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# When Brands Seem Human, Do Humans Act Like Brands? Automatic Behavioral Priming Effects of Brand Anthropomorphism

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This research examines automatic behavioral effects of priming brands that are anthropomorphized. It posits that anthropomorphized brands trigger people's goals for a successful social interaction, resulting in behavior that is assimilative or contrastive to the brand's image. Three studies show that consumers are more likely to assimilate behavior associated with anthropomorphized partner brands that they like, consistent with the goal of drawing in the liked coproducer, and servant brands that they dislike, consistent with the goal of pushing the disliked would-be helper away by signaling self-sufficiency. Results also show a contrastive behavior when primed with disliked partner brands and liked servant brands. These effects are observed in contexts unrelated to the brand prime. For example, priming Kellogg's, a liked partner brand associated with healthfulness, led to greater willingness to take the stairs than the elevator in a purportedly unrelated study. No effects were observed of priming brands that were not anthropomorphized.

Recent research has demonstrated automatic behavioral priming effects in the domain of brands. Building on prior research in social psychology that has shown that people sometimes take on the behaviors they associate with other individuals or social groups (e.g., Bargh, Chen, and Burrows 1996), Fitzsimons, Chartrand, and Fitzsimons (2008) found that brand exposure may elicit automatic behavioral effects consistent with the brand image. For example, participants exposed to the Apple brand behaved more creatively and those exposed to the Disney brand responded more honestly, compared to controls. These find-

ings of "social" influence for nonhuman stimuli stand in contrast to prior work that failed to find some basic social perception effects for brands (Lingle, Alton, and Medin 1984) and with research arguing that brands elicit weaker effects than people and occupy roles of much less importance than those occupied by humans (Sujan and Bettman 1989).

An explanation for this difference in findings might be that the iconic brands studied by Fitzsimons et al. (2008) were perceived much like people. That is, respondents may have anthropomorphized those brands, resulting in the effects of these brands spilling into the social world. This explanation accords with Lingle et al. (1984), who suggested that brands that are not naturally anthropomorphized are those for which social effects may be less likely to occur. We examine this possibility in the present research by considering differences in people's behavior when primed with brands that have been anthropomorphized compared to those represented only as objects.

One key contribution of this research, therefore, is to test the premise that automatic behavioral priming effects as noted in prior research depend on the extent to which the primed category or object is anthropomorphized. By anthropomorphizing brands, consumers open the door to "quasi social influences" in which brands elicit effects previously seen for responses to people. That is, these automatic effects of brand exposure documented in the literature would suggest not that

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social effects extend to inanimate objects and brands but rather that inanimate objects and brands may sometimes extend into the social realm.

A second contribution of this research is to propose the process by which automatic behavior results from anthropomorphized brand primes. Following Fitzsimons et al. (2008), we, too, suggest that automatic behavior in response to brand exposure follows a motivational process. Fitzsimons et al. (2008) argued that consumers are motivated by their desire to achieve the key personality or trait dimension associated with the brand. For example, most consumers would like to be creative and honest, and hence when primed with a brand that stands for either of these traits, such as Apple or Disney, they behave in a manner consistent with that trait. Our theorizing of the motivational process is somewhat broader than, although compatible with, the one proposed by Fitzsimons et al. (2008). We suggest that the automatic behavior that people display subsequent to being primed with a brand is motivated by a desire to achieve an effective interaction with the anthropomorphized brand rather than just by a desire to take on an admirable characteristic associated with it.

As a foundation for our framework, we rely on the work by Cesario, Plaks, and Higgins (2006), who have demonstrated that priming a social group triggers goals corresponding to people's desire for a successful social interaction (see also Cesario et al. 2010). People's behavior is dependent on the extent to which that behavior enables them to achieve these interaction goals. Those goals may be positive, such as getting along well with the other person, or negative, such as getting away from the person as soon as possible. These researchers thus showed that priming a stereotyped group such as the "elderly" led to participants walking more slowly if the participants liked members of the category and hence wanted to get along with them (Bargh et al. 1996). However, participants who disliked the primed category of the "elderly" walked faster, since an effective way to interact with such a disliked category would be to get away from someone in that category.

Building on this research, we predict that a brand prime will lead to assimilation or contrast from the behavior implied by the brand image depending on consumers' beliefs about how best to achieve their social interaction goals. In order to test this prediction, we adopted two potential moderators of the brand prime effect: liking for the brand and the type of relationship with or role ascribed to the brand. Our expectation is that the effect of liking will reverse depending on the perceived role, specifically, whether the brand is seen as partnering the consumer or serving her. Brands take on a partnering role if they are seen as coproducers of the benefit, working together with the consumer to meet the need. On the other hand, brands take on a servant role if they are seen as taking care of the need on behalf of the consumer—much like the consumer contracting out the task to the brand.

In the case of anthropomorphized brands that are seen as partners, liking the brand would suggest assimilating the

behavior associated with the brand image because shared action is the best way to interact with the coproducer. Taking on the behaviors of a partner brand that is liked signals "let's team up." By contrast, an effective way to behave around a brand that presents itself as a partner but which is disliked is to act unlike the brand because acting in contrast to the brand's image undermines working together, which would dissuade this disliked brand from sticking around. In short, we expect an assimilation effect for anthropomorphized brands that are seen in a partner role if they are liked and a contrast effect if they are disliked.

However, for anthropomorphized brands that are seen as taking on a servant role, we expect an opposite effect. In this case, taking on the behavior of the servant signals "I don't need you, so go away," whereas doing the opposite of the servant's association signals "I need your help, so please come closer." Thus, for anthropomorphized brands seen as servants, liking the brand would suggest that the servant be invited to do its job, leading to a behavior that is contrastive to the brand's image. In contrast, an effective way to behave with an anthropomorphized servant brand that is disliked is to obviate the need to have the brand around, thereby assimilating to the behavior suggested by the brand's image. Hence, we predict assimilation for servant brands that are disliked and contrast for servant brands that are liked. Note that a neutral action, neither assimilation nor contrast, would not undermine the social interaction with a liked servant brand because, by not taking on the same activities, at least the person would be staying out of the servant's way. However, we predict a true contrast effect because it provides a strong signal to draw in the liked, humanized brand. Given the premise that these effects depend on whether or not consumers anthropomorphize the brand, which triggers goals for successful social interaction, we do not expect any moderation by role or liking for non-anthropomorphized brands.

In the following sections, we elaborate the conceptual framework introduced above, first by addressing the concept of anthropomorphism in marketing and then by discussing automatic behavioral priming effects for anthropomorphized brands. We then test our proposed framework in three studies.

## ANTHROPOMORPHISM

Anthropomorphism is the attribution of uniquely human characteristics and features to nonhuman creatures and beings, natural and supernatural phenomena, material states or objects, and even abstract concepts (Epley, Waytz, and Cacioppo 2007). Anthropomorphism occurs frequently in marketing, sometimes because marketers suggest humanizing the brand or product and sometimes because consumers readily see the human in the nonhuman. For example, products have often been given humanlike characteristics to make them more distinctive and memorable (e.g., the hourglass form of the Coke bottle), to assign specific qualities that exemplify what they stand for (e.g., the shape of the front grille of the Thunderbird to give it a tough look), and

to make them more endearing and likeable (e.g., ads for analog clocks and wristwatches commonly show 10:10 time to make them look like a smiling face). Products are sometimes even perceived to have a soul (Gilmore 1919) or a genetic code (McGill 1998) much like humans do.

Similarly, brands are known to have distinctive humanlike personality traits (Aaker 1997). Consumers also form relationships with brands (Fournier 1998) and develop distinct communities around them (Muniz and O'Guinn 2001). Even though researchers generally focus on particular humanlike characteristics such as personality or relationships when examining brands, these effects presumably emanate out of the more generalized act of anthropomorphizing the brand. In fact, brand managers often encourage this phenomenon of anthropomorphizing by creating brand characters, mascots, and spokespeople such as the Pillsbury Doughboy, the Green Giant, Tony the Tiger, or the more contemporary Geico Gecko. Brands are given faces and names, and they are endowed with human emotions. Brand names are sometimes chosen to conjure up imagery of real people (e.g., Mr. Kleen or Mrs. Fields), and brand communication often involves using first-person language as if the brand were talking directly to the consumers as people do.

Given the pervasive use of anthropomorphism by marketers, it is quite surprising that academic research in the area has been extremely limited (for exceptions, see Aggarwal and McGill 2007; Chandler and Schwarz 2010; Kim and McGill 2011). Although researchers have looked at related issues, such as brand personality (Aaker 1997), consumer-brand relationships (Aggarwal 2004; Fournier 1998), brand imagery (Batra and Homer 2004), brand identity (Schmitt, Simonson, and Marcus 1995), and brand communities (Muniz and O'Guinn 2001), there has been very limited research directly examining the effects of bringing the brand to life. In this article, we attempt to fill this gap in part by exploring how priming an anthropomorphized brand, in contrast to an objectified brand, might affect people's everyday behavior beyond the context of immediate brand consumption. In our studies, we employ a direct instruction to imagine the brand coming to life as a person and to imagine its personality, physical appearance, opinions, occupation, approach, and so forth. This instruction was intended to suggest a wholly formed person, thereby triggering goals for a social interaction, even if no such interaction was actually forthcoming. We then examine participants' actions in subsequent unrelated tasks.

