In the next study, we start exploring our proposed love account for the handmade effect documented in Study 1.

**STUDY 2**

In Study 2 we test our theory that perceptions of love enhance the attractiveness of handmade products. We also examine a potential moderator of the path from perceived love to product attractiveness. Specifically, we argue that products that are imbued with love should be more attractive as gifts in relationships that tend to be characterized by love than in more distant relationships that are usually not characterized by love. Put differently, love might be an attribute that makes handmade products more attractive as such products might be an effective means of conveying your love to the gift recipient. Conversely, conveying your love might seem inappropriate in more distant relationships which makes the love associated with handmade products an attribute that is less attractive for such gifting situations. Thus, in Study 2 we look at the effect of production mode (handmade vs. machine-made) on the attractiveness of a product as a gift to recipients varying in closeness (family member versus acquaintance). Our focal love account predicts that the handmade effect is stronger when the giver and recipient have a closer relationship.

Less importantly, we also explored another, more practical issue in Study 2. If part of the handmade effect is due to consumers’ perception that the product is made with love, which imbues the product with love, can a marketer take a shortcut to leverage this “love advantage” by directly stating that the product is made with love also in a machine-made condition or would any such obvious mention be ignored (e.g., because it arouses the consumer’s “schemer schema” and/or because consumers would dismiss this as mere puffery or “cheap talk”)? Thus, in Study 2 we cross the production mode and recipient factors with (not) directly touting the product as
being “made with love.” In addition, we use a non-student sample and another set of product replicates to add generalizability.

**Method**

**Participants and Design.** 487 members of an Austrian consumer panel were recruited by a international market research agency ($M_{\text{age}} = 38$ years, 54% female) and were randomly assigned to conditions in a 2 (production mode: handmade vs. machine-made) x 2 (relationship with recipient of a potential gift: close vs. distant) x 2 (direct love cue: no cue vs. love cue present) x 4 (product replicates: ceramic mugs, soap, leather goods, stationery) experiment. The first three factors were manipulated between-participants and the latter within-participant. Details of study methodology are provided in the Web Appendix.

**Procedure and Stimuli.** In the close (distant) relationship condition, respondents were instructed to consider that they were in the market for a gift for someone with whom they have a close (distant) relationship, e.g., a relative, a good friend, significant other etc. (a distant acquaintance, a colleague at work etc.).

Further, participants were informed that the products are either handmade or machine-made. Then, consumers were exposed to the images of the handmade (machine-made) product replicates, one at a time and presented in random order. Participants either saw the plain product pictures (in the no love cue condition) or the product pictures accompanied by direct visual love cues next to the product pictures (in the love cue condition; e.g., “made with love,” heart-shaped graphics; stimuli adapted from existing commercial brochures, ads, or brand labels).

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1 Fifty-three participants failed a reading check that directly followed the relationship manipulation in which they were asked for whom the potential gift was intended (0: a close person, 1: distant person) and were thus excluded from further analysis (this criterion was determined before data collection in order to reduce noise in the data; cf. Goldstein, McAfee, and Suri 2013).
**Measures.** Purchase intention served as our main dependent variable and was measured directly after each product replicate exposure with three items following the preamble, “would you buy a product of this firm as a gift for the intended gift recipient?” (For this occasion, I would buy this product as a gift, It is unlikely that I would buy a product of this firm as a gift (r), I would feel good about buying a product of this firm as a gift; 1: strongly disagree, 7: strongly agree, α = .84).

After having been exposed to all four firms/products, participants completed items to measure our process and control variables, based on a holistic judgment of all firms/products combined (all items are measured on 7-point scales; 1: strongly disagree, 7: strongly agree, unless otherwise noted). Love in the product (“contains love”), our main mediator variable, was measured with three items: The products…can figuratively be described as “warm” (warmhearted), are full of “love”, are full of “passion” (α = .87). In order to provide more nuanced evidence for our conjectured process, that is, to examine whether love in the product (“contains love”) is a consequence of the love invested by the handmade producer in the production process (“made with love”), we also measured the latter love component with two items: I think the products are “made with love”, I think the products are “made with passion” (α = .94). Importantly, the “made with love” items were measured after the “contains love” items to avoid the threat of self-generated validity, i.e., that answers of the more obvious “made with love” construct “lead” respondents in their answers of the less obvious “contains love” construct. We also measured several other factors potentially underlying the handmade effect, as identified in the free association pilot study (uniqueness, quality, effort, expensiveness), as well as a manipulation check of the relationship closeness factor (see the Web Appendix for measures).

