## **Decoding the Opening Process**

Yixia Sun, Yuansi Hou, and Robert S. Wyer, Jr.

Yixia Sun and Yuansi Hou are Ph.D candidates, CUHK Business School, The Chinese University of Hong Kong, Shatin, Hong Kong.

Robert S. Wyer, Jr. is Professor of Marketing, CUHK Business School, The Chinese University of Hong Kong, Shatin, Hong Kong.

Correspondence concerning this article should be addressed to Yixia Sun, Department of Marketing, The Chinese University of Hong Kong, Hong Kong. Phone: (852) 39437808. E-mail: yixia@baf.cuhk.edu.hk

#### Abstract

Five experiments confirmed the hypothesis that observing a box being opened is intrinsically rewarding and that the positive feelings it elicits can increase evaluations of its contents independently of the nature of these contents. Even though a product is already familiar, seeing it in a box being opened can elicit enjoyment and increase evaluations of it. This is true even when the cover of the box is transparent (and so its contents can be easily seen when the box is closed). Moreover, seeing a box being opened increases evaluations of the box even when the box is empty. When the contents of a box are unknown, opening the box can elicit surprise, polarizing evaluations of the product contained in it. When the product is already familiar, however, the opening process influences product evaluations through its impact on enjoyment.

Keywords: the opening process, surprise, enjoyment

### **Decoding the Opening Process**

When we do not know what is in a package, the discovery of its contents can often be a pleasant surprise. Birthday and Christmas presents are obvious examples. In many instances, however, people already know what is in the package we receive and opening it does not reveal anything new. In this case, does the mere process of opening it, or only *seeing* it being opened, influence reactions to its contents? On Yahoo Answers, a lady described her experience of being proposed like this "*The day I finally got my ring [which I had helped to choose] …my husband brought it home in its box and popped the box open… Even though I had already seen the ring, it made me gasp. There's something special about that moment when the box opens and reveals a ring. It can't be explained."* (Karin, 2011). Our research attempts to provide this explanation.

First, when people do not know what is contained in the box, revealing its contents can be surprising. Whether the surprise is pleasant or unpleasant depends on the valence of the object that is revealed (Derbaix & Vanhamme, 2003). (For example, finding a cute puppy in the box could elicit pleasant surprise whereas finding a cockroach is likely to be unpleasant.) Surprise usually occurs when the object in the box is unexpected, however (Vanhamme, 2000). Consequently, it cannot account for the lady's reactions in the preceding example. Rather, her reactions might have resulted from a second source of affect, namely, the opening process itself.

Exploratory behavior is intrinsically rewarding and can elicit positive feelings (Brown, 1953; Butler, 1957; Harlow, 1954; Hebb, 1958). Opening a package may exemplify this behavior and has a positive effect independently of the revealed outcome. To this extent, it could elicit positive feelings of enjoyment even when its contents are already familiar. Moreover, these feelings could occur even when the contents are unpleasant.

3

Although people may experience positive feelings when they open a box themselves, these reactions could also occur vicariously when this behavior is observed (see Waytz & Mitchell, 2011). In our studies, participants only observed a box being opened and did not open it themselves. This allowed us to control for other extraneous factors that might exert an influence on evaluations (e.g., effort, or the impact of merely touching a product on its evaluation; see Peck & Shu, 2009). We hypothesized that observing a box being opened elicits positive affect and that this affect, once experienced, influences evaluations of both the package and its contents. This could result from evaluative conditioning (Baeyens, Vansteenwegen, Hermans, & Eelen, 2001; Galli & Gorn, 2011; Sweldens, Osselaer, & Janiszewski, 2010). It could also result from people's misattribution of the affect elicited by the opening process to their feelings about the product, and the consequent use of these feelings as a basis for evaluating it (Schwarz & Clore, 1983, 1988).