### AUTOMATIC BEHAVIORAL PRIMING

Prior research has shown that activation of a social category may produce behavior that is consistent with the stereotype of the primed category. For example, Bargh et al. (1996) first observed that priming the construct of the "elderly" led participants to walk more slowly, an effect that appears to occur automatically, outside conscious awareness. This general effect of assimilation of behavior in keeping with the primed concept or category has been replicated in a variety of different contexts: priming "professors" increased performance on a general knowledge task, whereas priming

"hooligans" reduced performance on the same task (Dijksterhuis and van Knippenberg 1998); priming the "elderly" reduced performance on a memory task (Dijksterhuis et al. 2000), and priming "politician" increased the length of one's essays, suggesting greater long-windedness (Dijksterhuis and van Knippenberg 2000).

Various cognitive and motivational explanations have been posited for this effect (Bargh et al. 1996, 2001; Cesario et al. 2006; Chartrand and Bargh 1996; Dijksterhuis and Bargh 2001; Kay and Ross 2003; Smeesters et al. 2003; Wheeler and Petty 2001). The predominant cognitive account suggests that priming influences behavior through a direct perception-behavior link, which works according to the principles of spreading activation (Dijksterhuis and Bargh 2001). The salience of a particular construct activates the corresponding internal representation of the construct. The activation of the construct also activates all the related features, including behavioral tendencies associated with it. And once the behavioral representation is activated, it becomes more likely to be acted upon than if it were not activated. The activation of a particular construct thus leads to a greater likelihood of nonconscious behavior associated with that construct.

### Priming Effects Are Not Always Assimilative

More recent work suggests, however, that the behavior subsequent to the priming of a social category might be motivational. Thus, Cesario et al. (2006) suggest that people's behavior is often driven by a desire to interact effectively. Hence, when a particular social category is made salient (e.g., elderly), people's motivational system begins to prepare for an interaction with a member of the primed category. As such, the subsequent behavioral response is a function of the characteristics of the primed category (e.g., walks slowly) as well as of one's affective evaluation of the target (e.g., Do I like this person?). This goal-based automatic behavioral response thus raises the possibility of contrast effects in response to the priming of a concept. For example, as noted in the introduction, Cesario et al. (2006) showed that people who have a positive attitude toward the elderly walk slowly once primed with the "elderly" construct since that is presumably the most effective way of interacting with them. However, those who have a negative attitude toward the elderly walk faster rather than slower after being primed with this category because this behavior would facilitate getting away from the disliked group. Thus, it is not just the association of a trait (walking slowly) with a category (elderly) that determines what the behavioral response would be but also the individual's attitude toward the category (like or dislike) and what is seen as the most effective way to interact with a member of this primed category. This research also suggests that the mere priming of the category is sufficient to bring the social goals to mind; anticipation of an actual, upcoming interaction with a member of that category is not necessary and the behavior may be observed in subsequent unrelated tasks.

Cesario et al. (2006) also stress that the pattern of assimilation or contrast is not as simple as "if like, assimilate and

if dislike, contrast.” Instead, assimilative or contrastive behavior is determined by which route best achieves the desired social goal, an idea we exploit in our use of the partner and servant roles. People who dislike a social group may show behavioral assimilation if doing so facilitates the social goal of pushing this group away or expressing disdain. For example, Cesario et al. (2006) demonstrated that people who dislike the social group African American may adopt the trait of being aggressive or hostile, which is part of the stereotype of this social group, because acting in this manner best achieves social goals of keeping members of this disliked group at a distance.

Other work has also highlighted assimilative and contrastive automatic behavior in response to a prime. For example, Wheeler and Berger (2007) note that differential behavioral effects can result from differences in the associations about the primed concept. For example, these authors show that men look at shopping as purpose-driven, whereas women look at it as possibility-driven, and in subsequent tasks the two behave accordingly. Mandel and Johnson (2002), studying expertise and search, highlight the underlying processes, such as the type of search (external vs. internal), that result in differences in the type of behavior in response to a prime. Laran, Janiszewski, and Cunha (2008) note the influence of the context of goal pursuit, finding assimilation to a primed goal when the behavioral context is common but contrast when the context is uncommon. Laran, Dalton, and Andrade (2011) recently reported assimilation effects of a brand prime but contrast effects of a slogan, tracing the effects to nonconscious efforts to correct for persuasive influence of slogans but not brand primes.

Of particular relevance to the present investigation is recent research by Smeesters et al. (2009), which examined participants' decisions in a mixed-motive game following a conceptual prime. These authors categorized people according to their social value orientation and found that priming a morality concept led to more cooperative behavior among participants whose goals were to maximize joint outcomes, an assimilation effect. However, the same prime led to competitive behavior among participants whose goals were to maximize their own outcomes, a contrast from the prime. Ironically, when primed with morality, those who were motivated to get ahead expected their partners to be more cooperative and hence ripe for exploitation through competitive actions. These findings demonstrate that the effect of a prime depends on participants' goals for a successful interaction. Whereas Smeesters et al. (2009) relied on social value orientation to manipulate goals, we examine goals implied by different brand roles.

### Brand Roles: Partner versus Servant

An emerging stream of work stresses the importance of understanding the relationship between consumers and brands, not just the static image of the brand in isolation. The main thesis of this stream of work is that consumers may sometimes think of brands as relational partners, much like their social interpersonal counterparts. For example, consumers may assign very specific roles to brands, conceiving of them as committed

partners, marriages of convenience, or even enslavements, among many others (Fournier 1998). Aggarwal (2004) suggests that consumers use norms of interpersonal relationships to guide their behavior when interacting with brands that they have an exchange relationship with, much like a business partner, or a communal relationship with, much like a friend. We suggest that the type of role that consumers assign to a particular brand would, in fact, influence their motivated preparation to interact with an anthropomorphized version of that brand and the consequent behavior in response to the brand prime.

In our studies, we focus on two specific roles that may be assigned to brands: the role of a partner (or the coproducer of the benefit) and the role of a servant (or the outsourced provider of the benefit). We chose to focus on this distinction because it affords a strong test of our theory based on motivated preparation to interact. These roles suggest distinctive behaviors to achieve a successful social interaction, and, critically, we expect the effect of liking to reverse across roles.

Recent work by Bolton et al. (2008) on the differences in effectiveness in the marketing of drugs versus nutritional supplements provided a very useful support for the type of moderator that we were seeking. Bolton et al. (2008) found that drugs are perceived as providing cures for the ailment and hence reduce the patient's motivation to adopt any other health-inducing behaviors in conjunction with the consumption of drugs. In contrast, nutritional supplements are seen as just that—supplements—and hence do not reduce the motivation of the patient to also adopt other positive health-inducing behaviors. What these authors have shown, therefore, is that the role assigned to the health intervention object is crucial in determining the patient's behavioral response. Interpreting these results for our purposes, we saw supplements as occupying a partnering role, leading to assimilative behavior, but drugs as occupying a servant role, leading to contrastive behavior.

Following this reasoning, we adopted a partner-servant distinction to reveal assimilative or contrastive effects of a brand prime. Hence, it is important to underscore the rationale for studying the role variable. Although the distinction between the partner and the servant roles is interesting in itself, and something that may be investigated in future research, our main goal is to use these two brand roles to test the theory of how brand anthropomorphism influences automatic behavior in response to brand primes, in particular, through motivated preparation to interact. Adopting a partner versus a servant role distinction helps us propose and test our specific and opposing predictions because these roles suggest different ways to achieve a successful interaction. By no means do we wish to suggest that these two roles are the only, or even the predominant, roles assigned to brands. It is also beyond the scope of this article to examine the antecedent factors or processes that give rise to these role perceptions in an ongoing consumer-brand interaction. Consequently, in this article, we merely use these two brand roles—partner versus servant—to test our hypothesis that the desire for a successful interaction with the anthropomorphized brand is the primary driver of assimilative or

contrastive consumer behavior in response to a brand prime. Having said this, it is interesting to note that instances of marketers promoting their brands in a partner or a servant role are relatively common; for example, Allianz, one of the world's leading financial organizations has the core value of being a "trusted partner" to its customers, while the Scrubbing Bubbles brand from S. C. Johnson and Co. is positioned as a servant for its customers, as is clear from its advertising tagline "We work hard so you don't have to."

We should also note that, within our studies, the brand serves as a mere prime and does not directly figure in the context in which we later examine participants' behavior. An anthropomorphized brand leads to a goal of having a successful social interaction. However, we are not assuming that the brand be purchased, consumed, or used. That is, once the brand has been brought to life in the consumer's mind, the goal is about the social interaction implied by the brand and not the commercial interaction in terms of purchase or consumption. Of course, the marketplace positioning of the brand will surely determine what is perceived as a successful social interaction. For example, imagine that the Kellogg's brand, which is positioned around health benefits, is brought to life as an uber-fit health fanatic inclined to burning calories at any given opportunity and, further, that this brand is seen as a partner to the consumer. In this case, if one likes the brand, one may be more likely to behave in a manner that is consistent with being active and healthy. On the other hand, if Kellogg's is brought to life as a partner brand but it is also disliked, then when primed with this brand, one may opt to act like a couch potato just to put off such a brand-person. That is, you might believe in the goal of fitness, but you may also dislike Kellogg's. Hence, when primed with the humanized version of Kellogg's, you may be willing to lose on the fitness goal just to get the disliked brand-person away from you. Similarly, imagine that Volvo, the car brand that is positioned on safety, is brought to life as a servant intent on taking care of its employer/master. In this case, if one likes the brand, one may be more likely to take risks and behave rashly as a way to invite in the brand, even if it means deviating (temporarily) from the goal of safety. On the other hand, when Volvo the servant brand is brought to life, and one dislikes it, one may be more likely to signal to the servant brand that it is not needed and thus to behave in a brand-consistent manner of caution and reserve.

