In this article, the authors examine how consumer choice between hedonic and utilitarian goods is influenced by the nature of the decision task. Building on research on elaboration, the authors propose that the relative salience of hedonic dimensions is greater when consumers decide which of several items to give up (forfeiture choices) than when they decide which item to acquire (acquisition choices). The resulting hypothesis that a hedonic item is relatively preferred over the same utilitarian item in forfeiture choices than in acquisition choices was supported in two choice experiments. In a subsequent experiment, these findings were extended to hypothetical choices in which the acquisition and forfeiture conditions were created by manipulating initial attribute-level reference states instead of ownership. Finally, consistent with the experimental findings, a field survey showed that, relative to market prices, owners of relatively hedonic cars value their vehicles more than do owners of relatively utilitarian cars. The authors discuss theoretical implications of these reference-dependent preference asymmetries and explore consequences for marketing managers and other decision makers.

Consumer Choice Between Hedonic and Utilitarian Goods

Consumer choices are driven by utilitarian and hedonic considerations. Consumers choosing among new automobiles, for example, may care about utilitarian features (e.g., gas mileage) as well as about hedonic attributes (e.g., sporty design). Research suggests that these different considerations map onto independent components of product evaluations and attitudes and enable people to distinguish between goods according to their relative hedonic or utilitarian nature (Batra and Ahtola 1990; Mano and Oliver 1993). Broadly speaking, hedonic goods provide more experiential consumption, fun, pleasure, and excitement (designer clothes, sports cars, luxury watches, etc.), whereas utilitarian goods are primarily instrumental and functional (microwaves, minivans, personal computers, etc.; Hirschman and Holbrook 1982; Strahilevitz and Myers 1998). If consumers make choices between goods or characteristics with such different appeal, an account of consumer behavior needs to address the manner in which they make these fundamental trade-offs.

In this article we examine consumer choice between two goods, one of which is seen as superior on a hedonic dimension and the other is seen as superior on a utilitarian dimension. We compare preferences for these goods in an acquisition condition, in which the consumer chooses which of the two to acquire, and in a forfeiture condition, in which the consumer chooses which of the same two items to give up. On the basis of the literature on the effect of elaboration on message evaluation (e.g., Tybout and Artz 1994), we propose that greater spontaneous elaboration in forfeiture choices increases the impact of hedonic aspects in overall evaluation. As a result, relative preferences for hedonic as compared with the same utilitarian goods will be stronger in forfeiture than in acquisition choices. Consistent with our underlying theory, we show that the predicted asymmetry can be attenuated using a thought-listing task that suppresses the differential elaboration on the hedonic and utilitarian dimensions.

We further propose that even in the absence of actual possession a choice can be framed as a forfeiture or as an acquisition decision on the basis of the attribute levels that characterize a reference option. Consider, for example, someone who is debating between two apartments. One has
a nicer view (a relatively hedonic feature), but the other provides a shorter commute to work (a relatively utilitarian feature). If the person’s current apartment has a nice view and a short commute, the choice will be viewed as a forfeiture decision—a trade-off between a loss of quality of view and a loss of commuting convenience. In contrast, if the current apartment has a poor view and a long commute, the choice appears as an acquisition decision—a trade-off between a gain in quality of view and a gain in commuting convenience. We propose an increase in the relative preference for the apartment that is superior on the hedonic dimension when the decision is viewed as forfeiting a benefit rather than acquiring a benefit. We show that this asymmetry in preferences due to the manipulation of the reference option can also be expressed in terms of differential loss aversion for hedonic and utilitarian attributes (see Tversky and Kahneman 1991).

The remainder of the article is organized as follows. A brief review of prior research relevant to reference effects and the role of elaboration in decision making leads to our prediction of asymmetric preferences for hedonic and utilitarian products in forfeiture and acquisition choices. Next, we test this prediction in three experiments involving real and hypothetical choices. As is illustrated in the apartment example, we use simple manipulations that determine whether the hedonic–utilitarian trade-offs involve forfeiting or acquiring benefits. We then illustrate marketplace implications of the experimental results in a field survey with used car data. We conclude with a discussion of the theoretical and managerial implications of our findings for pricing, promotion, and product modification strategies, which suggest that relative market shares for hedonic as compared with utilitarian products may depend on the frame of reference used to evaluate these products.

**PREFERENCE FOR HEDONIC AND UTILITARIAN GOODS IN ACQUISITION VERSUS FORFEITURE DECISIONS**

Although the consumption of many goods involves both dimensions to varying degrees (Batra and Ahtola 1990), there is little doubt that consumers characterize some products as primarily hedonic and others as primarily utilitarian. We define hedonic goods as ones whose consumption is primarily characterized by an affective and sensory experience of aesthetic or sensual pleasure, fantasy, and fun (Hirschman and Holbrook 1982). Utilitarian goods are ones whose consumption is more cognitively driven, instrumental, and goal oriented and accomplishes a functional or practical task (Strahilevitz and Myers 1998). Similar to these findings on perceived product characteristics, recent work by Bazerman, Tenbrunsel, and Wade-Benzoni (1998) suggests that we can distinguish between affective preferences ("wants") and cognitive or reasoned preferences ("shoulds") that underlie consumer choice (see Shiv and Fedorikhin 2000; Wertenbroch 1998).1 The want/should distinction is broadly consistent with the distinction between hedonic and utilitarian goods—items that are high on hedonic value are likely to be subject to want preferences, and items that are high on utilitarian value are likely to be subject to should preferences. What has not been examined previously, however, is whether evaluations of hedonic and utilitarian dimensions and consequently the trade-offs between them are systematically affected by the choice task.