**Results and Discussion**
Preliminary Analyses. We first performed a series of CFAs to establish discriminant validity between all pairs of constructs. First, a series of $\chi^2$-difference tests demonstrates that two-factor models fit the data significantly better than single-factor models ($p < .001$). Second, Fornell-Larcker tests reveal that the average variances extracted (AVEs) exceed the shared variances among all pairs of constructs, which further supports discriminant validity.

Before collapsing data across product replicates, we performed a 2 (production mode) x 2 (relationship closeness) x 2 (love cue) x 4 (product replicate) mixed model ANOVA on purchase intention. We find that none of the relevant effects interact with product replicate (all $F$s < 1, see Web Appendix for details). These results demonstrate that the focal effects are not affected by idiosyncratic characteristics of the product replicates. We thus collapsed the data across replicates for further analyses.

Manipulation Check. A 2 x 2 ANOVA on the relationship closeness index produced, as intended, a main effect of the relationship factor ($F_{(1,426)} = 1915.29, p < .001; M_{close} = .91; M_{distant} = -.87$). All other effects proved insignificant ($p > .22$).

Product Attractiveness. A three-way ANOVA on purchase intention produces a significant main effect of the production mode factor ($F_{(1,426)} = 9.48, p < .01$) such that respondents generally show a significantly stronger intention to buy handmade (vs. machine-made) products as gifts ($M_{hand} = 4.11, M_{machine} = 3.81$). Findings thus replicate the positive handmade effect observed in Study 1. Consistent with our focal prediction in Study 2, however, this main effect is qualified by a production mode x gift recipient interaction ($F_{(1,426)} = 14.54, p < .001$). Contrasting the handmade effect by gift recipient, we find that the positive handmade effect can be observed in the gift giving condition for close others ($M_{hand} = 4.32, M_{machine} = 3.61; F_{(1,426)} = 23.22, p < .001$), but not in the gift giving condition for distant others ($M_{hand} = 3.92, M_{machine} = 3.99; F < 1$; see Figure 1). The remaining main and interaction effects proved insignificant ($F$s < 1). Of particular
interest is the insignificance of effects involving the direct love cue (main effect: $F < 1$, interaction with production mode, $F(1, 426) = 1.02, p = .31$; three-way interaction between production mode, relationship closeness, and the direct love cue, $F < 1$). Thus, in our data, merely telling consumers that a product is made with love is not an effective shortcut for machine-made products. It also does not boost or diminish the attractiveness of handmade products.

[INSERT FIGURE 1 ABOUT HERE]

*Love.* A three-way ANOVA on love reveals that respondents perceive handmade products to contain significantly more love than machine-made products ($M_{hand} = 4.23$, $M_{machine} = 3.14$; $F(1,426) = 65.01, p < .001$). We also observe that the presence of the direct love cue slightly boosted consumer perceptions of love associated with the products ($M_{cue} = 3.85$; $M_{no cue} = 3.52$; $F(1,426) = 5.79, p < .05$). The other effects, including the three-way interaction, the production mode x direct love cue interaction and the production mode x relationship closeness interaction were not statistically significant (all $ps > .23$). Note that the absence of a production mode x relationship closeness interaction on love is as expected, because we hypothesized that relationship closeness would moderate the path from love to product attractiveness, not the path from production mode to love. Handmade production is perceived to imbue a product with love regardless of the recipient who will later receive the product. The love is just less valued when the relationship between the giver and the recipient is more distant.