In combination, the five studies we report show that (a) seeing a product in a box being opened (rather than already open) increases feelings that the experience is enjoyable and these feelings generalize to the product; (b) when the product contained in a box is unfamiliar, seeing the box being opened can induce surprise and polarize evaluations of the product; however, (c) when the product is familiar, the enjoyment experienced by seeing it in a box being opened has a positive effect on the product's evaluation even when the product is intrinsically undesirable and regardless of the quality of the box itself.

#### **Experiment 1**

Experiment 1 provided preliminary evidence that observing a box being opened increases participants' evaluations of the product contained in it even when they are already familiar with the product.

### Method

Forty Hong Kong undergraduates (25 females) participated for course credit. Participants, run individually, were told that a travel agency would like to obtain feedback about a newly designed commemorative coin. They were first shown a picture of the coin so that all participants would be familiar with its appearance. To avoid the possibility that participants would perceive that product might be "contaminated" by having previously been handled (Argo, Dahl, & Morales, 2006), the experimenter indicated that she had just received the real product from the manufacturer and put on gloves, implying that because the product was completely new, she wanted to keep it clean. She then took out a box with an opaque cover (see Appendix, Figure 1). The box was either open already or was opened by the experimenter. Participants then reported their liking for the coin along a scale from -5 (not at all) to 5 (very much) and indicated whether they would like to buy the coin along a scale from 1 (not at all) to 7 (very much). Finally, they estimated how surprised they were when they saw the coin in the box and reported their enjoyment of the entire experience along scales from 1 (not at all) to 7 (very much).

#### <INSERT FIGURE 1 HERE>

#### Results

Participants' liking for the target and their willingness to purchase it were correlated .66 (p < .001) and were averaged after converting them to standard scores. Participants liked the target more when they saw the box being opened (n = 19, M = 0.43, SD = 0.59) than when they saw it

already opened (n = 21, M = -0.32, SD = 0.99), F(1, 38) = 8.34, p < .01,  $\eta_p^2 = .18$ . Furthermore, they reported being more surprised by seeing the coin in a box being opened (M = 3.74, SD = 1.91) than seeing it in a box that was already open (M = 2.67, SD = 1.43), F(1, 38) = 4.08, p = .05,  $\eta_p^2 = .10$ , and enjoyed the experiment more in the former case (M = 5.05, SD = 0.91) than in the latter (M = 4.00, SD = 1.52), F(1, 38) = 6.89, p < .05,  $\eta_p^2 = .15$ .

The surprise that participants reported was correlated .38 with enjoyment (p < .05). Bootstrapping (Hayes, 2013, Model 4) indicated that both surprise and enjoyment mediated the effect of opening conditions on target evaluations when they were included into the model simultaneously (based on 5000 samples, 95% CI ranged from .03 to .59 in the case of surprise, and from .01 to .49 in the case of enjoyment), indicating that the influence of each factor persisted after controlling for the other.

## **Experiment 2**

In Experiment 1, the effect of surprise elicited by seeing the box being opened and the effect of enjoyment were positively associated. This might suggest that enjoyment is confused with pleasant surprise when the product is positively valenced. To provide clearer evidence that enjoyment and surprise were independent, we presented participants in Experiment 2 with a negatively valenced stimulus rather than a positively valenced one. Many people are afraid of spiders, and unexpectedly encountering one, or even a picture of it, is likely to elicit negative reactions in these persons. Moreover, these reactions are likely to be particularly intense of exposure to the stimulus that is unexpected. Therefore, if unexpectedly encountering the picture of a spider in a box is an unpleasant surprise, it is likely to increase the intensity of people's negative reactions to the stimulus and to decrease their evaluations of it. If, on the other hand,

people are already aware of the box's negative contents, the additional increment of surprise elicited by seeing these contents in a box being opened should be relatively minimal and the positive effect of enjoyment should be more apparent.

