

LOVE MAKES YOU REAL: FAVORITE TELEVISION CHARACTERS ARE PERCEIVED AS “REAL” IN A SOCIAL FACILITATION PARADIGM

Wendi L. Gardner
Northwestern University

Megan L. Knowles
The University of Georgia

Borrowing from the media, communication, and psychological literatures on parasocial, or one-sided, relationships to media figures, the current investigation examined the processes underlying the anthropomorphism of favorite television characters. Two studies tested the hypothesis that individuals' affection for television characters predicts their perceptions of realness. In Study One, participants reported their perceptions of and feelings toward either their favorite television character or an equally familiar, nonfavorite character, and results provided initial support for our hypothesis. In Study Two, participants were passively exposed to an image of either their favorite television characters or a control, nonfavorite character while completing well-learned and novel motor tasks. In line with classic social facilitation findings, participants in the “presence of” their favorite character (versus the nonfavorite character) demonstrated facilitation on the well-learned task and inhibition on the novel task. These studies suggest that feelings for the character may play an important role in encouraging the anthropomorphism of television characters.

“What is real?” asked the Rabbit one day, “Does it mean having things that buzz inside you and a stick-out handle?” “Real isn’t how you are made,” said the Skin Horse. “It’s a thing that happens to you. When (someone) loves you. . . , not just to play with, but really loves you, then you become Real.”

—Margery Williams, *The Velveteen Rabbit*

Correspondence concerning this article should be addressed to Wendi L. Gardner, Department of Psychology, Northwestern University, 2029 Sheridan Rd., Evanston, IL 60208.
E-mail: wgardner@northwestern.edu.

The above conversation between toys about “realness,” though excerpted from a classic children’s tale, asks a central question in the study of anthropomorphic cognition. What causes a non-human target to be treated as real? Researchers have long noted the human tendency to imbue non-human agents with human emotions, intentions, and characteristics (Mitchell, Thompson, & Miles, 1997; Nass & Moon, 2000), but little work has established whether anthropomorphism can be fully explained by qualities of the target alone or whether a perceiver’s feelings about the target must also be taken into account. A large body of research has demonstrated that “how one’s made” in terms of superficial similarity to humans is a robust predictor of anthropomorphism. For instance, both non-human animals and machines that possess human-like eyes and faces are more likely to be anthropomorphized than their less human appearing counterparts (e.g., DiSalvo, Gemperle, Forlizzi, & Kiesler, 2002; Mitchell et al., 1997). Similarly, Rabbit’s instinct that having “things that buzz inside you” might make you real has merit; human-like movement appears to encourage attribution of human-like intentions, even in very young infants (Luo & Baillargeon, 2005).

Thus, the morphological features of a target do appear to be important in determining anthropomorphic thinking, whether towards inanimate objects or non-human animals. However, do the feelings of the perceiver also play a role? Although one might intuit that feeling a strong attachment to a non-human target, be it one’s own cat, car, or computer, might encourage anthropomorphism, this assumption has not been empirically examined. Few studies have addressed this question because in part, it requires disentangling attachment from familiarity and similarity. Consider the following scenario: If I imbue my dog with more human-like thoughts and feelings than my neighbor’s dog, it could well be due to stronger affection to my own dog, or alternatively, it could be because I’m more familiar with my dog than my neighbor’s dog, or even because I chose my dog based on idiosyncratic anthropomorphic considerations, such as similarity in appearance to myself (e.g., Roy & Christenfeld, 2004). To our knowledge, only one study has examined aspects of anthropomorphism and attachment while controlling for familiarity. In this study, Kiesler and Kiesler (2004) randomly assigned participants to decorate a “pet rock” for either themselves or for potential buyers, and they found that those who initially designed the rock for themselves imbued it with a personality more like their own and became unwilling to release their rock into a product line. Moreover, the extent participants reported their rock aroused positive emotions was associated with reluctance to release it into a product line. Although this work is potentially suggestive of an association between attachment and anthropomorphism, because the focus of the work was on consumer behavior rather than anthropomorphism and attachment, their association was not directly tested.