*Alternative Process Variables.* Consistent with the insights from the qualitative exploration of the handmade effect, we also find main effects of the production mode on all other process and control variables. Handmade products are generally associated with more uniqueness ($M_{hand} = 4.63$, $M_{machine} = 2.75$; $F(1,426) = 140.85, p < .001$) and higher quality ($M_{hand} = 5.59$, $M_{machine} = 4.77$;
They are also perceived to be more expensive ($M_{\text{hand}} = 4.80$, $M_{\text{machine}} = 3.67$; $F(1,426) = 77.55$, $p < .001$) and more effortful to produce ($M_{\text{hand}} = 4.79$, $M_{\text{machine}} = 3.21$; $F(1,426) = 150.59$, $p < .001$). To account for these variables, we added them as controls in the subsequent mediation analysis (note that multicollinearity was not a concern in this study).

Moderated Mediation. We predicted that the handmade effect on the attractiveness of products for gifting occasions would be stronger in case of a close (vs. distant) gift recipient. The reason is that the love embodied in handmade products is appreciated more when giving to close than to distant others. That is, we expect a pattern of moderated mediation in which production mode has a main effect on “contains love” and in which “contains love” interacts with gift recipient to affect product attractiveness. As expected, a bootstrapping analysis (Hayes 2013) including uniqueness, quality, expensiveness, and production effort as covariates reveals that the indirect effect of the production mode on purchase intent through “contains love” is significantly stronger (CI$_{95\%}$: -.54, -.19) in the close than in the distant gift recipient condition (close: CI$_{95\%}$: -.66, -.23; distant: CI$_{95\%}$: -.27, -.01). Thus, we find evidence, even when controlling for alternative processes, that the handmade effect is significantly mediated by perceptions of love in the product, and that love in the product is significantly more positively related with purchase intention in the close (vs. distant) recipient condition.

Sequential mediation. Because our core contribution in this manuscript, besides documenting the handmade effect, is to show that this effect is at least partially due to handmade products becoming imbued with love, we concentrate on showing mediation by “contains love”.

However, our theory specifically argues that this perceived love in the product is the result of a handmade producer’s love for the production process. Therefore, we also ran a sequential mediation analysis in the close recipient condition (where, as expected, the handmade effect was present). This analysis showed a significant sequential indirect effect from production mode to
“made with love” to “contains love” to purchase intent (CI$_{95\%}$: -.53, -.18) which supports the overarching love account underlying the handmade effect.

**Discussion:** Results in Study 2 provide evidence for our theorizing about the role of love underlying the handmade effect. Consumers indeed associate handmade products more strongly with love imbued in the product. This love, in turn, helps to explain why handmade vs. machine-made products are preferred as gifts. Importantly, we were also able to moderate the love-product attractiveness link: Specifically, our results show how handmade products being invested with love makes them more attractive as gifts for relationally close versus relationally distant recipients. Anecdotally, this finding seems consistent with our constatation that the frequency of internet searches for handmade products increases strongly around the Holiday period when consumers presumably search especially for gifts for their loved ones (using Google Trends over 2004-2011).

**STUDY 3**

In Study 2, we assumed that handmade products are particularly attractive as gifts to close recipients because gift givers would be more motivated to convey love to close recipients (relative to more distant recipients). Whereas expressing love is a common motivation for buying gifts to close others (Belk and Coon 1993), we did not assess this motivation directly. Therefore, in Study 3 we provide further evidence for the proposed love account by manipulating the motivation to convey love directly. In other words, we test whether handmade products become more attractive if the gift giving goal is to use the product to convey one’s love to the recipient. Such a pattern of results would further validate our love account.

**Method**
Participants, Design, Procedure, and Stimuli. 402 consumers \((M_{\text{age}} = 31\text{ years}, 38\% \text{ female})\) recruited from a US online consumer panel participated in a study on wine glasses; participants were exposed to visual stimuli depicting two wine glasses, one from the brand Spiegelau and one from the brand Riedel. The focal question was which of the two types of wine glasses participants would choose as a gift for one of their close ones (i.e., a close family member) . We manipulated which of the two brands of glasses was handmade and which was machine-made. We also manipulated the focal gift giving goal between participants. Participants were asked which of the two types of glasses they would choose if their goal was to convey their love to the gift recipient versus to give the best possible glasses for drinking wine. This manipulation allows us to test whether handmade products become more attractive if the goal of the gift giving context is to convey love. Such a finding would provide converging evidence for our focal love account: if conveying love is key, handmade products become more attractive (because they “contain” love). We also counterbalanced the specific brand information. Thus, participants were randomly assigned to conditions in a 2 (production mode: Riedel machine-made, Spiegelau handmade vs. Riedel handmade, Spiegelau machine-made) x 2 (gift giving goal: love vs. performance) experiment.