## Method

A pretest was conducted in which participants evaluated eight different postage stamps. A stamp portraying a spider was evaluated -2.65 along a scale from -5 (extremely negative) to 5 (extremely positive). Therefore, this stamp (see Figure 2) was selected as a stimulus.

Participants were recruited on Amazon Mechanical Turk. They were restricted to 184 participants (87 females; mean age = 33) who indicated that their fear of spiders was equal to or greater than 4.0 along a scale from 1 (not afraid at all) to 7 (very much afraid). (An additional 178 participants who were not afraid were excluded from consideration.) In *unfamiliar* conditions, participants were only told to evaluate a product, thus they had no idea what the product was. In *familiar* conditions, they were told that they would evaluate a spider stamp and the picture of the stamp was presented. Then, all participants were shown a 7-second video of an opaque box either being opened or open already. (In the former case, the opening process took 2 seconds and the box remained open for 5 more seconds.)

#### <INSERT FIGURE 2 HERE>

After watching the video, participants estimated their liking for the spider stamp and their willingness to have it on 7-point scales. Then, they indicated how negative the stamp was and the extent to which the stamp surprised them when watching the video along scales from 1 (not at all) to 7 (very much). Finally, they reported their feelings of enjoyment while watching the video along a scale from 1 (not enjoyable) to 9 (enjoyable).

7

## Results

When the spider stamp was unfamiliar, we expected that seeing it in a box being opened would spontaneously elicit surprise and would polarize their negative reaction to it, decreasing their evaluation of the stamp. When participants had seen the spider stamp before, however, we expected that the additional surprise elicited by seeing it in a box being opened would be relatively minimal and was likely to be overridden by the positive effects of enjoyment. Results reported in Table 1 confirm these expectations. As mentioned above, participants who indicated their fear of spiders less than 4 were eliminated prior to analyses.

### < INSERT TABLE 1 HERE>

**Product evaluations**. Participants' liking for the stamp, their willingness to have it and their judgments of the stamp's negativity (after reverse scoring) were highly intercorrelated ( $\alpha$  = .83) and were averaged to provide a single index of product evaluations. Analyses of this index revealed significant interaction of familiarity and opening conditions, *F*(1, 180) = 16.57, *p* < .001,  $\eta_p^2 = .08$ , of the form expected. This interaction is shown in Table 1. When participants had already seen the stamp, they evaluated it more favorably if they saw it in a box being opened than if they saw it in a box that was open already (2.89 vs. 2.06, respectively; *F*(1, 180) = 9.83, *p* < .01,  $\eta_p^2 = .05$ ). When they did not know what was in the box, however, participants evaluated it *less* favorably in the former case than in the latter (2.11 vs. 2.92, respectively), *F*(1, 180) = 7.12, *p* < .01,  $\eta_p^2 = .04$ .

**Enjoyment and surprise**. The interactive effects of familiarity and opening condition on enjoyment were similar to their effects on product evaluations, F(1, 180) = 6.28, p < .05,  $\eta_p^2 = .03$ . When the stamp was familiar, participants reported higher enjoyment when they saw the

box being opened than when the box was open already (3.24 vs. 2.49, respectively), F(1, 180) = 3.85, p = .05,  $\eta_p^2 = .02$ . When the stamp was unfamiliar, however, the opposite pattern was found, (2.47 vs. 3.19, respectively), F(1, 180) = 2.62, p = .10,  $\eta_p^2 = .01$ .

Ratings of surprise were generally higher when the stamp was unfamiliar than when it was familiar (5.73 vs. 4.07, respectively), F(1, 180) = 46.09, p < .001,  $\eta_p^2 = .20$ . However, the effect of opening conditions on surprise was only evident when the stamp was unfamiliar. In this condition, seeing the box being opened elicited more surprise than seeing the already opened box (6.31 vs. 5.26, respectively), F(1, 180) = 7.62, p < .01,  $\eta_p^2 = .04$ . When the stamp was familiar, however, no effects of opening were apparent (4.03 vs. 4.11, respectively), F < 1. The interaction of familiarity and opening conditions was significant F(1, 180) = 4.96, p < .05,  $\eta_p^2 = .03$ .