Our focus on differences between acquisition and forfeiture choices is motivated by the research on loss aversion that demonstrates an asymmetry in evaluations depending on the direction of the proposed trade, that is, whether a good is being acquired or forfeited relative to the consumer’s present state (Kahneman, Knetsch, and Thaler 1990; Tversky and Kahneman 1991). The conclusion from this body of work is that an item that is to be traded is generally valued more when it is part of one’s endowment than when it is not. However, to the extent that both a hedonic and a utilitarian item are valued more when they are forfeited than when they are acquired, the concept of loss aversion by itself does not provide any insight into relative assessments. Because acquisition and forfeiture choices potentially involve different decision processes, we rely on the compatibility principle that suggests that the evaluation of stimulus components may depend on the particular evaluation task, affecting the decision maker’s relative preferences among the options (Shafir 1993; Tversky, Sattath, and Slovic 1988).

Previous research suggests why trade-offs between hedonic and utilitarian dimensions depend on the task. For example, a choice (as opposed to rating) task generally favors the option that is higher on the utilitarian dimension. Tversky and Griffin (1991; Shafir, Simonson, and Tversky 1993) propose that decision makers search for reasons and arguments to justify their choices. Similarly, Tversky, Sattath, and Slovic (1988) show that alternatives that provide decision makers with compelling and justifiable arguments are more likely to be preferred in choice tasks. In line with this view, Böhm and Pfister (1996) show that contexts that foster justification enhance preferences for utilitarian features. Recently, Bazerman, Tenbrunsel, and Wade-Benzoni (1998) have suggested that choice forces decision makers to focus on should preferences so that they are more likely to favor more utilitarian options. In summary, choice tasks enhance the relative salience of utilitarian consequences in overall evaluation in both acquisition and forfeiture.

Yet because acquisition and forfeiture choices represent different choice tasks, the evaluation of each stimulus will also depend on differences in how consumers process these tasks. We propose that forfeiture choices stimulate more spontaneous elaboration than do acquisition choices, and we suggest two reasons for this differential elaboration. First, it is likely that the more time consumers have to examine and interact with the object in the forfeiture condition, the more they will tend to elaborate on the object’s potential benefits (see Strahilevitz and Loewenstein 1998). Yet, although the extent to which consumers engage in elaboration depends on the time or resources available, it is unlikely to be the sole cause of differential elaboration. A second argument for greater elaboration in the forfeiture condition builds on the literature on counterfactual thinking. Counterfactuals are mental representations of alternative realities compared with those actually obtained. Research distinguishes between comparisons of actual outcomes with more preferred alternatives (i.e., upward counterfactuals) and comparisons with

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1Wertenbroch (1998) distinguishes between “vice” and “virtue” goods, providing a formal conceptualization of goods that are subject to impulsive preferences.
less preferred alternatives (i.e., downward counterfactuals) and suggests that upward counterfactuals are spontaneously generated more frequently than downward counterfactuals (Roese and Olson 1997). Recent research has extended these ideas to prefactual thinking, that is, the imagination of alternative possible outcomes prior to choice (Sanna 1996). These findings suggest that consumers are more likely to elaborate spontaneously on alternative future outcomes when they have to forfeit an item (i.e., an upward prefactual) than when they acquire an item (i.e., a downward prefactual; see also Carmon and Ariely 2000). For example, someone who has so far enjoyed a nice view and a short commute to work from his or her apartment but now has to forgo one of these two features in deciding between two new apartments is more likely to imagine what it is like not to have the view and the commute and contrast this with the old apartment than someone who has not possessed these features in the past and is about to acquire one of them. In summary, we propose greater elaboration in forfeiture choices.

We also propose that the presence of such differential spontaneous elaboration in the forfeiture choice condition enhances the relative valuation of hedonic attributes. This is based on two arguments. First, a well-documented finding in the literature is that elaboration on a positive stimulus message can enhance the favorableness of judgment (Tobin and Artz 1994). Thus, imagining the use of a superior, positively valued item should increase its attractiveness (see Shiv and Huber 1999; Strahilevitz and Loewenstein 1998). In particular, elaboration increases the influence of more easily imaginable attributes on product evaluations, making them more salient (Keller and McGill 1994; Sherman et al. 1985; Shiv and Huber 1999). To the extent that hedonic attributes are more sensory and imagery-evoking (MacInnis and Price 1987), the relative attractiveness of an item that is superior on the hedonic dimension should thus be enhanced. Second, upward prefactual thinking induces negative emotions, because one is about to be worse off than before (Roese 1997; Sanna 1999). To the extent that forfeiture choices spontaneously trigger upward comparisons that highlight (negative) affective consequences, respondents may be motivated to minimize the anticipated negative emotions by retaining the more hedonic good. Figure 1 summarizes the proposed process, by which differential elaboration influences the relative salience of hedonic and utilitarian attributes.

This leads to the following hypothesis about choices between hedonic and utilitarian goods. Consider consumers who may have to choose one of two options neither of which they currently own; alternatively, consider consumers who may have to forfeit one of two options, both of which they currently own. Although the two decisions are logically equivalent (i.e., the choice sets are identical), we predict that hedonic attributes will be weighed more heavily in relative terms when consumers are deciding which one of two options to give up as opposed to which one of two options to acquire. We now test this hypothesis in three experiments and a field survey. The first two experiments show how relative preferences for hedonic and utilitarian goods can

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Figure 1

DIFFERENTIAL ELABORATION IN ACQUISITION AND FORFEITURE CHOICES

<table>
<thead>
<tr>
<th>DECISION TASK</th>
<th>ACQUISITION CHOICE</th>
<th>FORFEITURE CHOICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less elapsed time till task + Spontaneous prefactuals less likely [\rightarrow] Less spontaneous elaboration</td>
<td>More elapsed time till task + Spontaneous prefactuals more likely [\rightarrow] More spontaneous elaboration</td>
</tr>
<tr>
<td></td>
<td>Relative salience of and preference for <strong>utilitarian</strong> features</td>
<td>Relative salience of and preference for <strong>hedonic</strong> features</td>
</tr>
</tbody>
</table>