In sum, therefore, the one paramount goal that is triggered by anthropomorphizing the brand is to have a successful social interaction with the humanized entity, not necessarily the attainment of the consumption benefit implied by the brand as a commercial entity. This is in keeping with findings from prior research examining the effects of goal primes that notes that "the goal priming context need not be associated with the goal pursuit context . . . the goal prime exerts an influence because it activates information that is applicable in a common behavioral context, even though the goal priming context is unrelated to the behavioral context" (Laran et al. 2008, 655). Thus, we propose that the brand

prime will suggest, based on brand liking and brand role, a specific behavioral action for a successful social interaction with the anthropomorphized brand, which will be observed in subsequent contexts unrelated to brand consumption. Hence, we may prime Volvo, which triggers behaviors related to acting prudently or recklessly depending on liking and perceived brand role, and we observe these behaviors in a subsequent gambling task.

### Pilot Studies

To get some empirical validation for this intuition on the assimilative and contrastive behavioral response to the partner versus servant roles being moderated by liking, we conducted a set of pilot studies. The first pilot study was conducted among 155 undergraduate students at the University of Toronto to examine if, in fact, there are certain interpersonal interactions that are more likely to be seen as a partner relationship and some other more likely to be seen as a servant relationship. Results show that people such as a doctor, a nutritionist, a tennis coach, a professor, a priest, a lawyer, a tutor, a real-estate agent, a personal trainer, an interior designer, a physiotherapist, a music teacher, and an income-tax consultant are all seen more as partners (all  $p < .01$ ). In contrast, people such as a taxi driver, a mechanic, a dog walker, a janitor, a babysitter, an airline hostess, a hairstylist, a sales rep, and an electrician are all seen more as servants (all  $p < .01$ ). While some of the occupations are naturally associated with a partner role and others with a servant role, we were interested in examining the extent to which manipulating the same occupation into partner versus servant roles would lead to different expectations about how people are likely to behave. Consequently, we conducted a separate pilot study to examine the extent to which people will assimilate or contrast their behavior in their interaction with a partner or a servant depending upon whether they like or dislike this person.

We showed a group of 86 undergraduate students a brief scenario describing four different people (a tennis coach, a tutor, a proofreader, and a party planner), all presenting themselves in a servant role. Further, the participants were told that they either liked this person a lot or disliked this person. Finally, they were asked to state, on a 9-point scale, the extent to which they were likely to present themselves as someone who has similar characteristics as the person in the servant role (e.g., fast reader, creative party planner). Combined results for these four scenarios showed that those who liked the servants were less likely to assimilate with the servant's characteristics than those who disliked the servants ( $M_{\text{Like}} = 5.15$ ,  $M_{\text{Dislike}} = 5.87$ ;  $F(1, 84) = 14.26$ ,  $p < .001$ ). Using the same four jobs, a different test was conducted in which the person was described as a partner (a tennis buddy, a group project member helping you study, a cowriter who also proofreads for you, and a co-office bearer on a student society jointly organizing a party), in which a group of 84 participants were told that they either liked the person concerned or disliked the person. As before, they were asked to state, on a 9-point scale, the extent to which

they were likely to present themselves as having similar characteristics as the person described in the partner role (e.g., serious and careful, interested in cross-cultural issues). Combined results for the four scenarios show that those who liked the partners were more likely to assimilate with the partner's characteristics than those who disliked the partners ( $M_{\text{Like}} = 6.52$ ,  $M_{\text{Dislike}} = 5.19$ ;  $F(1, 82) = 22.57$ ,  $p < .001$ ). These two pilot test results thus provide a strong initial validation to our thesis that people will assimilate behaviors in line with those of their liked partners but contrast away from those of their liked servants.

## Hypotheses

To summarize, when anthropomorphized, a partner brand that a consumer likes will encourage the consumer to assimilate the behavior suggested by the brand in a subsequent unrelated context since working collaboratively is the most effective way to interact with a liked partner; similarly, a partner brand that a consumer dislikes will encourage a contrastive behavior from the consumer in the subsequent unrelated context since that is the most effective way to persuade a disliked partner to go away. The brand's role of a servant rather than partner suggests the opposite effects. A servant brand that a consumer likes will encourage a contrastive behavior in a subsequent unrelated context since the most effective way to draw the humanized brand closer is to allow the servant brand to do its job. Finally, a servant brand that one dislikes will suggest behaving in an assimilative manner since the most effective way to make the brand go away is to preclude the need for the brand to be around.

These assertions are consistent with, and can also account for, the findings of Fitzsimons et al. (2008). Both Apple and Disney are ready candidates for anthropomorphizing by consumers, and, in fact, Apple has been anthropomorphized in a long-running advertising campaign (i.e., I'm a Mac), while the Disney brand derives from a real person as well as many lovable characters, such as Mickey Mouse, associated with the brand. Further, admired brands like Apple and Disney are more likely to be seen in a partnership rather than a servant role, as well as more likely to be liked rather than disliked, resulting in the assimilative effect reported by Fitzsimons et al. (2008).

The prediction for nonanthropomorphized brands is less clear. On the one hand, we might expect no effect of brand priming given prior research that has failed to show social effects for things (e.g., Lingle et al. 1984). In this case, we would not expect an effect for liking since there is no fundamental effect of brand priming to moderate. Alternatively, if the brand image is extremely well developed, a cognitive account based on the perception-behavior link may apply (Bargh et al. 1996). That is, cognitive representation of the brand image may spread to the representation of the behavior associated with the image increasing the likelihood of consumers producing that behavior. However, for nonanthropomorphized brands, we still do not expect moderation of the effect depending on liking because the spreading acti-

vation process is not dependent on attitude or goals with respect to the brand. Finally, we do not expect any effect of brand role since the proposed differences due to partner or servant roles for anthropomorphized brands are due to the brand being perceived like a human. For brands that are seen as objects or things, we do not expect brand role to act as a moderating variable. Thus, our first hypothesis, which applies to brands that are seen as being in partnership with the consumer, identifies a two-way interaction of anthropomorphism and liking as follows:

**H1:** For partner brands that are liked, consumers are more likely to assimilate their behavior to the brand image when primed with an anthropomorphized brand compared to a nonanthropomorphized brand; for partner brands that are disliked, consumers are more likely to contrast their behavior from the brand image when primed with an anthropomorphized brand compared to a nonanthropomorphized brand.

Our second hypothesis, for a brand perceived as a servant to the consumer, makes the opposite predictions:

**H2:** For servant brands that are disliked, consumers are more likely to assimilate their behavior to the brand image when primed with an anthropomorphized brand compared to a nonanthropomorphized brand; for servant brands that are liked, consumers are more likely to contrast their behavior from the brand image when primed with an anthropomorphized brand compared to a nonanthropomorphized brand.

In what follows, we report three studies examining these hypotheses. The first two studies use people's naturally occurring sense of the role assigned to actual brands, and we assess the role associated with the specific chosen brands using pretests. Study 1 tests hypothesis 1 by examining the effects of brands seen in a partner role, while study 2 tests hypothesis 2 by examining the effects of brands seen in a servant role. In both studies, the key comparison is between consumers' behavior when primed with a brand that is anthropomorphized versus primed with a brand that is seen as an object. Support for our hypotheses would be revealed in an interaction between conception of the brand (anthropomorphized or not) and liking, with moderation by liking observed only when the brand is seen as human. Finally, study 3 goes beyond measuring the brand's naturally perceived role, as was done in studies 1 and 2, by contextually manipulating the partner and servant roles within a single brand context. This study thus helps us get further support for the proposed theory by making direct comparisons between partner and servant roles within the same study.

## STUDY 1: HEALTHY AND UNHEALTHY PARTNER BRANDS

Our first study examines two partner brands, Krispy Kreme and Kellogg's, chosen because the key associations with them

were the opposite of one another. Assimilation to the Krispy Kreme prime would mean acting unhealthily, while assimilation to the Kellogg's prime would mean acting healthily. Hence, we could use the same dependent variable (a measure of healthfulness or unhealthy indulgence) with the two brands standing as conceptual replicates but with results expected to reverse across the two brands.

The selection of these brands and those for study 2, which focused on servant brands, was based on the results of a pretest conducted among a group of 104 undergraduate students at the University of Toronto. Participants in this pretest were shown one of two sets of 50 brand names each, such that half the participants saw one set of 50 brand names, and the other half saw a different set of 50 brand names. Participants were asked to indicate the first two words/associations that came to mind as they read each of the 50 brands. Across the 52 participants, a total of 104 associations for each of the brand names were generated. We restricted selection of brands for our studies to those with a single dominant association; over 50% to one association and no other association (other than product category or price mentions) greater than 10%.