The failure for opening the box to increase surprise when the product was familiar did not replicate the findings in Experiment 1. When the product is unfavorable, the surprise elicited by seeing it initially is extreme and so the additional increment elicited by seeing it in the box being opened may be less apparent. Be that as it may, the failure for surprise to have an effect in these conditions strengthens our assumption that the effects on product evaluations that we observed in these conditions were due to enjoyment alone.

Participants' ratings of enjoyment and surprise were negatively correlated when the stamp was unfamiliar (r = -.33; p < .01) but not when the stamp was familiar (r = -.08; p > .40). When the product was unfamiliar, a sequential mediation analysis was conducted (Model 6; see Hayes, 2013) to evaluate the causal sequence "opening conditions  $\rightarrow$  surprise  $\rightarrow$  enjoyment  $\rightarrow$  product evaluations." This sequence was confirmed (based on 5000 samples, 95% CI: from .06 to .70), implying that the surprise elicited by seeing a box opened polarized the evaluation of the product

in these conditions. When the stamp was familiar, the effects of opening conditions were analyzed including both surprise and enjoyment as mediators (Model 4; see Hayes, 2013). This analysis indicated that enjoyment had an indirect effect on product evaluations (based on 5000 samples, 95% CI: from -.83 to -.03) but surprise did not (95% CI: from -.06 to .02). Thus, the effect of observing the box being opened when the product was familiar was due to the enjoyment it elicited and not to surprise.

## **Experiment 3**

In Experiment 3, we not only familiarized participants with the product before they saw it in the box, but also presented it in a box with a transparent cover so the actual product could be easily seen even when the box was closed. Thus, opening the box did not reveal its contents to any appreciable extent and so the surprise it elicited should be minimal. We nevertheless expected that the mere act of opening the box would elicit enjoyment and that this positive feeling would generalize to the product.

## Method

Thirty-eight undergraduates (23 female) participated for course credit. Each participant, run individually, was first shown a picture of a tie clip. In contrast to earlier experiments in which the box was opaque, participants were shown the tie clip in a blue box with a transparent glass cover (Figure 3 in Appendix). Some participants (n = 19) saw the box open already and others (n = 19) saw it opened by the experimenter under conditions similar to those employed in Experiment 1. After seeing the tie clip, participants evaluated the product, indicated their willingness to purchase it, and reported their surprise and enjoyment of the experiment along scales from 1 to 7.

## Results

Participants' liking for the product and their willingness to buy it were averaged (r = .73, p < .001). These evaluations were more favorable when participants had seen the box being opened (M = 4.11, SD = 1.26) than when it was already opened (M = 3.11, SD = 1.49), F(1, 36) = 4.99, p < .05,  $\eta_p^2 = .12$ .

Overall enjoyment of the experiment was also greater when participants had seen the box being opened (M = 4.42, SD = 1.26) than when the box was open already (M = 3.53, SD = 1.54), F(1, 36) = 3.84, p < .06,  $\eta_p^2 = .10$ . Bootstrapping indicated that enjoyment mediated the impact of experimental conditions on evaluations of the tie clip (95% CI: 0.02 to 1.06)

As we expected, however, seeing the product in a transparent box eliminated any surprise that might otherwise be elicited by opening the box. Participants' estimates of their surprise did not depend on whether they saw the box being opened or not (3.63 in both cases, F < 1). No correlation of enjoyment and surprise was found (r = .12, p > .47). Thus, seeing a box being opened elicited positive affect independently of the surprise it elicited.