Measures. Preference for a set of six wine glasses of one (Spiegelau) or the other brand (Riedel) served as our main dependent variable and was measured directly after product exposure. We employed three measures, captured on six-point scales: (1) I would definitely prefer to buy the [production mode] glasses from Spiegelau/Riedel, (2) I would choose the glasses from Spiegelau/Riedel, and (3) I would purchase the Spiegelau glasses/Riedel glasses \((1: \text{ Spiegelau}, 6: \text{ Riedel}, \alpha = .99)\). After the product preference scales we captured love in the product (i.e., “contains love”) with three items: (1) The production process imbued the products with a lot of love, (2) The products contain love, and (3) I think the products are full of love \((1: \text{ more true for} \)
Results and Discussion

Preliminary Analyses. We performed a series of CFAs to test whether product preference is empirically distinct from love. First, a $\chi^2$-difference test demonstrates that a two-factor model is superior to and significantly better than a single-factor model ($p < .001$). Second, a Fornell-Larcker test reveals that the AVE exceeds the shared variance between the two constructs, which supports discriminant validity.

Product Attractiveness. A 2 (production mode: Riedel machine-made, Spiegelau handmade vs. Riedel handmade, Spiegelau machine-made) x 2 (gift giving goal: love vs. performance) ANOVA on product preference first reveals a main effect of the production mode which replicates the positive handmade effect documented in the prior studies: If the Riedel glass was portrayed as handmade, respondents demonstrate a significantly stronger preference for the Riedel glass compared to when it was portrayed as being machine-made ($M_{\text{hand}} = 4.85$, $M_{\text{machine}} = 2.20$, $F(1,398) = 366.62$, $p < .001$). Second, the main effect of the gift giving goal factor was insignificant ($F < 1$). Third and in support of our love account, we find a significant interaction ($F(1,398) = 24.11$, $p < .001$). Although the handmade effect is positive and significant in both scenarios, it is significantly more pronounced in the love (vs. performance) condition, that is, if the goal of giving the wine glasses was to convey love ($M_{\text{hand}} = 5.15$, $M_{\text{machine}} = 2.02$, $F(1,398) = 257.35$, $p < .001$) versus to give the best possible glasses for drinking wine ($M_{\text{hand}} = 4.53$, $M_{\text{machine}} = 2.38$; $F(1,398) = 121.51$, $p < .001$).

Love. A 2 x 2 ANOVA on love, as expected, only reveals a main effect of the production mode factor. Respondents perceive the Riedel glass to contain more love when portrayed as
handmade \( (M_{\text{hand}} = 4.85) \) vs. machine-made \( (M_{\text{machine}} = 1.98, F_{(1,398)} = 903.29, p < .001; \) other \( Fs < 1 \).

**Moderated Mediation.** We specified the same type of moderated mediation model as in Study 2, replacing gift recipient by gift giving goal. As expected, we find that the indirect effect (production mode → contains love → preference) is significantly stronger (CI\(_{95\%}\) .25, .1.00) if conveying love as opposed to maximizing performance is the primary gift giving goal (love: CI\(_{95\%}\): -2.97, -2.14; performance: CI\(_{95\%}\): -2.33, -1.48).

**Discussion.** In Study 3, we replicated the handmade effect in a side-by-side preference setting and provided additional process evidence through moderation and mediation. Specifically, we argued that the fact that handmade products are thought to contain love makes them particularly well-suited to convey love. This argument was supported by our findings that preference for handmade products was stronger when the gift giving goal was to convey love (vs. giving the best-performing product). Moderated mediation results further corroborated this process account.