The current work attempted to more directly address the relationship between attachment and anthropomorphism. To do this, we capitalized on the existing literature in parasocial relationships (or “parasocial interaction”) and examined individuals’ responses to favorite television characters versus familiar but nonfavorite television characters. The study of parasocial interaction explores a special case of anthropomorphism, the tendency for people to engage with fictional television characters as if they were real human companions. The notion that humans form relationships with media characters has been studied in the media and communication literature almost since the advent of television; Horton and Wohl (1956) coined the term “parasocial relationships” to describe these one-sided rela-

tionships with media figures and viewed them as a strategy potentially providing “the socially and psychologically isolated with a chance to enjoy the elixir of sociability” (p. 222).

Even though strong parasocial relationships are not consistently found among the lonely and socially isolated (e.g., Rubin, Perse, & Powell, 1985), research suggests that parasocial relationships may be motivated, at least in part, by belonging needs. For example, parasocial attachments are influenced by attachment styles (Cole & Leets, 1999). Additionally, dispositional belonging needs positively correlate with the intensity of individuals’ parasocial relationships in a nationally representative sample of American adults (Knowles, 2007). Thus, it appears that parasocial relationships may be sought or intensified, at least in part, in the service of belonging needs (see also Gardner, Pickett, & Knowles, 2005).

Interestingly, recent theories concerning anthropomorphism have begun to consider the potential role of belonging needs. In a recent review by Epley, Waytz, and Cacioppo (2007), a three factor model is proposed that predicts greater anthropomorphism to the extent that (1) anthropocentric knowledge is accessible and applicable to the target; (2) perceivers are motivated to be effective social agents, and importantly; (3) perceivers are lacking a sense of social connection with other humans. The role of social needs in anthropomorphic thinking was further demonstrated in work by Epley, Waytz, Akalis, & Cacioppo (2008, this issue), who showed that lonely individuals were more likely to anthropomorphize their pets. The literature on parasocial interaction and the literature on anthropomorphism thus appear to be converging in their emphasis on the importance of understanding the motives and characteristics of the perceiver in addition to the features of the target.

The focus of the current research was to assess the role of perceiver affection in inducing greater anthropomorphic thinking and behavior with fictional television characters. The exploration of parasocial relationships with television characters may present an ideal case of disentangling fondness from familiarity in assessing effects upon anthropomorphism. Given exposure to a television character takes place within the bounds of watching a particular show, we can compare responses to a favorite character with other equally familiar characters from the same television show, thus holding exposure constant. Moreover, although shows vary in terms of the “reality” of their fictional spheres (*The Simpsons’* cartoon house vs. the *Friends’* New York coffee house), characters within the same show are depicted with equal reality (the cartoon depictions of Homer and Marge are equally dissimilar to real human beings, just as Rachel and Phoebe are both equivalently depicted by real human actors). Thus, to the extent that a favorite character is perceived as more “real” than another character on the same show, it would suggest support for the hypothesis that fondness or affection for a target, above and beyond the impact of morphology or familiarity, may be associated with anthropomorphism.

Two studies were thus conducted to explore the association between love and perceptions of realness in the domain of parasocial relationships with TV characters. The first study surveyed undergraduates who answered questions concerning the perceived realness of their favorite character or another character appearing on the same show. The questionnaire also assessed familiarity with the character (depth of knowledge about the character’s habits, attitudes, and background), perceived similarity with the character, and interpersonal liking of the character. The second study used a more implicit examination of “realness” by monitoring behavioral patterns typically associated with exposure to a live human audience. Specifi-

cally, we investigated whether exposure to favorite characters could induce social facilitation and inhibition to a greater degree than non favorites. Over a century ago, Triplett (1898) demonstrated that individuals perform simple motor tasks (e.g., turning a rod and reel) faster when in the company of others than when alone, and since then, many researchers have conducted studies examining how audiences impact task performance. In their meta-analysis of 241 studies, Bond and Titus (1983) found robust evidence that mere exposure to a conspecific audience facilitates performance on well-learned tasks and hinders performance on novel tasks.