## **Experiment 4**

If the mere action of opening a box can elicit positive feelings independently of the revealed outcome, its effect should be evident even if the box is empty. Experiment 4 examined this possibility. Thirty-eight Hong Kong undergraduates (25 female) participated for course credit. Each participant was told to evaluate a box (Figure 4 in Appendix). Then they saw a video showing either a transparent empty box being opened or the box already opened. Finally, they indicated their liking for the box along 7-point scales, and reported how surprised they were when seeing the box along 9-point scales and their enjoyment of the survey along 7-point scale.

#### < INSERT FIGURE 4 HERE>

Participants evaluated the box more favorably when they had seen it being opened (n = 20, M = 4.40, SD = 1.35) than when it was already opened (n = 18, M = 3.39, SD = 1.29), F(1, 36) = 5.53, p < .05,  $\eta_p^2 = .13$ , and reported greater enjoyment in the former case (M = 4.60, SD = 1.39) than in the latter (M = 3.67, SD = 1.46), F(1, 36) = 4.08, p = .05,  $\eta_p^2 = .10$ . The positive effect of opening the box was mediated by reported enjoyment (95% CI: -1.09 to -.06). Although enjoyment and surprise was correlated (r = .33, p = .044), participants' surprise did not depend on whether they saw the box being opened (M = 3.30, SD = 2.03) or not (M = 2.94, SD = 1.67), F < 1.

### **Experiment 5**

To the extent that the opening process per se is intrinsically rewarding, the magnitude of the reward might depend on the quality of the box. Experiment 5 examined this possibility.

## Method

One hundred twenty-eight participants (58 female; mean age = 36) participated in an online study on Amazon Mechanical Turk. Participants were told that an online company selling accessories was pretesting a new product. All participants were first shown the product (a necklace) in a *closed* box. Thus, participants in all conditions saw the box in both its closed and its open state, thereby controlling for the amount of exposure to the box. In the *elegant box* condition, we used the same (transparent) box employed in Experiment 3. In the *standard box* 

condition, a fully transparent plastic box was used (Figure 5 in Appendix). After being initially exposed to the box, participants were shown a 7-second video in which the box was either gradually opened or was open already.

#### < INSERT FIGURE 5 HERE>

After watching the video, participants evaluated the necklace along four 7-point scales (liking, appeal, attractiveness and desirability,  $\alpha = .95$ ). In addition, they evaluated the box along five 7-point scales pertaining to liking, elegance, attractiveness, appeal and desirability ( $\alpha = .96$ ). Then, participants estimated the extent to which the necklace absorbed their attention along a similar scale.

Finally, participants reported their feelings along a 9-point scale pertaining to surprise and scales pertaining to enjoyment (not enjoyable/enjoyable, sad/happy, and bad/good,  $\alpha = .93$ ).

## Results

Because a necklace was a feminine product, gender was included as a covariate in all analyses. Data relevant to these analyses are summarized in Table 2. As shown in the first section of the table, participants evaluated the box more favorably when it was elegant (M = 4.60) than when it was standard (M = 3.34); F(1, 123) = 24.36, p < .001,  $\eta_p^2 = .17$ , and more favorably when they saw the box being opened than when they saw it already open (4.16 vs. 3.78; F(1, 123) = 2.16, p > .10). This difference was not reliable and could result from the fact that participants paid more attention to the necklace than to the box.

< INSERT TABLE 2 HERE>

**Product evaluations.** Participants liked the necklace more when they saw the box being opened (M = 4.61) than when the box was open already (M = 3.95), F(1, 123) = 5.98, p < .05,  $\eta_p^2 = .05$ . No effects involving box quality were reliable, however (p > .10).

**Enjoyment.** Participants reported more positive feelings when they had viewed the box being opened (M = 6.54) than when the box was already open (M = 5.72), F(1, 123) = 8.62, p < .01,  $\eta_p^2 = .07$ . However, neither the main effect of box quality nor its interaction with opening conditions was significant (Fs < 1). Bootstrapping analysis revealed a significant indirect influence of enjoyment on the impact of the opening process on product evaluations (based on 5000 samples, 95% CI: from 0.15 to 0.74).