**STUDY 4**

The studies reported thus far measured the handmade effect using a variety of attitudinal and behavioral intention measures. These measures, while informative, did not involve consequential decisions and did not involve a dollar metric. That is, we did not show that participants were actually willing to pay a significantly higher amount of money for handmade versus machine-made products. Therefore, drawing on a sample of US consumers, Study 4 employs an incentive-compatible willingness-to-pay measure. In addition, anonymous reviewers graciously suggested additional alternative processes we did not control for in the earlier studies. In particular, one might argue that handmade products are seen as more authentic or that
handmade production arouses other positive emotions, such as pride, happiness, or contentment. Whereas we believe that the handmade effect, like virtually any other managerially relevant phenomenon, is likely multi-determined, we argue that love imbued in handmade products can be a significant driver of the handmade effect, even if controlling for these alternative accounts. Therefore, in Study 4, we assess “contains love” as a mediator of the handmade effect while controlling for these other positive emotions.

**Method**

**Participants, Design, Procedure, and Stimuli.** 302 consumers (\(M_{age} = 35\) years, 53% female) recruited from a US online consumer panel participated in a study run close before Mother’s Day (May 11\(^{th}\)). Participants were informed they could win a bar of Le Sérail brand French milled soap for their mother. Embedded in other product information, we manipulated the production mode (handmade vs. machine-made) between participants. After product exposure, participants completed a short questionnaire containing an incentive-compatible measure of WTP and a set of items capturing love, happiness, pride, contentment, and product authenticity.\(^2\)

**Measures.** WTP for a bar of Le Sérail soap served as our main dependent variable and was measured directly after product exposure using an incentive-compatible BDM lottery (Becker, DeGroot, and Marschak 1964) which has been demonstrated to be a reliable and valid elicitation method of consumers’ WTP (Wertenbroch and Skiera 2002). Love was measured by three items (all 1: strongly disagree, 7: strongly agree): I think the production process imbued the product with a lot of love, the product contains love, and I think the product is full of love (\(\alpha = .94\)). More

\(^2\) We deleted 39 participants from the initial sample as they indicated that their mother was not alive anymore, annulling the incentive-compatibility of the task (the opportunity to win a gift for one’s mother is not meaningful for these participants). Thus, the final sample consisted of 263 participants (\(M_{age} = 34\) years, 51% female).
details of study methodology, including measures for the alternative accounts, are provided in the Web Appendix.

Results and Discussion

Preliminary Analyses. A series of CFAs first indicated that love is empirically distinct from the rival explanations ($\chi^2$-difference tests: $ps < .001$; also the Fornell-Larcker criterion suggested discriminant validity). To avoid multicollinearity among the alternative accounts in the mediation analyses reported below, we used each construct separately to establish the relative power of love in mediating a potential handmade effect on WTP.

Willingness to Pay (WTP). An ANOVA on WTP replicates the handmade effect based on a behavioral, incentive-compatible outcome variable. If the soap was described as handmade, respondents indicate a significantly higher WTP compared to when it was described as machine-made ($M_{\text{hand}} = \$6.56$, $M_{\text{machine}} = $5.63, $F_{(1,261)} = 4.53, p < .05$).

Mediation by Love. To again test for love as a mediator, we specified a model with the production mode as the independent variable, love as the mediating variable, and WTP as the dependent variable. As sketched above, we ran four different mediation models in which we additionally added happiness, pride, contentment, or authenticity as covariates (one at a time to avoid multicollinearity). In all four models, we find that love is significantly related to WTP which supports mediation (i.e., none of the confidence intervals contained zero). It is noteworthy that alternative models in which the rival process variables were specified as mediator variables and love as the covariate hardly produced any significant mediation effects. These effects are also consistent if we ran an additional model in which a compound index of all alternative process measures ($\alpha = .93$) is added as a rival mediator. Findings thus indicate that love mediates the
handmade effect independent of and beyond any effects stemming from more general positive emotions (happiness, pride, contentment) as well as perceptions of product authenticity.3

Discussion. In Study 4, we find that participants in an incentive-compatible experiment are willing to pay more for the same bar of French milled soap when it is promoted as handmade than when it is promoted as machine-made. The effect appears to be quite substantial: marketing one and the same soap bar as handmade increases consumers’ WTP, on average, by 17 percent. Importantly, in this Study we also find mediation of the handmade effect by love imbued in the product (“contains love”) when we control for the rival accounts authenticity, pride, happiness, or contentment.