The use of a social facilitation paradigm provides a unique behavioral measure of the depth of “human-like” representation for anthropomorphism research. After all, although many explanations for social facilitation and inhibition effects have been forwarded, ranging from physiological arousal’s influence on dominant responses, to evaluation apprehension, to perceptions of challenge or threat (e.g., Zajonc, 1965, Baumeister, 1982; Blascovitch, Mendes, Hunter, & Saloman, 1999), all agree that the perception of the co-presence of another person is important to producing the effects. Thus, to the extent that a fictional favorite television character is experienced as a real person, it was hypothesized that their “presence” in the room (as depicted by an image displayed on a nearby computer desktop background) would lead to greater social facilitation and inhibition than the presence of a nonfavorite character.

STUDY ONE

The goal of Study One was to explore individuals’ perceptions of characters’ “realness” as a function of their liking for the character. All participants listed their favorite television character (e.g., Phoebe), that character’s show (e.g., *Friends*), and another character on the same show (e.g., Chandler). Participants randomly assigned to the *favorite condition* were asked to answer a questionnaire in reference to their favorite character (Phoebe), and those assigned to the *nonfavorite condition* completed the same questionnaire in reference to the second, nonfavorite character (Chandler). In general, the questionnaires assessed participants’ perceptions of and responses to their idiosyncratic favorite or nonfavorite character. Specifically, questions assessed participants’ perceptions of the character’s realness (e.g., “She/he seems like a real person to me”), fondness or liking of the character (e.g., “She/he is warm”), depth of knowledge and familiarity about the character (e.g., “I definitely know his/her attitudes and values”) and perceived similarity to the character (e.g., “I feel she/he and I are similar”). Importantly, by comparing favorite and nonfavorite characters on the same television show, exposure to the characters should be equivalent. Despite this equal exposure, we expected that favorite characters would be perceived as being more “real” than nonfavorite characters who appeared on the same show. Moreover, in exploring the association between depth of knowledge, similarity, liking, and perceptions of realness, we expected to find that, regardless of whether a character was listed as a favorite or not, liking of a character, would be associated with perceived “realness”.

METHOD

Participants

One hundred and ninety-nine undergraduate participants (105 females, 75 males, 19 unreported) completed the survey in their Introduction to Psychology class.

Materials and procedure

Participants completed a series of questions about familiar television characters embedded within a mass-testing survey packet. First, they were asked to report the name of their favorite television character, the name of the television show that character is on, and the name of a second character on the same television show. In answering the subsequent questions, participants randomly assigned to the favorite condition were asked to do so in reference to their favorite character and those assigned to the nonfavorite condition were asked to do so in reference to the second character reported. The survey consisted of items adapted from a measure of parasocial attachment (Parasocial Interaction Scale; Rubin et al., 1985) as well as newly constructed items. Specifically, five questions assessed perceived realness (e.g., "She/he seems like a real person to me," "I sometimes make remarks to him/her when watching the show" ($\alpha = .70$); nine items assessed interpersonal liking e.g., "She/he is warm," "He/she makes me feel comfortable, as if I am with friends" ($\alpha = .83$); nine items assessed knowledge and/or familiarity with the character, e.g., "I definitely know where he/she likes to hang out," "I definitely know his/her attitudes and values" ($\alpha = .86$); and two items assessed similarity, i.e., "I feel that she/he and I are similar," "I can identify with him/her" ($\alpha = .85$). All items were answered on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale.

RESULTS AND DISCUSSION

The majority of participants named a favorite television character from sitcoms or dramas with ensemble casts such as *Friends*, *Grey's Anatomy*, *24*, *Sex and the City*, or *The Office*, and thus could easily nominate a secondary character from the same show. Over 85% of the participants listed a character played by a human actor as their favorite (e.g., Meredith from *Grey's Anatomy*), and the remaining 15% of the sample listed an animated cartoon character (e.g., Stewie from *Family Guy*). Whether the favorite and nonfavorite characters reported were represented by human actors or cartoons was entered as a moderator variable in all analyses.