Attention. Analyses of participants' attention to the necklace indicated that the standard box attracted more attention (M = 4.89) than the elegant one (M = 3.94), F(1, 123) = 10.62, p = .001,  $\eta_p^2 = .08$ . However, this attention did not depend on whether participants saw the box being opened or not (4.56 vs. 4.28, respectively), F < 1.

**Surprise**. Participants' surprise did not significantly depend on whether they saw the box being opened (M = 4.21) or already open (M = 3.69), F(1, 123) = 1.73, p = .19. Nor was surprise dependent on the box's quality (F < 1). No correlation was found between enjoyment and surprise (r = .10, p > .24). This reinforces the assumption that seeing the product in a transparent box eliminated any surprise that opening it otherwise elicited.

## **General Discussion**

Five studies provide evidence that when people are already familiar with a product, they become more attracted to it when they observe the box containing it being opened than when they encounter it in a box that is open already. Moreover, the effect does not depend on the nature of the box (whether it is elegant or plain, or whether its cover is opaque or transparent).

Two sources of affect appear to account for these findings. First, the revelation of the box's content elicits surprise when people do not know what was in the box, and the arousal associated with this surprise can increase the extremity of their reactions to the product. Thus, Experiment 2 indicated that when the contents of the box were completely unfamiliar, the surprise elicited by revealing it polarized product evaluations. When the contents of a box are familiar, however, surprise does not play a role, as Experiment 2 also indicated. In this case, the opening process per se elicits enjoyment and this has a positive effect on evaluations of the box's contents. Although our studies prevented a direct comparison of the effects observed when the box's contents were favorable vs. unfavorable, the similar results observed in Experiments 1 and 2 suggest that the effects were evident in both cases.

Our study was restricted in some aspects. For example, individuals are unlikely to use the affect they are experiencing to evaluate stimuli that are usually judged on the basis of utilitarian criteria (Yeung & Wyer, 2004; see also Adaval, 2001; Pham, 1998). This suggests that if the object contained in a box is typically judged on the basis of its functional utility rather than its aesthetic appeal, the affect elicited by seeing the box being opened would have less impact on their judgments. A second possible qualification concerns the reason for the box being opened. In our research, the purpose of opening the box was to reveal its contents. However, people sometimes observe a box being opened incidentally, for purposes other than revealing its contents. The effects we observed should theoretically generalize to such conditions.

The effects of revelation and action may be as or more pronounced under conditions in which individuals open a package themselves. In this regard, it is conceivable that individuals who see a box being opened imagine themselves opening it and this imagining leads them to experience feelings similar to those that they might experience if they were personally involved. However, the duration of the opening process was only 2 seconds. It therefore seems likely that participants' evaluations of the product reflected spontaneous responses that were not mediated by conscious inferences of their attitudes from their behavior.

The conditions we constructed in Experiment 1 and 3, in which participants were individually shown a product by an experimenter, are analogous to many shopping situations in which a salesperson reveals a product to a customer that had not been on display. Moreover, the videotaped presentation of boxes being opened in Experiments 2 and 5 resembles commercials and Internet advertisements in which products are often revealed. The possibility that how the product is presented can itself have an impact in these conditions may be worth consideration.

## Acknowledgements

The preparation of this manuscript was supported by Grants GR0F 640011, GRF 452813 and GRF 493113 from the Research Grants Council of Hong Kong.