We also conducted pretests with separate groups of participants from the same university to assess the extent to which the two brands were seen in a partnership role (like a partner, works with the consumer, coproduces) and a servant role (like a servant, an assistant, like an outsource), using 1–7 scales. Pair-wise comparisons showed that participants were more likely to see these brands as partners versus servants (for Krispy Kreme: 4.35 vs. 3.94;  $t(1, 40) = 3.13, p < .01$ ; for Kellogg's: 4.87 vs. 4.22;  $t(1, 47) = 4.29, p < .001$ ).

### Design, Stimuli, and Procedure

Seventy-three students from the University of Toronto who participated for course credit answered questions about Krispy Kreme (study 1A) and 70 students answered questions about Kellogg's (study 1B). Participants in these studies were told that they would be responding to a variety of short studies being conducted by different researchers and, indeed, the materials presented participants related to several unrelated experiments. Both studies 1A and 1B used a two-factor design with brand conception (anthropomorphism, object) being manipulated and likeability being measured as the between-participants factors.

For the first of the studies related to the present research, participants were told that the researcher was interested in finding out how people think about different brands and products. In the anthropomorphism condition, participants were encouraged to imagine that the brand had come to life as a person and to think of the sort of person the brand would be in terms of its personality, physical appearance, opinions, approach, profession, conversational style, and so forth. In the object condition, the participants were instructed to describe the brand in as much detail as possible and were encouraged to think of all the features, benefits, characteristics, and different aspects of the brand they may have heard

about. The participants had up to two pages of space to write their open-ended responses. To ensure that this manipulation did not lead to any differences in engagement with the task or degree of elaboration, a comparison of the word count across the two conditions showed no differences either for Krispy Kreme ( $M_{\text{Anthro}} = 65.8, M_{\text{Object}} = 61.8$ ;  $F(1, 72) = 1.01, p = \text{NS}$ ) or for Kellogg's ( $M_{\text{Anthro}} = 61.9, M_{\text{Object}} = 59.8$ ;  $F(1, 69) < 1, p = \text{NS}$ ).

Next, the participants were asked to respond to a short scenario purportedly designed by another researcher to study decision-making skills of university students when facing everyday issues. The scenario asked them to imagine that "you are going for a class and that there is a bit of a lineup for the elevator. It has been a long day and you are feeling somewhat tired. The stairs to the third floor were close at hand." They were asked to respond on a 7-point scale on their likelihood of waiting for the elevator (1) or taking the stairs (7). This question was the dependent variable for our main study. It was hypothesized that, in keeping with hypothesis 1, participants who anthropomorphized the Krispy Kreme brand would behave in an assimilative manner and show a lower likelihood to take the stairs (less healthy behavior) if they liked the brand and behave in a contrastive manner by showing a greater likelihood to take the stairs (healthy behavior) if they disliked the brand. In the same way, participants who anthropomorphized the Kellogg's brand would behave in an assimilative manner by displaying a greater likelihood to take the stairs if they liked the brand (more healthy behavior) but behaving in a contrastive manner by displaying a lower likelihood to take the stairs (less healthy behavior) if they disliked the brand. Thus, while the participants exposed to the Krispy Kreme and Kellogg's brands are predicted to behave in completely opposite ways because the two brands are on the opposing ends of the healthy-trait spectrum, these expected results would in fact provide conceptual replication of the effect.

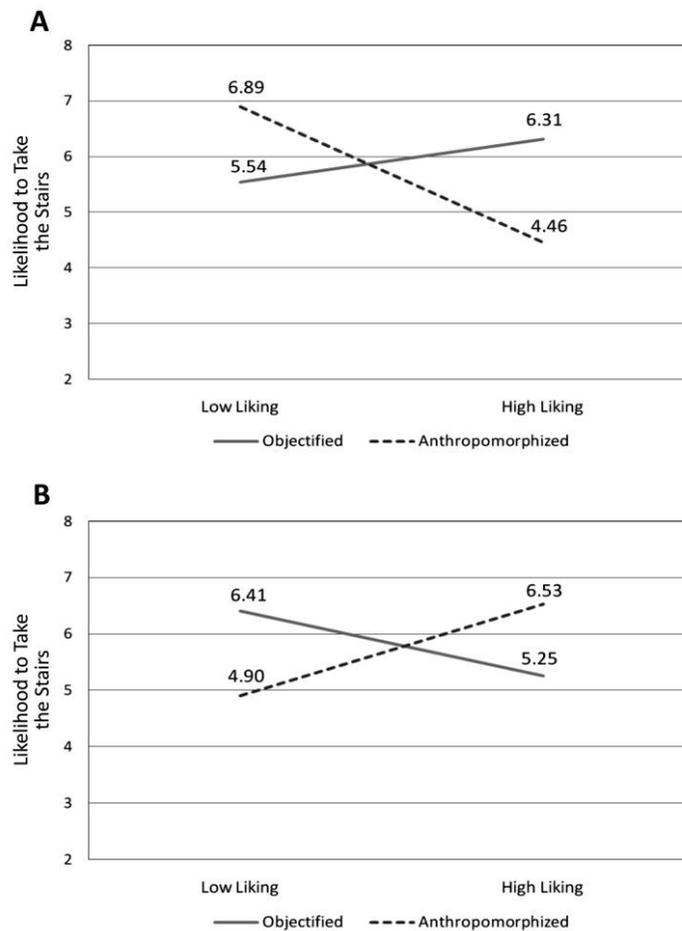
Following this question, the participants were asked to think back to Krispy Kreme (or Kellogg's) and to rate their liking for the brand. Three questions (like the brand, admire, fit in your life) were combined into a single "liking" measure ( $\alpha_{\text{Krispy Kreme}} = .82$ ;  $\alpha_{\text{Kellogg's}} = .72$ ). Next, a number of other unrelated studies were administered, after which a few demographic measures were taken. Finally, the participants were debriefed and thanked for their participation.

### Results

Data were analyzed separately for the two brands and will be reported as such as studies 1A and 1B. Since our measure of liking was taken subsequent to the brand conception manipulation, it was important to assess if there were any significant differences in brand liking due to brand conception. An ANOVA conducted across the brand conception conditions with brand liking as the dependent variable showed that brand liking was no different across the anthropomorphism and object condition for Krispy Kreme ( $M_{\text{Anthro}} = 3.76, M_{\text{Object}} = 3.24$ ;  $F(1, 72) = 1.88, p > .10$ ), and for Kellogg's ( $M_{\text{Anthro}} = 5.10, M_{\text{Object}} = 5.21$ ;  $F(1, 69) < 1, p > .60$ ).

FIGURE 1

## STUDY 1: KEY RESULTS



*Study 1A: Krispy Kreme.* To test hypothesis 1, a regression analysis was first run with a dummy variable for brand conception (anthropomorphism = 1, object = 0), the continuous brand liking measure, and the interaction of the two as the three independent variables. The likelihood to take the stairs was included in the regression as the dependent variable. Results show that there was a significant effect of brand conception ( $\beta = .61$ ,  $t(1, 69) = 2.12$ ,  $p < .05$ ) and a nonsignificant effect of liking ( $\beta = .15$ ,  $t(1, 69) = .93$ ,  $p > .30$ ). More importantly, there was a significant interaction of brand conception and liking ( $\beta = -.86$ ,  $t(1, 69) = -2.61$ ,  $p < .01$ ). In order to decompose the interaction, further analysis was conducted at one and a half standard deviations above and below the mean of liking, as suggested by prior research (Aiken and West 1991; Fitzsimons 2008). Results show that at higher levels of liking (1.5 SD above the mean) participants in the anthropomorphism condition were less likely to take the stairs than those in the object condition, consistent with assimilation of the unhealthy

brand association ( $M_{\text{Anthro}} = 4.46$ ,  $M_{\text{Object}} = 6.31$ ;  $t(1, 69) = 2.51$ ,  $p < .05$ ), but at lower levels of liking (1.5 SD below the mean) they were more likely to take the stairs, a contrast effect, although this effect was only marginally significant ( $M_{\text{Anthro}} = 6.89$ ,  $M_{\text{Object}} = 5.54$ ;  $t(1, 69) = 1.83$ ,  $p = .07$ ; see fig. 1A).

To get a better sense of the default level of participants' likelihood to take the stairs and to rule out effects due to different inclinations to be fit for participants who like or dislike Krispy Kreme, a separate group of 87 participants were administered the dependent variable as a control. This set of participants, which was drawn from the same participant pool as those in our main study and recruited in the same fashion, was just shown the short scenario about waiting for the elevator and the three-item brand liking measure without being given the initial brand task relating to object or anthropomorphism manipulation. Regression analyses were conducted comparing the anthropomorphism and control conditions. Results show that there was a significant

interaction effect of brand conception and liking ( $\beta = -.59$ ,  $t(1, 120) = -2.28$ ,  $p < .05$ ) and a main effect of brand conception ( $\beta = .49$ ,  $t(1, 120) = 2.05$ ,  $p < .05$ ), but no main effect of liking ( $\beta = .02$ ,  $t(1, 120) = .21$ ,  $p > .80$ ). As before, further analysis was conducted at one and a half standard deviations above and below the mean of liking. Results show that at higher levels of liking (1.5 SD above the mean), the difference between the anthropomorphism and control conditions is marginally significant ( $M_{\text{Anthro}} = 4.62$ ,  $M_{\text{Control}} = 5.75$ ;  $t(1, 120) = -1.93$ ,  $p < .06$ ), and at lower levels of liking (1.5 SD below the mean), the difference between the anthropomorphism and control conditions is also marginally significant ( $M_{\text{Anthro}} = 6.89$ ,  $M_{\text{Control}} = 5.63$ ;  $t(1, 120) = 1.86$ ,  $p < .07$ ).