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2One reason for this asymmetry in counterfactual thinking is that the negative affect associated with worse outcomes is more likely to trigger the imagination of (better) alternatives to reality (Kahneman and Miller 1986; Roese 1997). A second, adaptive reason is that people who experience negative or unpleasant outcomes are more likely to focus on actions that could have been taken to avoid these outcomes (Lewin 1935; Roese 1997).
change as a result of whether subjects choose which of them to acquire or which of them to forfeit. Experiment 2 also involves examining the role of elaboration in the relative assessment of hedonic and utilitarian goods. Experiment 3 shows that our predictions for ownership-dependent acquisition and forfeiture choices also apply to reference dependence in the absence of actual possession. Finally, the field survey shows that, relative to market prices, owners of relatively hedonic cars value their vehicles more than do owners of relatively utilitarian cars.

**EXPERIMENT 1: FORFEITURE VERSUS ACQUISITION CHOICE BETWEEN HEDONIC AND UTILITARIAN GOODS**

**Method**

Fifty-one undergraduate and graduate students at a private Midwestern university were recruited for this experiment with flyers posted around the campus. The stimuli were two gift certificates with $7 face values, one for an audio tape (or as partial payment for a compact disc [CD]) of the subjects' choice at a nearby local record store, the other for a 10-pack of brand-name computer disks at the nearby university book store. These stores were chosen to equalize transaction costs.

The between-subjects experimental design consisted of an acquisition condition and a forfeiture condition. Subjects were randomly assigned to one of the two conditions. The dependent variable was subjects' choices between the gift certificates. Subjects in both conditions were shown the two certificates when they entered the laboratory. In the acquisition condition, they were told that they would first need to fill out a series of questionnaires and then could choose one of the certificates as compensation. In contrast, subjects in the forfeiture condition were told at the outset that they could keep both certificates as compensation. When they had completed the (unrelated) questionnaires, the experimenter asked subjects in the acquisition condition to choose one of the certificates. She informed subjects in the forfeiture condition that there had been a procedural error when she had given away both gift certificates and therefore asked them to return one certificate. After recording subjects' choices, the experimenter debriefed them about the purpose of the experiment and gave them back the gift certificate that they had just returned. Thus, subjects in the acquisition condition received one $7 certificate, whereas subjects in the forfeiture condition ultimately received a total of $14 worth of certificates.

**Results and Discussion**

Pretest. We chose the two gift certificates as stimuli on the basis of the results of two pretests. In the first pretest, which we adopted from Straehleivitz and Myers (1998), subjects from the same population categorized several everyday consumer goods as primarily utilitarian (defined as useful, practical, functional, something that helps achieve a goal, e.g., a vacuum cleaner), as primarily hedonic (defined as pleasant and fun, something that is enjoyable and appeals to the senses, e.g., perfume), as both utilitarian and hedonic, or as neither. The majority of subjects classified music audio tapes and CDs as primarily hedonic (17 of 22 subjects, $\chi^2 = 6.55, p < .02$) and computer disks as primarily utilitarian (18 of 22 subjects, $\chi^2 = 8.91, p < .01$). A second pretest showed that the gift certificates for these two kinds of items were seen as equally attractive.

Experiment. We predicted that the relative preference for the more hedonic item over the utilitarian item would be greater in the forfeiture condition. In support of this hypothesis, subjects were significantly more likely to give up the disk certificate (and therefore to prefer the music certificate) when they were faced with a decision of which item to forfeit than they were to select the music certificate when they were faced with a decision of which item to acquire. Eighty-four percent of the subjects (21 of 25 subjects) preferred the music certificate in the forfeiture condition compared with 54% (14 of 26 subjects) in the acquisition condition ($\chi^2 = 5.382, p = .02$). This suggests that the relative evaluation of the hedonic characteristics of goods is more favorable in choice when the options represent potential losses than when they represent potential gains.

**EXPERIMENT 2: SUPPRESSING DIFFERENTIAL ELABORATION IN FORFEITURE AND ACQUISITION CHOICES BETWEEN HEDONIC AND UTILITARIAN GOODS**

Experiment 1 demonstrated the predicted interaction between type of good and decision task. The purpose of the next experiment is threefold. First, we want to replicate the results of Experiment 1 with different products to show the generality of the effect. Second, we want to rule out the possibility that the observed choice patterns arise from a difference in consumers' uncertainty in their evaluations of hedonic and utilitarian goods. For example, if consumers are more uncertain about the precise value of hedonic than of utilitarian goods, the decision may be seen as a choice between a sure (utilitarian) and an uncertain (hedonic) outcome. Risk aversion would then predict the pattern of preferences observed in Experiment 1. Because both goods were standard market goods, there is no a priori reason to believe that subjects associated greater uncertainty with the more hedonic good. To rule out this explanation empirically, we pretested the stimuli by measuring subjects' uncertainty about their monetary valuations of the stimuli (Nowlis and Simonson 1997).

Third and most important, Experiment 2 involves using a thought-listing task to examine whether the increased preference for the hedonic good in forfeiture choices results from greater spontaneous elaboration on the hedonic object. On the basis of previous research, we suggest that requiring subjects to list reasons for their choices should diminish this effect for two reasons. First, if spontaneous elaboration focuses decision makers on affective consequences, listing reasons should de-emphasize the hedonic relative to the utilitarian focus of subjects' evaluations. General evaluations of attitude objects reflect more utilitarian components when subjects think about reasons for their attitudes (Böhm and Pfister 1996; Millar and Tesser 1986; Wilson et al. 1993). Second, to the extent that spontaneous elaboration favors the hedonic good because it is easier to imagine or elaborate on (see Keller and McGill 1994; MacInnis and Price 1987), a task that forces elaboration on both items should suppress differential elaboration. Thus, the difference in subjects'
preferences between hedonic and utilitarian goods in the acquisition and forfeiture choices should be smaller when they list reasons before choosing than when they do not.