GENERAL DISCUSSION

In four studies, we document the existence of a positive handmade effect on product attractiveness and find that this effect is to an important extent explained by love. That is, in Study 1 we find that participants evaluate products marketed as handmade more positively than both products described as machine-made and products that do not mention any mode of production. In Study 2, we moderate the handmade effect by manipulating the relationship between giver and recipient of a potential gift. Specifically, we find that handmade products are no longer more attractive than machine-made products when the products are evaluated as gifts for socially more distant (vs. close) recipients. The fact that products are perceived as containing love does not convey as much of an advantage on products that are to serve as gifts for distant recipients. In Study 3, we tap into the process more directly. We show that when the goal of a gift

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3 Mediation models: love (mediator) controlled for happiness: CI95% 0.08, .40; love controlled for pride: .05, .35; love controlled for contentment: .06, .42; love controlled for authenticity: .07, .35; love controlled for compound index of alternative accounts: .001, .38; alternative mediation models controlled for love: happiness (mediator): -.08, .23, pride: -.07, 19, contentment: -.08, 11, authenticity: .001, .17; compound index: -.46, .28.
is to convey love, gift givers show a stronger preference for a handmade (vs. machine-made) product than when the gift giver’s goal is to give the best-performing product. Finally, in Study 4, we provide evidence for the managerial significance of the handmade effect by using an incentive-compatible measure of willingness to pay. We find that participants are willing to pay 17 percent more for a bar of French soap when the soap is presented as handmade (vs. machine-made).

**Theoretical and Practical Implications**

In addition to demonstrating the existence of a positive handmade effect on product attractiveness (in a way that controls common confounds by experimentally manipulating stated production mode), the present studies uncover the mediating role of perceptions of the love with which handmade products are produced and with which handmade products are imbued. Whereas our primary goal was to contribute to the understanding of the influence of stated production mode (handmade vs. machine-made) on product attractiveness *per se*, our results also speak to the literature on contagion. The studies in this manuscript suggest that perceived feelings of the producer of a product can transfer to the product and impact the attractiveness of that product to consumers. Moreover, our findings suggest that positive contagion effects are not only elicited by physical contact with a *specific* producer (e.g., a well-known celebrity; Newman et al. 2011); they can also be elicited by physical contact with an unspecific, anonymous producer. This is of interest because physical contact by an unspecific other (i.e., another consumer) has previously been shown to produce negative contagion effects (Argo et al. 2006). Finally, our research contributes by documenting the role of a process variable underlying a positive contagion effect directly, through measurement and mediation, supplementing evidence provided through the more common moderation approach.
In addition to their theoretical significance, our findings also have clear practical implications. Our results suggest that producing a product by hand, or rather, marketing it as such, can be an effective way to make a product more attractive to consumers, of course with several caveats about target population and the type of handmade production involved (see the section on Limitations and Future Research). In this regard, the incentive-compatible Study 4 is particularly informative. We find that in our US sample, consumers were, on average, willing to pay 17 percent more for a bar of soap that was portrayed as made by hand versus machine. This is a substantial difference, but a more fine-grained analysis suggests that the handmade effect may be even larger for the segment of customers most likely to be in the market for the focal product. We plotted the downward-sloping demand curves for the handmade and machine-made conditions of Study 4 (see Figure 2). What emerges is that the handmade effect appears to be particularly pronounced at higher, rather than lower levels of WTP (i.e., for respondents who seem to be especially interested in getting the focal product).