Finally, a comparison of the object and control conditions was conducted to examine the extent to which seeing the brand as an object resulted in significant differences in the participants' likelihood to assimilate or contrast with the default level of associated brand trait. A regression analysis showed that there was no significant interaction effect of brand conception and liking ( $\beta = .13$ ,  $t(1, 119) = .58$ ,  $p > .50$ ) nor any significant main effects of either brand conception ( $\beta = -.06$ ,  $t(1, 119) = .58$ ,  $p > .50$ ) or of liking ( $\beta = .02$ ,  $t(1, 119) = .21$ ,  $p > .80$ ).

This last set of results, which reveals that the object and control conditions do not differ significantly, provides a way for us to simplify the presentation of results going forward. The results of the comparison for the object and control conditions for all subsequent studies also showed no significant differences across the two groups. As a consequence, we are able to use the object condition as a control condition to indicate assimilation or contrast of the brand association, holding constant possible differences in default tendencies for the target behavior depending on brand liking. For reasons of brevity, therefore, for all subsequent studies, we will report detailed results for the comparison between the anthropomorphism and object conditions and only report abbreviated results for the other comparisons (i.e., between anthropomorphism and control conditions and between object and control conditions).

*Study 1B: Kellogg's.* To test hypothesis 1, a regression analysis was first run with a dummy variable for brand conception (anthropomorphism = 1, object = 0), the continuous brand liking measure, and the interaction of the two as the three independent variables. The likelihood to take the stairs was included in the regression as the dependent variable. Results show that there was a significant effect of brand conception ( $\beta = -1.53$ ,  $t(1, 64) = -2.19$ ,  $p < .05$ ) and a nonsignificant effect of liking ( $\beta = -.23$ ,  $t(1, 64) = -1.13$ ,  $p > .20$ ). More importantly, there was a significant interaction of brand conception and liking ( $\beta = 1.59$ ,  $t(1, 64) = 2.21$ ,  $p < .05$ ). Further analysis was conducted at one and a half standard deviations above and below the mean of liking. Results show that at higher levels of liking (1.5 SD above the mean), consistent with assimilation, participants were more likely to take the stairs in the anthropomorphism than in the object condition, although this effect

was only marginally significant ( $M_{\text{Anthro}} = 6.53$ ,  $M_{\text{Object}} = 5.25$ ;  $t(1, 64) = 1.85$ ,  $p < .07$ ), but at lower levels of liking (1.5 SD below the mean), they were less likely to take the stairs in the anthropomorphism condition, a contrast effect ( $M_{\text{Anthro}} = 4.90$ ,  $M_{\text{Object}} = 6.41$ ;  $t(1, 64) = 2.01$ ,  $p < .05$ ; see fig. 1B).

As was done before, the separate group of 174 participants, recruited in the same manner and from the same pool as participants in the main study, were administered the dependent variable as a control. Results of a regression analysis comparing the anthropomorphism and control groups show that there was a significant interaction effect of brand conception and liking ( $\beta = .66$ ,  $t(1, 205) = 2.01$ ,  $p < .05$ ) and a marginally significant effect of brand conception ( $\beta = -.56$ ,  $t(1, 205) = -1.73$ ,  $p = .09$ ), but no effect of liking ( $\beta = -.09$ ,  $t(1, 205) = -1.16$ ,  $p > .20$ ). Finally, a comparison of the object and the control groups showed that there were no significant main effects of liking ( $\beta = -.09$ ,  $t(1, 206) = -1.18$ ,  $p > .20$ ), or brand conception ( $\beta = .26$ ,  $t(1, 206) = .59$ ,  $p > .50$ ), or of the interaction of the two ( $\beta = -.16$ ,  $t(1, 206) = -.36$ ,  $p > .60$ ). Thus, the brand's conception as an object was no different from the control condition.

## Discussion

Results of studies 1A and 1B support hypothesis 1. When the two partner brands were anthropomorphized, liking moderated the effect of the brand prime. Behavior of the participants assimilated to the brand prime when they liked the brand but contrasted from it when they disliked the brand. In these studies, we used two different brands with opposing trait associations, a pattern that allows us to rule out generic effects for being asked to anthropomorphize the brand on tendency to behave in a healthy or energetic way. In particular, assimilation for an anthropomorphized Kellogg's in the liking condition was reflected by greater inclination to take the stairs but assimilation for an anthropomorphized Krispy Kreme in the liking condition was reflected in greater tendency to wait for the elevator. As expected, our results also find that participants who do not anthropomorphize the brand, but instead think of it as an object, do not show any effect of liking or disliking for the brand in their subsequent behavior. For both Krispy Kreme and Kellogg's brands, there is no significant difference in the behavior of participants in the object condition compared to those in the control condition.

One key premise of the Cesario et al. (2006) framework is that the behavioral responses are determined by what is deemed to be the most effective way to interact with a member of the primed category. In study 1, the two brands—Krispy Kreme and Kellogg's—were selected such that they were both perceived as partners to the consumer, and we observed an assimilative behavior from consumers when primed with a brand they anthropomorphized and liked. As noted in hypothesis 2, we expect the opposite effect of the anthropomorphized brand prime if the brand is seen as a servant, specifically, contrasting the association

when the brand is liked and assimilating it when the brand is disliked.

## STUDY 2: SAFE AND KNOWLEDGEABLE SERVANT BRANDS

We again used two brands to test our predictions, drawn from our pretest of trait associations described above. Study 2A focused on the Discovery Channel, which is associated with knowledge and study 2B focused on Volvo, which is associated with safety. Although these two brands have distinct traits associated with them, and consequently do not span the opposite ends of one particular trait as was the case in study 1, the advantage of having two brands from very different categories (entertainment, automobiles) and with very different associated traits (knowledge, safety) is that they would provide a useful replication of the predicted effect in vastly different contexts and using different dependent variables.

Our intuition was that these brands would be perceived as servants instead of partners. Volvo keeps the customer safe regardless of the customer's actions. The Discovery Channel is a source of knowledge, providing this helpful service to its viewers "like Merlin serving King Arthur," in the words of one student to whom we described this work. These intuitions were confirmed in a pretest, like one described for study 1, assessing the extent to which the two brands were seen in a servant role (like a servant, works for the consumer, work delegated) and a partner role (like a partner, colleague, friend), using 1–7 scales. Pair-wise comparisons showed that participants' mean ratings were higher for the brand in a servant role than in a partner role for Discovery Channel (5.47 vs. 4.82;  $t(1, 44) = 3.59, p < .001$ ) and for Volvo (4.88 vs. 4.48;  $t(1, 46) = 2.26, p < .05$ ).

### Design, Stimuli, and Procedure

One hundred and sixty-four students from the same university as study 1 participated in study 2A, involving the Discovery Channel, and 188 students participated in study 2B, involving Volvo. Both studies used brand conception (anthropomorphism, object) and likeability as the two between-participant factors, of which brand conception was manipulated and likeability was measured, as in study 1. As before, to ensure that the anthropomorphism manipulation did not lead to any differences in elaboration, a comparison of the word count across the two conditions showed no differences either for Discovery Channel ( $M_{\text{Anthro}} = 55.1, M_{\text{Object}} = 56.2; F(1, 163) < 1, p > .80$ ) or for Volvo ( $M_{\text{Anthro}} = 36.1, M_{\text{Object}} = 30.6; F(1, 187) = 2.51, p > .10$ ).

Next, the participants responded to the main dependent variable, which was presented as an unrelated study being run by a different researcher, and, as noted above, these measures differed for the two brands. As a measure of assimilation or contrast with the association to knowledge, participants who were exposed to the Discovery brand name gave their responses to 15 questions selected from a set of sample SAT (Reasoning Test, formerly called the Standard-

ized Admission Test) questions testing mathematical and verbal abilities. As a measure of assimilation or contrast to safety, participants who were exposed to the Volvo brand were presented with a gambling scenario that gave them a one in 1,000 chance to win \$2,000, and they were asked to indicate if they would choose the gamble or the sure amount—with a total of 17 levels of sure amounts sequentially increasing from \$1.00 to \$160.00. The level first marked by the participants as the sure amount at which they would switch from the gamble was deemed as their certainty equivalence for the gamble, and it was the dependent variable for study 2B.

Following this task, the participants were asked to think back to Discovery Channel (or Volvo) and to respond to the same set of three questions about their liking for the brand (like the brand, admire, fit in your life) as asked in study 1, along with two additional questions (embarrassing to be seen with [reversed], avoid being with [reversed]), all of which were combined into a single "liking" measure ( $\alpha_{\text{Discovery}} = .83$  and  $\alpha_{\text{Volvo}} = 0.82$ ). Participants then responded to several unrelated studies, provided demographic information, and were thanked and debriefed.