Method

One hundred fourteen undergraduate students from a private Northeastern university were recruited in their college dormitories. Subjects were run in small batches of several individuals. In return for their participation in an unrelated questionnaire study, they were offered a large pack of M&M’s chocolate candies and a UHU glue stick, each with a retail value of approximately $1.25.

The study design was a 2 x 2 between-subjects full factorial. Similar to Experiment 1, the first factor manipulated whether subjects decided between the alternatives in a forfeiture or acquisition condition. In the acquisition condition, subjects were first shown the two items and were told that they would have to choose one of them as compensation at the end of the study. Next, they filled out the unrelated questionnaire and then made their choice. In the forfeiture condition, subjects were given both items at the beginning of the procedure and were told that these were theirs to keep as compensation for their participation. Upon completion of the questionnaire, the experimenter informed these subjects that there had been a procedural error and asked them to return one of the items. To prevent subjects in the forfeiture condition from feeling misled to expect to receive two items, they were told that they would later be provided with a consolation item. After recording each subject’s decision of which item to forgo, the experimenter debriefed subjects and gave back the forfeited item. The second factor was intended to suppress differential spontaneous elaboration in the forfeiture condition. Specifically, subjects were asked to write down the reasons they would like to own M&M’s and glue sticks. Subjects in the control group received no such instructions. Subjects were randomly assigned to the four conditions.

Results and Discussion

Pretests. The stimuli had been selected on the basis of the results of two pretests with samples from the same subject population. The first pretest was the same as the one used in designing the stimuli for Experiment 1 and showed that the majority of subjects regarded M&M’s as primarily hedonic (40 of 46 subjects, $\chi^2 = 25.13, p < .001$) and UHU glue sticks as primarily utilitarian (34 of 46 subjects, $\chi^2 = 10.52, p < .001$). In the second pretest, subjects stated their willingness to pay for a pack of M&M’s (M = $8.83$) and for a UHU glue stick (M = $1.27$; t(31) = −3.70, p < .001, two-sided) and rated how confident they were in these valuations of the two items. Subjects showed greater confidence in their ability to evaluate M&M’s (M = 6.59 on a nine-point scale) compared with UHU glue sticks (M = 5.72; t(31) = 1.98, $p < .06$, two-sided). Thus, greater relative preference for M&M’s in forfeiture choices cannot be explained by greater uncertainty in evaluating M&M’s compared with a glue stick.

Experiment. We predicted a relative increase in the preference for the hedonic item in the forfeiture condition. The results are reported in Table 1. Across the two without-reasons conditions, subjects showed a relatively stronger preference for the hedonic good in forfeiture choice. The M&M’s were preferred by 85% of the subjects (22 of 26) in the forfeiture condition and by 50% of the subjects (15 of 30) in the acquisition condition. This replicated the finding in Experiment 1. We further predicted that the asymmetry in preferences between forfeiture and acquisition would be attenuated if subjects first provided reasons for their preferences. Consistent with this prediction, 62% of the subjects (18 of 29) preferred the M&M’s in the forfeiture condition compared with 55% (16 of 29) in the acquisition condition. We used a logit model to conduct an overall test of the main and interaction effects. The dependent variable was a 0–1 dummy variable, where 1 denoted preference for the M&M’s. The independent variables were as follows: (1) a dummy variable for task (1 = acquisition), (2) a dummy variable for the reasons manipulation (1 = reasons listing), and (3) the interaction of these two main effects. Consistent with the hypotheses, the coefficient for task was significant ($\beta_{\text{task}} = -0.50, p < .01$), as was the coefficient for the interaction ($\beta_{\text{task} \times \text{reasons}} = .36, p < .10$). This result provides additional evidence that hedonic characteristics loom larger in forfeiture choices. When subjects engaged in an activity that reduced the hypothesized difference in elaboration on the two goods—for example, listing reasons for owning both items—the choice differential was considerably smaller.

If, as we have suggested, the increased evaluation of hedonic characteristics is due to differential spontaneous elaboration in the forfeiture condition, the imagined impact of forfeiting a hedonic item should be greater than the imagined impact of forfeiting an equivalent utilitarian item. Thus, in a brief follow-up study, we directly compared the imagined impact of forfeiting a hedonic and an equally attractive utilitarian good by having subjects evaluate hypothetical outcomes. This approach is similar to previous research on evaluations of imagined outcomes (e.g., Kahneman and Miller 1986; Schkade and Kahneman 1998). We used ratings instead of choice to reinforce the central finding from Experiments 1 and 2 with a different evaluation mode. Because the objects in each of the two item pairs in these experiments had been shown to be equally attractive in acquisition choices, we focused on the imagined impact of forfeiture only.

In a within-subjects design, subjects evaluated the loss experienced by two hypothetical consumers, A and B, one of whom was described as having lost the more hedonic of two previously owned goods, whereas the other was described as
having lost the more utilitarian of the same two goods. In one scenario, they had each won the two $7 gift certificates described in Experiment 1 (i.e., one for an audio tape or CD of the person's choice, the other for a 10-pack of disks). A had subsequently lost the music certificate but not the disk certificate, whereas B had lost the disk certificate but not the music certificate. In another scenario, A and B had each won a small bag of M&M's and a UHU glue stick. A had subsequently lost the M&M's but not the glue stick, whereas B had lost the glue stick but not the M&M's. Note that these scenarios paralleled the forfeiture conditions in Experiments 1 and 2, except that forfeiture resulted from a loss in circumstances beyond the target person's control (theft or breakage) rather than from choice.