### References

- Adaval, R. (2001). Sometimes it just feels right: The differential weighting of affect-consistent and affect-inconsistent product information. *Journal of Consumer Research*, 28, 1–17.
- Argo, J. J., Dahl, D. W., & Morales, A. C. (2006). Consumer contamination: How consumers react to products touched by others. *Journal of Marketing*, 70, 81–94.
- Baeyens, F., Vansteenwegen, D., Hermans, D., & Eelen, P. (2001). Chilled white wine, when all of a sudden the doorbell rings: Mere reference and evaluation versus expectancy and preparation in human Pavlovian learning. In F. Columbus (Ed.), *Advances in psychology research* (Vol. 4, pp. 241–277). New York: NOVA Science Publishers.
- Brown, J. S. (1953). Problems presented by the concept of acquired drives. In H. F. Harlow & L.J. Postman (Eds.), *Current theory and research in motivation* (pp. 49–54). Lincoln, NE: University of Nebraska Press.
- Butler, R. A. (1957). The effect of deprivation of visual incentives on visual exploration motivation in monkeys. *Journal of Comparative and Physiological Psychology*, 48, 247– 249.
- Derbaix, C., & Vanhamme, J. (2003). Inducing word-of-mouth by eliciting surprise—a pilot investigation. *Journal of Economic Psychology*, 24, 99–116.
- Galli, M., & Gorn, G. (2011). Unconscious transfer of meaning to brands. *Journal of Consumer Psychology*, 21, 215-225.
- Harlow, H. F. (1954). Learning theory, personality theory, and clinical research. In *Kentucky Symposium* (Vol. 9, pp. 36–53). Oxford: Wiley.

- Hayes, A. F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis. New York: Guilford Press.
- Hebb, D. O. (1958). The motivating effects of exteroceptive stimulation. *American Psychologist*, *13*, 109–113.
- Karin (2011). Answers for a question asked on Yahoo Answers. Retrieved from http://answers.yahoo.com/question/index?qid=20120207100455AAkIJM3
- Peck, J., & Shu, S. B. (2009). The effect of mere touch on perceived ownership. *Journal of Consumer Research*, *36*(*3*), 434–447.
- Pham, M. T. (1998). Representativeness, relevance, and the use of feelings in decision making. *Journal of Consumer Research*, 25, 144–159.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45, 513–523.
- Schwarz, N., & Clore, G. L. (1988). How do I feel about it? Informative functions of affective states. In K. Fiedler & J. Forgas (Eds.), *Affect, cognition, and social behavior* (pp. 44–62). Toronto: Hogrefe International.
- Sweldens, S., Van Osselaer, S. M., & Janiszewski, C. (2010). Evaluative conditioning procedures and the resilience of conditioned brand attitudes. *Journal of consumer Research*, 37(3), 473-489.
- Vanhamme, J. (2000). The link between surprise and satisfaction: an exploratory research on how best to measure surprise. *Journal of Marketing Management*, *16*(6), 565-582.

- Waytz, A., & Mitchell, J. P. (2011). Two mechanisms for simulating other minds dissociations between mirroring and self-projection. *Current Directions in Psychological Science*, 20(3), 197-200.
- Yeung, Y. M., & Wyer, R. S. (2004). Affect, appraisal and consumer judgment. *Journal of Consumer Research*, *31*, 412–424.

# Table 1

## Product Evaluations and Process Measures as a Function of Opening Conditions and

## Familiarity: Experiment 2.

	Familiarity	
	Unfamiliar	Familiar
Product Evaluation		
Open already	2.92 (43, 1.68)	2.06 (47, 1.08)
Opening process	2.11 (36, 0.94)	2.89 (58, 1.47)
Surprise		
Open already	5.26 (43, 1.26)	4.11 (47, 1.94)
Opening process	6.31 (36, 0.79)	4.03 (58, 2.09)
Enjoyment		
Open already	3.19 (43, 2.28)	2.49 (47, 1.68)
Opening process	2.47 (36, 1.59)	3.24 (58, 2.09)

*Note:* Liking of the product, willingness to have the stamp, and the reversed coding of negativity of the product were averaged to form a single index of product evaluation. Enjoyment was measured on a 9-point scale. Other variables were measured on a 7-point scale. The number of participants per cell and standard deviations are shown in parentheses.