### Results

As before, to assess if there were any significant differences in brand liking due to brand conception, an ANOVA was conducted across the brand conception conditions with brand liking as the dependent variable. Results showed that brand liking was no different across the anthropomorphism and object condition for Discovery Channel ( $M_{\text{Anthro}} = 5.20, M_{\text{Object}} = 5.14; F(1, 162) < 1, p > .60$ ) but was significantly different for Volvo ( $M_{\text{Anthro}} = 4.49, M_{\text{Object}} = 4.11; F(1, 186) = 4.65, p < .05$ ). Although the significant effect of brand conception on liking for Volvo was rather unexpected, the results are not necessarily problematic for our proposed theory since this effect seems to be an anomaly. In particular, as we will observe later in study 3, there was no effect of brand conception on brand liking for the Volvo brand.

*Study 2A: Discovery.* To test hypothesis 2, a regression analysis was first run with a dummy variable for brand conception (anthropomorphism, object), the continuous liking measure, and the interaction of the two as the three independent variables. The composite score on the 15 SAT questions was included in the regression as the dependent variable. Results show that there was a significant effect of brand conception ( $\beta = .905, t(1, 161) = 3.84, p < .001$ ) and a nonsignificant effect of liking ( $\beta = .10, t(1, 161) = 0.87, p > .30$ ). More importantly, there was a significant effect of the interaction of brand conception and liking ( $\beta = -.92, t(1, 161) = -3.51, p < .001$ ). Further analysis was conducted at one and a half standard deviations above and below the mean of the liking measure. Results show that at higher levels of liking (1.5 SD above the mean), participants' scored significantly lower in the anthropomorphism condition compared to the object condition, a contrast effect ( $M_{\text{Anthro}} = 6.66, M_{\text{Object}} = 8.00; t(1, 161) = -2.10,$

$p < .05$ ), and at lower levels of liking (1.5 SD below the mean), participants scored significantly higher in the anthropomorphism condition, an assimilation effect ( $M_{Anthro} = 9.69$ ,  $M_{Object} = 7.31$ ;  $t(1, 161) = 3.82$ ,  $p < .001$ ; see fig. 2A).

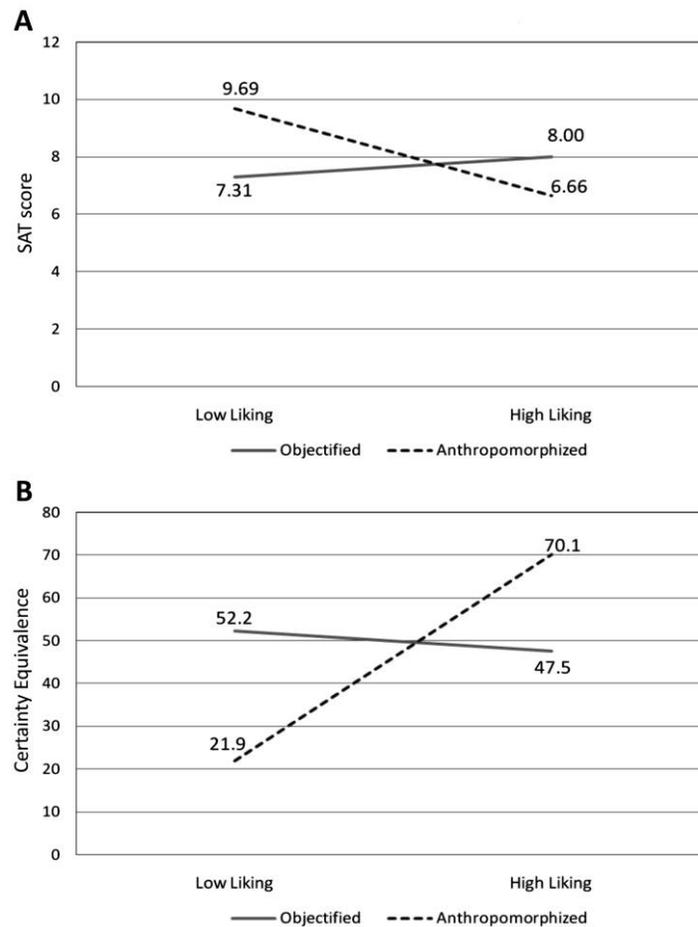
As was done before, a separate group of 174 participants, recruited in the same manner and from the same pool as participants in the main study, was administered the dependent variable as a control. Results of a regression analysis comparing the anthropomorphism and control groups show that there was a significant interaction effect of brand conception and liking ( $\beta = -.59$ ,  $t(1, 268) = -2.72$ ,  $p < .01$ ) and a marginally significant effect of brand conception ( $\beta = .45$ ,  $t(1, 268) = 1.91$ ,  $p = .058$ ), but no effect of liking ( $\beta = -.02$ ,  $t(1, 268) = -.26$ ,  $p > .70$ ). Finally, a comparison of the object and the control groups showed that there were no significant main effects of liking ( $\beta = -.02$ ,  $t(1, 255) = -.25$ ,  $p > .80$ ), or brand conception ( $\beta = -.32$ ,  $t(1, 255) = -1.36$ ,  $p > .10$ ), or of the interaction of the

two ( $\beta = .16$ ,  $t(1, 255) = .75$ ,  $p > .40$ ). Thus, the brand's conception as an object was no different from the control condition.

*Study 2B: Volvo.* In this study, lower certainty equivalence corresponds to assimilation to the brand's association with safety. Regression analysis on participants' certainty equivalence as the main dependent variable and brand conception, brand liking, and the interaction of the two as the three independent variables revealed a significant effect of brand conception ( $\beta = -.78$ ,  $t(1, 185) = -2.96$ ,  $p < .01$ ), a nonsignificant effect of liking ( $\beta = -.037$ ,  $t(1, 185) = -.35$ ,  $p > .70$ ), and a significant effect of the interaction of brand conception and liking ( $\beta = .84$ ,  $t(1, 185) = 2.88$ ,  $p < .01$ ). As before, further analysis was conducted at one and a half standard deviations above and below the mean of liking. Results show that at higher levels of liking (1.5 SD above the mean), participants in the anthropomorphism condition contrasted the association and demanded a signifi-

FIGURE 2

STUDY 2: KEY RESULTS



cantly higher certainty equivalence than those in the object condition ( $M_{\text{Anthro}} = 70.1$ ,  $M_{\text{Object}} = 47.5$ ;  $t(1, 185) = 1.97$ ;  $p = .05$ ), and at lower levels of liking (1.5 SD below the mean), participants in the anthropomorphism condition assimilated the association, taking on less risk as reflected in a significantly lower certainty equivalence ( $M_{\text{Anthro}} = 21.9$ ,  $M_{\text{Object}} = 52.2$ ;  $t(1, 185) = -1.97$ ;  $p = .05$ ; see fig. 2B).

As was done before, a separate group of 171 participants, recruited as before, responded to the dependent variable as a control. Results of a regression analysis comparing the anthropomorphism and control groups show that there was a significant interaction effect of brand conception and liking ( $\beta = .49$ ,  $t(1, 255) = 2.52$ ,  $p < .05$ ) and a significant effect of brand conception ( $\beta = -.46$ ,  $t(1, 255) = -2.39$ ,  $p < .05$ ), but no effect of liking ( $\beta = .17$ ,  $t(1, 255) = .86$ ,  $p > .30$ ). Finally, a comparison of the object and the control groups showed that there were no significant main effects of liking ( $\beta = .17$ ,  $t(1, 255) = .86$ ,  $p > .30$ ), or brand conception ( $\beta = .17$ ,  $t(1, 255) = .89$ ,  $p > .30$ ), or of the interaction of the two ( $\beta = -.14$ ,  $t(1, 255) = -.81$ ,  $p > .40$ ). Thus, the brand's conception as an object was no different from the control condition.

## Discussion

The results of studies 2A and 2B show that for servant brands such as Discovery Channel and Volvo anthropomorphism leads to greater assimilation if participants dislike the brand than if they like it. This is an interesting, predicted reversal of the effect observed in study 1 in keeping with the different perceived role of the brands in study 2. By assimilating their behavior to the brand's image, consumers obviate any need for the servant brand to take care of the task on their behalf—an effective social ploy to get rid of a disliked brand-person. With no clear purpose, the disliked, anthropomorphized brand would presumably slink off. However, when the servant is liked, consumers contrast the behavior associated with the brand, signaling a strong need on that dimension, which should serve as an effective ploy to draw in the humanized entity. The effect is much the same as the clichéd ploy of “snaring” a love interest by feigning ignorance on a particular strength of the desired person.

This reversal of the effect of liking within the anthropomorphism condition across the partner and servant role—assimilation for liked partners but contrast for liked servants—is not only consistent with our account based on motivated preparation to interact but also serves to rule out alternative explanations based on differences in processing for the anthropomorphism and object conditions. That is, looking at either study 1 or 2 in isolation, the divergence in effects between the anthropomorphism and object conditions might be attributed to greater elaboration, vividness, or other processing differences produced by the anthropomorphism instructions. According to such accounts, the anthropomorphism instructions simply lead to some sort of greater engagement with the task, which allows liking to produce an effect, compared to the bland object condition.