Sixty-seven subjects compared on nine-point rating scales (1) which of the target persons felt worse and (2) which missed the lost prize more (1 = A who lost the music certificate/M&M's, 9 = B who lost the disk certificate/glue stick). Subjects predicted that the target person who lost the hedonic music certificate would feel worse (t = 6.17, p < .0001) and miss the item more (t = -9.16, p < .0001) than would the person who lost the utilitarian disk certificate. Similarly, subjects predicted that the person who lost the hedonic M&M's would feel worse (t = -3.18, p < .01) and miss the item more (t = -2.47, p < .05) than would the person who lost the utilitarian glue stick. These results cannot be explained by greater overall preferences for the M&M's or the music certificate, because the two utilitarian items were evaluated at least as highly as the corresponding hedonic items in the pretests. Instead, hedonic characteristics become more salient when subjects imagine the impact of forfeiture independent of choice.

EXPERIMENT 3: REFERENCE EFFECTS IN CHOICES BETWEEN HEDONIC AND UTILITARIAN GOODS

Experiments 1 and 2 created acquisition and forfeiture choices by manipulating actual ownership of a hedonic and a utilitarian good. Subjects either owned both and had to give one up or owned neither and had to choose one. We used this design to obtain externally valid findings for actual consumer goods of real monetary value. Recent research suggests that asymmetric valuations can also occur in the absence of physical possession (Sen and Johnson 1997; Tversky and Kahneman 1991). Specifically, when consumers are provided with a reference point, they may evaluate alternatives with respect to that reference point. Thus, a choice between the same two alternatives can be framed as a forfeiture or as an acquisition decision depending on the attribute levels that characterize a reference alternative. Evidence of a shift in preference due to a manipulation of the reference option would extend the scope of our previous findings beyond the realm of ownership effects. We test this hypothesis using hypothetical choice problems between comparable alternatives that are described at the attribute level.

The asymmetry in preferences due to a reference point shift can be expressed in terms of relative loss aversion for hedonic and utilitarian attributes. Consider the four stimulus items in Figure 2. Choice option h is characterized by a high score in the hedonic attribute and a low score in the utilitarian attribute. Choice option f is characterized by the reverse scores. A superior reference item s has high scores in both attributes, and an inferior reference item i has low scores in both. When the reference item is s, so that the decision is which of two superior attribute levels to forfeit, consumers have a relatively stronger preference for h over f (as shown by indifference curve U_h) than when the reference item is i (as illustrated by the steeper indifference curve U_i).

Our hypothesis implies that the ratio of the choice share of h to the choice share of f is greater in forfeiture choices. These ratios can be transformed into a coefficient \( \lambda_{hf} \) of relative loss aversion for hedonic and utilitarian goods as follows:

\[
\frac{Pr(h > f)}{Pr(f > h)} = \frac{Pr(h > f)}{Pr(f > h)} = \frac{Pr(h > f)}{Pr(f > h)} = \frac{Pr(f > h)}{Pr(f > h)} = \lambda_h + \lambda_f = \lambda_{hf},
\]

where \( >_h \) and \( >_f \) denote strong preference, given a superior (s) or an inferior (i) reference item, and \( \lambda_h \) and \( \lambda_f \) are the parameters of loss aversion for h and f (see Tversky and Kahneman 1991). Our prediction of stronger preferences for the hedonic good when the reference item is superior implies that the relative loss-aversion coefficient \( \lambda_{hf} \) is greater than 1. Because such differential loss aversion may be a function of attribute importance (Tversky and Kahneman 1991), we design choice problems such that the utilitarian attributes are at least as important as the hedonic attributes.

Method

Subjects were 141 undergraduate students at a private Northeastern university. There were four choice problems (within subjects, in counterbalanced order), each with two reference item conditions (superior versus inferior; between subjects). The reference options were designed according to Figure 2. In each problem, subjects decided between two al-

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\(^{*}\)Similar results were obtained with a between-subjects design.
ternatives, one of which was superior in a utilitarian attribute (point f in Figure 2), and the other was superior in a hedonic attribute (point h in Figure 2), all else being equal. An example is provided in the Appendix. The alternatives were as follows:

- Apartments: utilitarian attribute, distance to work (10 minutes versus 45 minutes); hedonic attribute, view from the apartment (breathtaking view of sunset and city skyline versus view of a parking lot).
- Coworkers: utilitarian attribute, reliability (very reliable versus not very reliable); hedonic attribute, fun to work with (a lot of fun versus somewhat arrogant).
- College lunch plans: utilitarian attribute, walking distance to cafeteria (5 minutes versus 10 minutes); hedonic attribute, dessert menu (cookies, pastry, and fresh fruit for dessert versus no dessert).
- Shampoos: utilitarian attribute, cleansing efficacy (very effective cleansing agent versus moderately effective cleansing agent); hedonic attribute, softness of hair (hair feels soft and silky versus hair feels dry after shampooing).

We had conducted a pretest to ensure that these pairs of attributes differed in their hedonic and utilitarian content and that the more hedonic attributes were not seen as more important than the corresponding utilitarian attributes. Thirty-five subjects rated the relative hedonic and utilitarian content as well as the importance of each attribute used in the four problems. Using a measure adopted from Leclerc, Schmitt, and Dubé (1994), the hedonic ratings were anchored at 1 = utilitarian and 9 = hedonic, where the terms utilitarian and hedonic were defined as in the pretests in Experiments 1 and 2, and the importance ratings were anchored at 1 = not at all important and 9 = very important.

A brief cover story for each problem manipulated the reference item. In the superior reference item condition (equivalent to a forfeiture condition; point s in Figure 2), subjects were instructed to imagine themselves as currently consuming the alternative that was characterized by superior values in both attributes (e.g., a 10-minute drive to work and a beautiful view of the sunset from their current apartment). In contrast, in the inferior reference item condition (equivalent to an acquisition condition; point i in Figure 2), they were asked to imagine themselves as currently consuming an alternative that was characterized by inferior values in both attributes (e.g., a 45-minute drive to work and a view of a parking lot from their apartment). In both conditions, they were told that they then had to switch to one of the two decision alternatives (e.g., because they had to move out of their current apartment). Subjects were randomly assigned to the two conditions. The dependent variable was subjects' choices.