# Table 2

# Product Evaluations, Box Evaluations and Process Measures as a Function of Opening

## Conditions and Box Quality: Experiment 5

	Box Quality	
	Elegant	Standard
Box Evaluation		
Open already	4.30 (33, 1.40)	3.27 (32, 1.48)
Opening process	4.90 (31, 1.18)	3.41 (32, 1.58)
Product Evaluation		
Open already	3.81 (33, 1.47)	4.09 (32, 1.49)
Opening process	4.44 (31, 1.59)	4.77 (32, 1.56)
Attention to the Necklace		
Open already	3.79 (33, 1.60)	4.78 (32, 1.68)
Opening process	4.10 (31, 1.87)	5.00 (32, 1.41)
Affect		
Open already	5.49 (33, 1.54)	5.96 (32, 1.89)
Opening process	6.54 (31, 1.48)	6.54 (32, 1.23)
Surprise		
Open already	3.61 (33, 2.09)	3.78 (32, 2.04)
Opening process	4.23 (31, 2.26)	4.19 (32, 1.91)

*Note*: Affect and surprise were rated along a 9-point scale. Others were rated along a 7-point scale. The number of participants per cell and standard deviations are shown in parentheses.

# APPENDIX



Picture of the Coin



Coin in the Box

Figure 1. Stimuli in Experiment 1.



The Spider Stamp



The Opaque Box Used in the Video

Figure 2. Stimuli in Experiment 2.





Picture of the Tie Clip

Figure 3. Stimuli in Experiment 3.

Tie Clip in the Box



Figure 4. Empty Box in Experiment 4.



Elégant Box Condition



Standard Box Condition

Figure 5. Stimuli in Experiment 5.

## **Questions in Experiment 1 and 3**

1. Please indicate to what extent you like the product. (-5 = Not at all, 5 = Very much, in Experiment 1 and 2; 1 = Not at all, 7 = Very much, in Experiment 3)

2. Please indicate to what extent you would like to buy the product. (1 = Not at all, 7 = Very much)

3. How surprised were you when you saw the product in the box? (1 = Not at all, 7 = Very much)

4. How enjoyable was the experiment? (1 = Not at all, 7 = Very much)

## **Questions in Experiment 2**

1. To what extent do you like the stamp? (1 = Not at all, 7 = Very much)

2. To what extent would you like to have the stamp? (1 = Not at all, 7 = Very much)

3. How negative do you think the stamp is? (1 = Not at all, 7 = Very much)

4. To what extent do you agree with the following sentence? (1 = Not at all, 7 = Very much)

"The stamp in the box surprised me."

5. Please rate your feelings when you saw the stamp in the video. (1 = not enjoyable, 9 = enjoyable)

#### **Questions in Experiment 4**

- 1. To what extent do you like the box? (1 = Not at all, 7 = Very much)
- 2. How surprised were you when you saw the box? (1 = Not at all, 9 = Very much)

3. Please indicate your feelings while seeing the box in the video (from 1 to 9).

1) Not surprised/Surprised.

4. How enjoyable was this survey? (1 = Not at all, 7 = Very much)

#### **Questions in Experiment 5**

1. To what extent do you like the necklace? (1 = Not at all, 7 = Very much)

2. To what extent do you agree with the following statements (1 = Not at all, 7 = Very much):

1) The necklace is appealing. 2) The necklace is desirable. 3) The necklace is attractive.

3. To what extent do you like the package (i.e., the box) of the product? (1 = Not at all, 7 = Very much)

4. To what extent do you agree with the following statements (1 = Not at all, 7 = Very much):

- 1) The box is elegant. 2) The box is appealing. 3) The box is desirable. 4) The box is attractive.
- 5. To what extent did the necklace absorb your attention? (1 = Not at all, 7 = Very much)
- 6. Please indicate your feelings while seeing the product in the video (from 1 to 9).
- 1) Not surprised/Surprised. 2) Not enjoyable/Enjoyable. 3) Sad/Happy. 4) Bad/Good.