However, these accounts fail to predict the reversal of the effect for liking, considering just the anthropomorphism condition, for partner brands in study 1 compared to servant brands in study 2. In particular, we know of no account other than the one we propose that would predict a reversal of the effect of liking depending on brand role.

This argument, however, requires us to look across studies and across brands. We therefore thought it important to directly examine the moderating effect of role and likeability in a study within the context of one brand. Consequently, study 3 was designed to directly examine the extent to which the effects will be replicated for the same brand that is manipulated to be seen as a servant and a partner. Thus, under the guise of a pretest of an advertising slogan for Volvo, study 3 manipulates the brand's role of being a partner or a servant to the consumer by exposing the consumers to one of two alternative slogans: “Volvo. Works with You” or “Volvo. Works for You.” It is expected that when consumers are told the brand works with you, they would see it as a partner, leading to assimilation of the brand association when they like it. By contrast, we expected that when consumers are told the brand works for you, they would think of it as a servant, and so be more likely to assimilate the association if they dislike the brand.

## STUDY 3: A SAFE CAR AS A PARTNER OR A SERVANT

### Design, Stimuli, and Procedure

One hundred and ninety-four students from the same university as in studies 1 and 2 participated in this study and were provided the same general instructions. The study was a three-factor design, with brand conception (anthropomorphism, object), brand role (partner, servant), and likeability as the between-participants factors, of which brand conception and role were manipulated factors and likeability was a measured variable. Participants first encountered the anthropomorphism manipulation. As in the prior two studies, analysis of the number of words written revealed no difference in elaboration across the anthropomorphism and object conditions ( $M_{\text{Anthro}} = 74.1$ ,  $M_{\text{Object}} = 67.2$ ;  $F(1, 188) = 1.79$ ,  $p > .10$ ).

Next, participants were exposed to the manipulation of brand role under the pretext of a pretest being done for a new advertising tagline for Volvo. In the “partner” condition, the tagline was: “Volvo. Works with You. Helping You Take Care of What's Important,” while in the “servant” condition, the tagline was: “Volvo. Works for You. Taking Care of What's Important to You.” Participants then responded to a set of 10 items assessing their comprehension and evaluation of the slogan (which were all unrelated to the primary hypotheses of interest).

Subsequent to these questions, the participants responded to the certainty equivalence question like that used in study 2B, which served as the main dependent variable. Again, higher certainty equivalence was indicative of greater risk taking, and so higher scores would reflect contrast from the brand asso-

ciation with safety. Finally, participants responded to the same set of five questions assessing their likeability ( $\alpha = .83$ ) for the Volvo brand as used in study 2B (like, admire, fit in, embarrassing to be seen with [reversed], avoid being with [reversed]). As before, an analysis revealed that perceptions of brand liking did not differ across either the two brand conception conditions ( $M_{\text{Anthro}} = 4.46$ ,  $M_{\text{Object}} = 4.45$ ; ( $F(1, 190) < 1$ ,  $p > .90$ ) or across the two brand role conditions ( $M_{\text{Partner}} = 4.35$ ,  $M_{\text{Servant}} = 4.55$ ; ( $F(1, 190) = 2.32$ ,  $p > .10$ ). Finally, after responding to a few demographic questions, the participants were debriefed and thanked for their participation.

## Results

A regression analysis was first run with a dummy variable for brand conception (anthropomorphism, object), brand role (partner, servant), the continuous liking measure, the three two-way interactions, and the one three-way interaction as the seven independent variables and the certainty equivalence amounts as the dependent variable. Results show that there were no main effects of brand role ( $\beta = -.46$ ,  $t(1, 188) = -1.25$ ,  $p > .20$ ) or liking ( $\beta = -.17$ ,  $t(1, 188) = -1.32$ ,  $p > .19$ ) but that there was a significant effect of brand conception ( $\beta = -1.12$ ,  $t(1, 188) = -2.68$ ,  $p < .01$ ). There were also significant effects of brand conception and brand role interaction ( $\beta = 1.52$ ,  $t(1, 188) = 3.14$ ,  $p < .01$ ) and brand conception and liking interaction ( $\beta = 1.25$ ,  $t(1, 188) = 3.02$ ,  $p < .01$ ) but a nonsignificant effect of brand role and liking interaction ( $\beta = .50$ ,  $t(1, 188) = 1.37$ ,  $p = .17$ ). More importantly, however, there was a significant three-way interaction of brand conception, brand role, and liking ( $\beta = -1.63$ ,  $t(1, 188) = -3.51$ ,  $p < .001$ ).

For further understanding, a separate analysis was done for the two brand roles, that is, for Volvo as a partner and for Volvo as a servant. Regression results showed that the interaction effect of brand conception and liking is significant when the brand was seen as a partner ( $\beta = -.78$ ,  $t(1, 84) = -1.98$ ,  $p = .05$ ) such that at higher levels of liking (1.5 SD above the mean), participants accepted a lower certainty equivalence for the partner brand in the anthropomorphism condition compared to the object condition ( $M_{\text{Anthro}} = 18.7$ ,  $M_{\text{Object}} = 52.7$ ;  $t(1, 84) = -1.96$ ,  $p = .05$ ) but that at lower levels of liking (1.5 SD below the mean), participants preferred a higher certainty equivalence, although this difference was not significant ( $M_{\text{Anthro}} = 58.7$ ,  $M_{\text{Object}} = 42.3$ ;  $t(1, 84) = 1.23$ ,  $p > .20$ , see fig. 3A). Similarly, when the brand is seen in a servant role, the interaction of brand conception and liking is significant ( $\beta = 1.24$ ,  $t(1, 97) = 2.96$ ,  $p < .01$ ). Results show that at higher levels of liking (1.5 SD above the mean), participants indicated a higher certainty equivalence in the anthropomorphism condition compared to the object condition ( $M_{\text{Anthro}} = 83.0$ ,  $M_{\text{Object}} = 33.4$ ;  $t(1, 97) = 3.11$ ,  $p < .01$ ) but at lower levels of liking (1.5 SD below the mean) they accepted a lower certainty equivalence ( $M_{\text{Anthro}} = 24.1$ ,  $M_{\text{Object}} = 55.6$ ;  $t(1, 97) = -1.96$ ,  $p = .05$ ; see fig. 3B). These results suggest that those who anthropomorphize Volvo as a partner are more likely to assimilate the brand association by displaying lower risk taking if they like the brand relative to if they dislike the brand. By contrast,

those who anthropomorphize Volvo as a servant are more likely to contrast away from the brand association by displaying greater risk taking if they like the brand relative to if they dislike the brand.

As before, a separate control group was run with a different but comparable set of 171 undergraduate students. Since the brand role manipulation was not administered on this control group, separate analyses were conducted for the two brand role conditions. For the brand as partner, regression revealed a marginally significant interaction of brand conception and likeability ( $\beta = .41$ ,  $t(1, 211) = 1.72$ ,  $p = .087$ ), with participants who liked Volvo being marginally more likely to show a lower certainty equivalence compared to the control, with those who disliked Volvo being no different across the anthropomorphism or control conditions. For the brand presented as servant, regression showed a significant interaction effect of brand conception and liking ( $\beta = -.56$ ,  $t(1, 209) = -2.08$ ,  $p < .05$ ), with participants who liked the brand seeking a significantly greater certainty equivalent amount in the anthropomorphism compared to the control condition but being no different across the two conditions if they disliked the brand. Finally, as expected, analysis of the object and control conditions shows no significant effects ( $p = \text{NS}$ ).

## GENERAL DISCUSSION

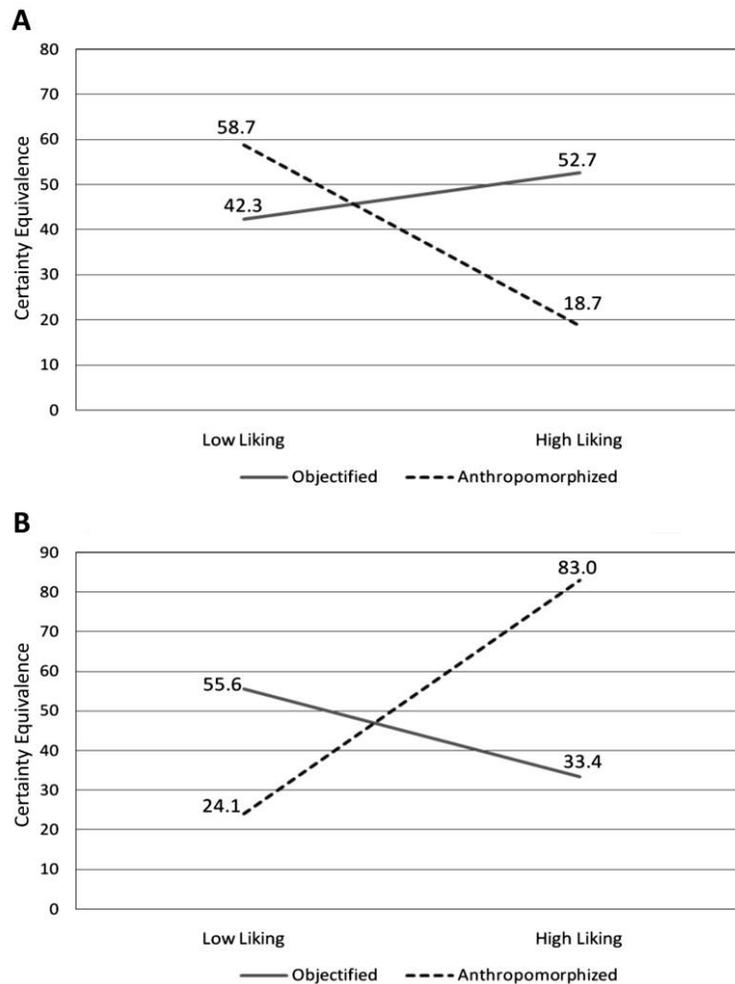
### Theoretical Implications of This Research