Results and Discussion

Pretest. The pretest results supported our manipulation of the relative hedonic and utilitarian content and importance of the attributes. First, subjects distinguished clearly between hedonic and utilitarian attributes in all four cases. Distance to work was seen as a highly utilitarian attribute of apartments (M = 1.80), whereas the view from an apartment was rated as highly hedonic (M = 7.86; t = -16.52, p < .0001). Similarly, a coworker's reliability was seen as utilitarian (M = 1.6), whereas fun in working with a coworker was seen as hedonic (M = 7.6; t = -14.71, p < .0001).

Distance to the cafeteria was a utilitarian attribute (M = 2.63), whereas presence of the dessert menu was hedonic (M = 7.46; t = -8.32, p < .0001). A shampoo's cleansing efficacy was utilitarian (M = 2.23), whereas the softness of one's hair was hedonic (M = 6.91; t = -9.67, p < .0001).

Second, across attribute pairs, the attributes that were rated as relatively more hedonic were never rated as more important than the corresponding utilitarian attributes. For apartments, distance to work (M = 6.82) was rated as more important than the view (M = 6.06; t = 2.05, p < .05). For coworkers, reliability was rated as more important (M = 7.74) than whether the coworker was fun to work with (M = 6.17; t = 4.28, p < .0001). For lunch plans and shampoos there was no significant difference in attribute importance ratings (at p < .20). Thus, the pretest results rule out that the greater preference for the hedonic good in forfeiture choices is confounded with greater importance of hedonic attributes.

Experiment. We predicted an increase in relative preference for the hedonically superior alternative in the superior reference item condition compared with the inferior reference item condition. The individual choice shares are reported in Table 2 and are discussed here for the apartment problem. In the apartment problem, 64% of the subjects selected the apartment that had the better view over the apartment characterized by the shorter commute when the current apartment had a breathtaking view of the sunset and city skyline and was a 10-minute drive from work (superior reference item). In contrast, only 52% of the subjects chose that apartment when the existing apartment was described as overlooking a parking lot and being located 45 minutes from work (inferior reference item; λ_g = 1.64). As shown in Table 2, similar results were obtained across the four choice problems.

We used a logit model to conduct an overall test of this effect. The dependent variable was a 0–1 dummy variable, where 1 denoted preference for the item superior in the hedonic attribute. The independent variables were a dummy variable for reference item (1 = superior) and three dummy variables for the individual choice problems. The results are presented in Table 3. As predicted, subjects were signifi-

Table 2
RELATIVE CHOICE FREQUENCIES FOR OPTIONS THAT ARE SUPERIOR IN THE HEDONIC OR THE UTILITARIAN ATTRIBUTE IN EXPERIMENT 3 (n = 141)

<table>
<thead>
<tr>
<th>Choice Options:</th>
<th>Reference Item</th>
<th>Superior</th>
<th>Inferior</th>
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<tbody>
<tr>
<td>Apartments (λ_{hi} = 1.64)</td>
<td>A</td>
<td>Distance to work (utilitarian)</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>View from apartment (hedonic)</td>
<td>64%</td>
</tr>
<tr>
<td>Coworkers (λ_{hi} = 1.57)</td>
<td>C</td>
<td>Reliability (utilitarian)</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>Fun to work with (hedonic)</td>
<td>48%</td>
</tr>
<tr>
<td>Lunch plans (λ_{hi} = 2.55)</td>
<td>E</td>
<td>Distance to cafeteria (utilitarian)</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Dessert menu (hedonic)</td>
<td>60%</td>
</tr>
<tr>
<td>Shampoos (λ_{hi} = 2.41)</td>
<td>G</td>
<td>Cleansing efficacy (utilitarian)</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>Softness of hair (hedonic)</td>
<td>79%</td>
</tr>
</tbody>
</table>

Total n in each choice: 70 71
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Field Survey: Marketplace Implications of the Asymmetry in Forfeiture and Acquisition Choices

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effect on the results. We regressed the ratio of reservation prices to Bluebook prices on the natural logs of the original purchase price and mileage, as well as on the year the car was built, subjects' perceived uniqueness ratings, and a composite measure of subjects' ratings of the hedonic and utilitarian characteristics of their vehicles. This measure was the difference between each individual's hedonic and utilitarian ratings. Thus, values could range from -8 (indicating purely utilitarian vehicles) to 0 (indicating vehicles that are seen as both utilitarian and hedonic or as neither) to +8 (indicating purely hedonic vehicles).

As predicted, the greater the net hedonic content of the vehicle, the higher the ratio of respondents' stated selling reservation prices to market prices ($\beta_{\text{DIFFERENCE}} = .017; p < .001$). Owners of hedonic cars were more reluctant to part with them than were owners of utilitarian cars. Among the control variables, only mileage ($\beta_{\text{MILES}} = -.085; p < .05$) and original purchase prices ($\beta_{\text{BOUGHT_PRICE}} = .160; p < .0001$) affected the ratio of WTA to market prices, which suggests possible usage rate and income effects on buyer-seller price gaps for used cars. There was no evidence of multicollinearity in the independent variables. In summary, this study illustrates marketplace implications of our experimental results that show that hedonic aspects loom larger in forfeiture (e.g., selling) than acquisition (e.g., buying). Including uniqueness ratings and original purchase prices in our analysis controls for the rival explanation that hedonic cars, which might be more expensive than utilitarian cars, are seen by their owners as unique collectibles with high investment value. We note, however, that this nonexperimental field study can only provide suggestive evidence consistent with our hypothesis but naturally cannot confirm it.