The handmade effect, for example, yields an increase in WTP of 25 percent at the 95th percentile. This pattern is formally confirmed by a series of quantile regressions that compare WTP for participants in the handmade versus machine-made condition at the same percentile of WTP within their condition. For example, while the handmade effect is of medium strength at the 5th percentile ($b_{5\%} = .5, p < .10$) and the median ($b_{50\%} = .5, p < .05$), it is much stronger at the 95th percentile ($b_{95\%} = 1.5, p < .01$). Thus, marketing products as handmade seems particularly relevant for the left-hand side of the demand curve, that is, for consumers who are generally willing to pay higher amounts for the focal product.

[INSERT FIGURE 2 ABOUT HERE]
The focal love account underlying the handmade effect bears direct implications for managers. Marketing products as handmade appears to be particularly promising when love is a central buying motive, for example, when consumers are searching for gifts (a) for close others to whom (b) they want to convey their love. Thus, marketing products as handmade might be particularly promising during Christmas, around Mother’s Day, or Valentine’s Day, for example. Reminding potential customers that handmade products might be the right way to convey their love to their beloved ones might be a promising communication strategy toward that end.

Marketers might also stress the love in the handmade in their advertising by, for example, providing vivid pictures and descriptions of the production process. The Austrian ceramic tableware brand Gmundner, for example, presents their products online as “lovingly made by hand”, supported by detailed information about their products’ production process including pictures of the artisans producing the tableware with joy, passion, and love (e.g., “Apart from artistic talent, this profession requires […] a lot of love and care. One can sense this in the end product”). In this regard it is noteworthy, however, that our findings indicate that marketers of machine-made products cannot take a simple shortcut to love by merely saying their products are “made with love” (Study 2). Thus, producers of handmade products seem to have a strategic comparative advantage of marketing their products as “made with love.”

Limitations and Future Research

Because our research is, to the best of our knowledge, the first series of experiments on the handmade effect, we see our work as merely a first step towards understanding the impact of marketing a product as handmade. Some caveats apply and many questions remain for future research. First, most of our studies involved comparing handmade products to products explicitly presented as machine-made. At first sight, one might argue this comparison reduces the external
validity of our results, because more companies present their products without mentioning production mode than as machine-made. We chose to contrast the handmade with the machine-made production mode in most of the studies to safeguard internal validity. This is because contrasting the handmade production mode with not mentioning the production mode confounds the specific mode of production (i.e., by hand or machine) with the salience of production process per se. In addition, we did include a “no-mention” control condition in the first experiment (Study 1). We found that machine-made results were similar to the “no mention” condition. This might be the case because, as suggested by the open association pilot study, handmade production is naturally contrasted with machine-made production by consumers. For all these reasons, we chose to use machine-made as our control condition and omit the “no mention” control in the process-oriented studies that followed. Finally, it is noteworthy that marketing products as machine-made is not without instance. For example, already in the 1980s, Italian car maker Fiat touted its Fully Integrated Robotized Engine (FIRE). More recently, the upscale wine glass manufacturer Riedel actively promotes some of its wine glasses as handmade, but touts other wine glasses to be fully “machine-blown.” Similarly, the cigar manufacturer Mom’s prominently sells its cigars as “machine-made.”

Second, as most phenomena of practical importance, the handmade effect is almost certain to be multiply-determined. That is, several processes contribute to the effect. For example, in Study 4, we did find significant mediation of the handmade effect by authenticity (in addition to the much stronger mediation by love). Our experiments were designed to isolate the love driver from many, in our view more obvious, potential drivers such as uniqueness or quality. We chose to focus on imbued love for our initial empirical exploration of the handmade effect, because the

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4 As speculated by one reviewer, the handmade effect might even reverse in developing countries (i.e., machine-made might be viewed as a positive attribute).
love contagion process is less straightforward and intuitive than some of the other potential mediators. In addition, we feel the love process is likely to be more specific to handmade production, as many machine-made products are also authentic and machines can increasingly turn out high-quality products or can even be programmed to customize products to the extent of being unique. That is, perceptions of handmade products being made with love may prove to be more stable over time (and across situations) than perceptions of handmade products being unique or of higher quality. In sum, our goal in this initial paper was to document the existence of a positive handmade effect and to explore the significant role of love imbued in the product as one of the drivers of the effect. We focused on imbued love but fully recognize that the handmade effect is multiply-determined.