Results of our third study, like those of studies 1 and 2, provide evidence consistent with our theorizing that automatic behavior in response to a brand prime depends on whether or not it is anthropomorphized. For brands that are anthropomorphized, the priming effects follow the pattern suggested by a motivated preparation to interact, as detailed by Cesario et al. (2006). Our participants adopted the behavior best suited to an effective interaction, assimilating the behavior to the image of a partner brand that is liked, thereby signaling a willingness to team up; and contrasting a partner brand they disliked, signaling a wish that the brand should go away. When the brand was perceived as a servant, the pattern reversed. Participants contrasted the association of a liked servant, which signaled a strong need for the anthropomorphized brand and so a desire to draw the brand-person closer, whereas they assimilated the association of a disliked servant, thereby signaling to the brand-person "back off, you are not needed here." We observed no effect of prime when the brand was not anthropomorphized.

Our findings not only support our theorizing but also rule out possible alternative explanations based on processing differences between the anthropomorphism and object conditions. For example, one could argue that the anthropomorphism instructions increased the degree of elaboration or involvement in the task, thereby fostering an effect for liking that was lacking in the object conditions. Our measure of elaboration, number of words written about the brand in each condition, is not consistent with these accounts. More importantly, an explanation based on processing differences

FIGURE 3

STUDY 3: KEY RESULTS—VOLVO



caused by the anthropomorphism instructions cannot explain the reversal of the effect of liking across brand role within the anthropomorphism conditions observed across studies 1 and 2 and in study 3.

One might also argue that the anthropomorphism instructions led to a more vivid representation of the brand in the minds of participants. This account is more challenging to dismiss outright because vividness, at least in one sense, and anthropomorphism are conceptually linked. The word “vivid” is derived from a Latin root “vididus” meaning alive and lively and, indeed, one definition of vivid is “full of life; lively; animated” (*Random House Dictionary of the English Language*). In this sense, our anthropomorphism instructions also call for a more vivid representation. However, vivid may also be taken to mean “strikingly bright or intense, as color, light, etc.,” which is not strictly aligned with bringing the brand to life. In addition, research on

vividness in consumer behavior has largely followed the characterization provided by Nisbett and Ross (1980, 45): “Information may be described as vivid, that is likely to attract and hold our attention and to excite the imagination to the extent that is (a) emotionally interesting, (b) concrete and imagery provoking, and (c) proximate in a sensory, temporal, and spatial way” (e.g., Keller and Block 1997; Kisielius and Sternthal 1986; McGill and Anand 1989), a very broad definition that may be tied to affect, imagery, elaboration, even construal level, along with anthropomorphism.

An examination of the descriptions our participants provided for the brands also reveals the challenge in distinguishing the sense of vividness as being alive from other senses of the construct. For example, “[the brand] would walk like a geek” suggests animation as well as concrete, imagery-provoking terms. For this reason, we cannot fully rule out

vidiness, broadly defined, as an explanation for our findings, which would therefore be recast as “vivid representations of a liked partner brand lead to assimilation whereas vivid representations of liked servant brands lead to contrast.” However, we believe the perception of the brand as coming alive as a person has the most conceptual support. As we argued, seeing the brand as a person triggers a motivated preparation to interact and the different motivations for a successful interaction with a partner and a servant produces the reversal of effects across roles. By contrast, we know of no conceptual support for the reversal of effects for partner and servant brands depending on vividness in any other sense of the construct.

We also considered the possibility that our liking variable, because it was measured, led to selection effects with participants who liked the brand being more likely to produce the behavior regardless of the prime. This explanation also cannot account for the reversal of the liking effect in the partner and servant conditions in study 3, which focused on one brand. To further assess this alternative explanation, we also ran a control condition for each study consisting of participants who responded to the main dependent variable—for example, indicating whether they would take the stairs or not, stating their certainty equivalence for a gamble, and responding to SAT questions—and who also indicated how much they liked the target brand. In all cases, the pattern of results in the control condition did not differ significantly from that of the object condition. We accordingly relied on the object condition as a control for the effect of liking. Specifically, we compared the responses when people greatly liked the brand (1.5 SD above the mean of liking) in the anthropomorphism and object conditions and when they greatly disliked the brand (1.5 SD below the mean of liking). This comparison produced 12 “contrast” tests, six involving partner brands (Kellogg’s, Krispy Kreme, and Volvo<sub>study3/partner/manipulated</sub>) and six involving servant brands (Discovery Channel, Volvo<sub>study2/measured</sub>, and Volvo<sub>study3/servant/manipulated</sub>), 11 of which were significant or marginally so, while the remaining test was in the predicted direction.

As noted in the introduction, the purpose of the role variable in our studies was to test our theory regarding the mechanism producing brand priming effects. In particular, we expected the effect of liking to reverse for anthropomorphized brands for partner and servant brands because the best way to interact with such brands differed. We should note that support for the effect of this variable was provided by just four brands, two of which pretests indicated were perceived as partners (Kellogg’s and Krispy Kreme) and two of which were perceived as servants (Volvo and Discovery Channel). We were also able to manipulate the perception of one of these brands, Volvo, as a partner or a servant through an advertising tag line. Hence, while the pattern of results in our studies is consistent with our theorizing, we acknowledge that the evidence regarding the effect of this variable is fairly limited. This acknowledgment is important because the conception of brands as partners and servants is interesting in its own right and might,

in time, provide a useful contribution to the brand relationship literature, going far beyond our theoretical account. However, much future work is needed to validate the relevance and operation of this distinction. To the extent that this distinction appears valid, future studies might find it informative to examine if there is a particular pattern in what types or categories of brands are deemed to be partners and what types or categories are seen more like servants, or whether it all depends on the marketers’ positioning efforts with respect to the specific brand.

We had been uncertain about the possible effects in the object condition, but our findings are quite consistent across the studies. We saw no moderation by liking or role. Neither did we observe a main effect of brand prime compared to controls. Hence, we did not find evidence in favor of the perception-behavior link as suggested by Bargh et al. (1996) for any of the brands. Of course, this null effect does not rule out possible priming effect for objectified brands. Because the focus of our investigation was on understanding behavioral differences when the brand is anthropomorphized, we did not pursue possible moderators within the object condition. However, given the interesting findings from recent research suggesting different effects of brands on consumers’ self perception depending on their prior beliefs about personality (Park and Roedder John 2010), there is opportunity for future researchers to explore potential moderators of the behavioral effects of brand priming when the brand is perceived as an object.

As they presently stand, however, our findings already provide some insights for marketing managers. First, our data suggest that not all brands are automatically anthropomorphized. Second, brands may have a stronger effect on consumer behavior when they are anthropomorphized, and these effects may follow a complex pattern. Finally, the specific relationships that consumers develop with a brand uniquely influence the subsequent behavioral effects. Specifically, whether or not the consumer assimilates or contrasts the behavior associated with the brand image may depend on liking, brand role, and, possibly any other factor that would influence a perceived successful social interaction. For managers, merely anthropomorphizing the brand may not necessarily produce the kind of behavioral effects they expect if the precise role that consumers assign to this humanized brand is not fully understood.

## Relationship to Prior Research and Possible Future Investigations

Our research is based on prior findings reported by Cesario et al. (2006) that demonstrate the role of motivation to interact effectively as the underlying process that determines people’s subsequent behavioral response. As noted in the introduction, research by Fitzsimons et al. (2008) also highlights the importance of goals in a brand context. However, the motivational process proposed by these researchers is somewhat different. The model proposed by Fitzsimons et al. (2008) is based on the consumers’ goal to take on desired

characteristics, such as creativity or honesty, which are strongly associated with the brand. However, Cesario et al. (2006) suggest that priming effects are driven not by the desire to possess given characteristics but instead by the desire to achieve successful social interactions. These two lines of research may be aligned by noting that the most effective way to interact with an admired brand possessing a desired image may be to assimilate one's behavior to that image.

Our research shows that anthropomorphized brands may influence consumer behavior outside the brand context, affecting decisions about fitness, risk taking, and performance on an examination. These are striking effects, and they warrant further study. For example, how long do these effects last? How soon after being exposed to the brand does the behavior have to be enacted for consumers to exhibit this effect? Are these effects stronger for consumers who see themselves as loyal consumers compared to those who are not, or those who identify with the brand versus those who do not? Russell Belk (1988) helped the field to understand how consumers extend themselves through their possessions. Providing answers to these and related question may reveal the reverse, how possessions are extended through consumers.

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