GENERAL DISCUSSION

Previous research has shown that consumer perceptions and preferences have both hedonic and utilitarian dimensions. We demonstrate a fundamental asymmetry in how consumers trade off these dimensions in acquisition and forfeiture choices. Our data consistently show an increase in the weight of the hedonic aspects in forfeiture choices. Experiments 1 and 2 manipulated real ownership of two different pairs of products. Subjects in both experiments show a relative increase in the preference for the hedonic good in forfeiture compared with acquisition choices. Experiment 2 also showed that this effect is moderated by the relative salience of hedonic considerations in the forfeiture condition. This was predicted on the basis of the notion that the increased opportunity for spontaneous elaboration in forfeiture enhances the evaluation of hedonic goods. Experiment 3 replicated the preference asymmetry by inducing a forfeiture frame through a simple attribute-level reference point manipulation instead of imposing real losses or gains on subjects. Finally, the field survey sacrificed experimental control to illustrate marketplace implications of the asymmetry in forfeiture and acquisition choices. Owners of hedonic cars valued their vehicles more than did owners of utilitarian cars, relative to market prices.

The series of studies limits the effect of alternative accounts of why consumers may be more reluctant to part with hedonic than with utilitarian goods. Work by Belk (1988) suggests that consumers develop symbolic relationships with their possessions. If these relationships are stronger for hedonic than for utilitarian possessions, consumers might reasonably value such options more over time. However, the duration of ownership in Experiments 1 and 2 appears too brief for such differences in relationships to develop. A related argument can be derived from Hanemann (1991), in which he argues that consumers' true selling prices (WTA) are a function of the substitutability and tradability of the good to be traded. If hedonic goods are more unique and irreplaceable (e.g., a bridal gown), perhaps because we develop emotional attachments to them over time, consumers might be more reluctant to forfeit them. Although possible in general, these arguments do not apply to Experiments 1 and 2, in which the alternatives used were widely available market goods. Moreover, we controlled for the effect of substitutability in the field survey by including perceived uniqueness as a covariate in the analysis. In practice, these alternative processes are likely to enhance the strength of the phenomenon, providing promising areas of further research.

Similarly, another rationale for greater preferences for utilitarian items in acquisition choices can be derived from Kahn and Meyer (1991), in which they show that the subjective importance of attributes that are seen as enhancing or preserving a status quo can be altered by the level of attribute uncertainty. Specifically, they show that increasing this attribute uncertainty increases the weight of preserving attributes and diminishes the weight of enhancing attributes. If people consider utilitarian goods a means of preserving benefits in day-to-day life (e.g., a fork is a means of avoiding eating with one's hands) and hedonic goods are thought of as tools that provide enhancements (e.g., wine is a tool for enhancing the quality of a meal), then the weight of utilitarian (i.e., preserving) attributes would increase in acquisition choices if these are characterized by greater attribute uncertainty. However, it is highly unlikely that there was a difference in attribute uncertainty between the acquisition and forfeiture conditions in our experiments. We used market goods, with which subjects in both conditions had similar prior experience, and the opportunity for incremental learning in the experiments was limited.

The asymmetry in preference for the hedonic good between the acquisition and forfeiture frames is potentially consistent with findings on the omission bias (Baron and Ritov 1994; Spranca, Minsk, and Baron 1991). Baron and colleagues report that consequences arising from action or choice induce greater feelings of responsibility than do consequences arising out of inaction or omission. If there is greater guilt associated with choosing a hedonic item (see Strauhlevitz and Myers 1998) and if retaining hedonic goods induces less guilt than acquiring them, hedonic items may be relatively less preferred in acquisition choices. However, there are several reasons this argument does not provide a valid rival explanation for our findings. The hedonic stimuli in our studies are fairly regular consumption items. More

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7The results reflect Bluebook prices for cars in good condition and are similar for vehicles in excellent condition.

8Recent research suggests that even short increments in duration of ownership may affect absolute valuations (Strahlevitz and Loewenstein 1998) but makes no predictions about differential evaluations. Further research might examine whether such differences exist for hedonic and utilitarian goods.

9We thank an anonymous reviewer for this suggestion.
important, subjects in the forfeiture condition also made active choices instead of receiving an item as the result of in-action. Thus, both conditions should have induced an equal degree of responsibility and guilt in subjects. Furthermore, the data described at the end of Experiment 2 showed that the loss of a hedonic good was evaluated worse, even when no choice occurred and when it was described as the result of circumstances not under the protagonist’s control (i.e., theft or breakage).

Finally, we tested this rival explanation directly by examining whether acquisition choices are seen as inducing more guilt than are forfeiture choices. Following Spranca, Minsk, and Baron (1991), we asked subjects to evaluate the degree of guilt felt by two hypothetical persons for choosing a hedonic good. A forfeiture condition was created by describing a person who had mistakenly received both a hedonic (M&M’s or CD certificate) and a utilitarian (glue stick or disk certificate) prize in a lottery and then had to forfeit one of them when the mistake was discovered. In an acquisition condition, a person was simply described as having won a choice between the same two items. Both persons were depicted as having selected the hedonic item. A random sample of 80 passengers at a regional airport rated on a nine-point scale the amount of guilt the target persons felt as a result of selecting the hedonic item in the acquisition and forfeiture conditions. The mean guilt ratings for selecting the hedonic item were not significantly different in the forfeiture and the acquisition conditions (M = 2.69 and M = 2.53; F(1,78) = .25, p < 1). These results do not support a correlation between responsibility and guilt and a greater preference for hedonic items in forfeiture choices.