Third, documenting the existence of the handmade effect does not imply we believe the effect is universal. We find a positive handmade effect with three distinct samples of consumers in three countries (Austria, the Netherlands, and the USA), but our results in Study 2 show that the handmade effect is not omnipresent. We find no significant handmade effect when products are bought for an emotionally more distant gift recipient. Results in Studies 2 and 3 show the handmade effect can be moderated by factors that reduce the value of conveying love (i.e., by factors that affect the link between love and product attractiveness; by changing gift recipient in Study 2 and by changing the goal to convey love in Study 3).

The handmade effect should also be moderated by factors that reduce the extent to which handmade production is seen to imbue the product with love (i.e., by factors that affect the link between the handmade production mode and love). Whereas for our Western samples, “handmade” per se may be a cue to love by default, additional information may change this inference. In some situations, handmade products are unlikely to be seen as “vessels of love.” In fact, we conducted a study showing that the handmade effect on product attractiveness decreases
when the product is handmade by multiple people, each performing one step in the production process (vs. one person handcrafting the entire product). This is because such assembly-line production is perceived to be characterized less by artisanal love. We expect that several other factors may also sever the link between stated production mode and perceptions of love. For example, consumers in developing economies or even poorer customers in Western societies may not associate handmade products with love at all (and may instead associate manual production with alienation, oppression, hardship, and low quality). We expect the handmade effect to be stronger for well-to-do, Subaru-driving, organic-granola-eating academics in scenic college towns than for hardscrabble day laborers in the developing world. Even for well-to-do Western consumers, we expect that different countries-of-origin may entail different inferences about love. Handmade shoes from low-wage, emerging economies with little regard for the well-being of manual laborers should be less likely to engender perceptions of love than handmade shoes from Saskatchewan, Sweden, or Spain; indeed, interviews we conducted with managers of apparel stores resonate well with this conjecture. Thus, we believe that handmade production in some situations may do more to remind consumers of the alienating work processes all too familiar from stories about the industrial revolution or from news items about sweatshops from Bangladesh to Manhattan, than to conjure up images of artisanal love Consistent with this reasoning, a further study (not reported here due to space constraints) shows that the handmade effect is contingent on the perceived working motivation of handmade producers (intrinsic vs. extrinsic motivation); specifically, we found no significant handmade advantage when handmade producers were primarily motivated by economic incentives.

Moreover, the handmade effect should be moderated by factors that affect the attractiveness of handmade products through other mediators than imbued love. For example, handmade production by large corporations may not only reduce perceptions of the product containing love,
but might also lack the perceived authenticity and trustworthiness common to smaller producers and their products. Finally, in our experiments participants were not exposed and introduced to the specific persons that handcrafted the products; it seems plausible that familiarizing consumers with the producer might further strengthen the handmade effect. Thus, if consumers are made familiar with the artisan, for example, through an advertisement displaying the artisan (at work, as done, for example, by the fashion brand Vans), they might be able to better envision the love put into the product, which might in turn increase perceived product attractiveness.

**Conclusion**

In light of rapid technological advancements in IT and manufacturing, which are increasing the prevalence of a fully machine-made production mode at an unprecedented pace (Brynjolfsson and McAfee 2011), this research suggests that human, hand-based labor will not disappear (and will continue to play an important role in the labor market). Our results show that consumers have a special appreciation for the human factor in production; handmade products are perceived to be made with love by the craftsperson and even to contain love, and this perception is a significant contributor to the positive handmade effect on product attractiveness. Put differently, efficiency and cost gains proposed by classical economists dating back to Adam Smith and industrialists such as Henry Ford do not necessarily outweigh the value of the human factor in production – as opposed to humans, machines just do not produce love, or as reflected by the slogan of the Italian car manufacturer Alfa Romeo “senza cuore saremmo solo macchine.”
REFERENCES


FIGURE 1: Mean purchase intention for handmade vs. machine-made gifts as a function of the relationship to the gift recipient (Study 2)
FIGURE 2: Consumer demand (WTP) for a handmade vs. machine-made bar of soap 

(Study 4)