The limitations of the present research point out promising areas for further research. One relates to the choice problems that were used. The choice sets in our experiments were limited to two alternatives. Greater complexity and task realism in acquisition and forfeiture choices from a set of more than two alternatives may induce different decision processes that may change the proposed effect. In addition, our outcome- rather than process-oriented methodology does not examine the thoughts that subjects spontaneously generate in the two conditions and that are predicted to mediate the asymmetry in relative evaluations. Further research could examine think-aloud protocols to provide additional support for the existence and effect of differential elaboration in acquisition and forfeiture choices. Last, it would be interesting to test whether the preference asymmetry we observed is due solely to the intrinsic properties of hedonic and utilitarian goods or whether the effect extends to other product features because of more general differences in the ease with which these can be elaborated on.

**Theoretical Implications**

This fundamental asymmetry in how consumers trade off hedonic and utilitarian product attributes in domains of losses and gains also sheds light on the discussion of the causes of loss aversion and the processes by which it operates (e.g., Hanemann 1991; Sen and Johnson 1997). Although the phenomenon itself is well established, relatively little is known about the exact processes that underlie asymmetric valuations of gains and losses. To address this gap, we need a systematic analysis of key moderators that drive differences in reference dependence and loss aversion across categories of goods and attributes. Such differences have been shown, for example, by Hardie, Johnson, and Fader (1993), who demonstrate greater loss aversion for product quality than for price, and by Irwin (1994), who finds greater loss aversion for environmental (public) goods than market (private) goods.

The present findings contribute to this discussion in two ways. First, the endowment effect and buyer–seller price gaps may arise from a differential focus on the hedonic and utilitarian aspects of a traded good if owners/sellers are more likely than nonowners/buyers to engage in spontaneous elaboration in determining their evaluations of that good. This has several implications for further research related to loss aversion. For example, we could examine the effect of asking buyers to imagine the actual experience with the good to be traded, which should attenuate buyer–seller price gaps. Furthermore, the variation in loss aversion (measured as $\lambda$) across goods can be examined to determine if it is correlated with the hedonic content of these goods and with ease of elaboration.

Second, we designed Experiment 3 so that we could compare loss-aversion coefficients for hedonic ($\lambda_H$) and utilitarian ($\lambda_F$) attributes by computing a relative loss-aversion coefficient $\lambda_{H/F}$ directly from observed choice shares. The choice-based nature of this design enables researchers to estimate relative loss aversion without having to determine the size of the individual coefficients from the usual WTP and WTA measures that previous research has used. To the extent that consumer preferences in markets are revealed through choices (i.e., joint evaluations), WTP and WTA (i.e., separate evaluations) potentially introduce a source of measurement error and bias (see Hsee 2000). Further research can use the present choice-based design to derive potentially more valid estimates of relative loss aversion across attributes and commodity types.

**Managerial Implications**

Managerial implications of the findings are straightforward. At a strategic level, if competing firms are forced to cut existing product attribute or service levels (see Sen and Morwitz 1996), consumers may be more reluctant to accept cuts on the more hedonic dimensions. In contrast, adding the same hedonic benefits may have relatively less impact on market share than would adding more utilitarian benefits. Similar implications may hold for bargaining situations that involve trade-offs between hedonic and utilitarian benefits. For example, labor unions may be more likely to reject management proposals to cut funding for company-owned vacation retreats (a hedonic benefit) than to reject proposals for a slight increase in the number of working hours (a utilitarian feature) but may value similar improvements in working hours relatively more than increased funding of vacation retreats.

Our results also suggest implications for pricing and promotion strategies. Marketers ought to be able to charge premiums for hedonic goods to which consumers have adapted in some manner when the consumers are faced with a decision to discontinue consumption. For example, all else being equal, marketers may be able to add a hedonic premium to the buyout option price at which lessees of luxury or sports cars can buy their vehicles at the end of the lease term. Alternatively, we suspect that buyout rates are higher.
for these hedonic cars than for more utilitarian ones, such as compact cars or minivans. Introductory special offers are often used to acquire new customers. Our results suggest that acquisition through trial periods and samples may be relatively more effective for hedonic (e.g., cable television) than for utilitarian (e.g., encyclopedias) goods. All else being equal, this may make low introductory price offers especially attractive for hedonic goods. More generally, our results also indicate that secondhand markets involving private sellers may be less efficient for hedonic than for utilitarian goods, because owners of hedonic goods may be relatively more reluctant to sell at prices that potential buyers are willing to offer.

Asymmetric preferences due to a simple task manipulation raise the question of which frame is more appropriate when consumers make purchase decisions. From a normative perspective, trade-offs between hedonic and utilitarian alternatives to derive overall evaluations should be made independently of particular reference items, which makes either frame suspect. Descriptively speaking, the answer to this question may depend on a consumer’s propensity to focus on forgone alternatives. If consumers tend to elaborate on what might have been, choosing the more hedonic option may make them happier. However, if out of sight is out of mind for consumers, the more utilitarian option may be the better choice.

**APPENDIX**

We provide examples of one of the stimuli (apartments) in the inferior reference item (corresponding to acquisition; upper panel) and superior reference item (corresponding to forfeiture; lower panel) conditions in Experiment 3:

**Apartments**

Imagine that for the past year you have been renting a one-bedroom apartment that has the following features:

- overlooks a large parking lot.
- is a 45-minute drive from your place of work.

Now you have to move out of this apartment, and you face a decision of renting one of the two apartments described below. Both apartments have one bedroom and are similar in all other respects (for example, monthly rent, safety).

<table>
<thead>
<tr>
<th>View</th>
<th>Distance to Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your present apartment</td>
<td>Overlooks a large parking lot</td>
</tr>
<tr>
<td>Apartment I</td>
<td>Breathtaking view of sunset and city skyline</td>
</tr>
<tr>
<td>Apartment II</td>
<td>Overlooks a large parking lot</td>
</tr>
</tbody>
</table>

**REFERENCES**


Hedonic and Utilitarian Goods


——— and Joel Huber (1999), "The Impact of Anticipating Satisfaction on Choice," working paper, College of Business, University of Iowa.