Four separate 2 (character: favorite, non-favorite) \times 2 (representation: human, cartoon) ANOVAs explored knowledge/familiarity with the character, perceived realness of the character, liking for the character, and similarity with the character. Given that the favorite and nonfavorite characters were selected from the same television show, we did not expect differences in general knowledge or familiarity with the characters, and indeed, neither character nor representation, nor their interaction emerged as significant, all $F_s < 1$, all $p_s > .63$. In other words, participants felt equally familiar and knowledgeable about the character they were answering questions about, regardless of whether it was their favorite or a secondary character on the show, and regardless of whether it was represented by a human actor or a cartoon. Despite this equivalent familiarity, the identical analysis examining per-

ceived realness of the character produced effects for both character and representation, but no interaction. Participants perceived their favorite character ($M = 2.58, SD = 1.44$) to be more real than their nonfavorite ($M = 2.18, SD = 1.58$), $F(1, 196) = 4.84, p < .05$, and perceived characters represented by human actors ($M = 2.75, SD = .84$) to be more real than those represented by cartoons ($M = 2.11, SD = 2.24$), $F(1, 196) = 14.24, p < .05$. Similar results were found for liking for the character; this analysis also produced two main effects but no interaction. Participants liked their favorite character ($M = 3.04, SD = 1.40$) more than their nonfavorite ($M = 2.59, SD = 1.54$), $F(1, 196) = 9.24, p < .05$, and they liked characters represented by humans ($M = 3.09, SD = .84$) more than cartoons ($M = 2.54, SD = 1.96$), $F(1, 196) = 13.25, p < .05$. Participants also viewed themselves as more similar to their favorite ($M = 2.48, SD = 2.10$) than nonfavorite character ($M = 1.86, SD = 2.52$), $F(1, 196) = 6.86, p < .05$, and more similar to human actors ($M = 2.38, SD = 1.26$) than cartoons ($M = 1.96, SD = 3.07$), $F(1, 196) = 3.23, p < .07$.

More central to the current paper was the association between perceived realness and depth of knowledge, similarity, and liking. To the extent one has deeper knowledge of a character's habits, attitudes, and background, the character might seem more real. Likewise, similarity has often been noted as a trigger for anthropomorphism—to the extent a character seems similar to the viewer, they might be perceived as more real. Most importantly, we wished to see whether interpersonal liking for a character would contribute to perceived realness, above and beyond any effects of depth of knowledge and similarity. We ran two separate linear regressions predicting perceptions of realness from knowledge, similarity, and liking for human represented characters and for cartoon characters. Because we were specifically interested in whether liking for a character contributed to anthropomorphism, even after controlling for knowledge and similarity, we examined the increment in R^2 using hierarchical regression. As can be seen in Table 1, greater knowledge of the character contributed significantly to perceived realness for both human and cartoon characters, but even after entering knowledge and similarity, liking for the character contributed additional significant variance in predicting perceived realness—for both human characters ($\Delta R^2 = .16, \Delta F(1, 161) = 52.86, p = .00$) and cartoons ($\Delta R^2 = .19, \Delta F(1, 25) = 16.12, p = .00$).

Taken together, the results of this exploratory survey suggest that favorite television characters are seen as more like real people than nonfavorite television characters, and moreover, that this perception of realness is associated with liking for the character, even after controlling for the contributions of familiarity and similarity with the character. Interestingly, patterns were comparable for characters represented by human actors and by cartoons. Although characters represented by cartoons were generally perceived as less real than their human acted counterparts, favorite and well-liked cartoon characters were nonetheless perceived as more like real people than their nonfavorite or less liked counterparts. Of course, the current results are merely suggestive of the "love makes you real" hypothesis. Study One was based solely on self-reports, and although participants only answered the survey in reference to either their favorite or nonfavorite character, they could have made implicit comparisons because of their initial reporting of both favorite and nonfavorite characters. Consequently, these results are potentially open to demand as an alternative explanation. Additionally, the idiographic nature of the survey meant that the characters nominated as favorites versus secondary characters were free to vary. Although some characters were chosen an equivalent number of times

TABLE 1. Study One results demonstrating how extent of knowledge/familiarity, perceived similarity to character, and liking for character predict the perceived realness of a television character, separated by whether the target character was human acted vs. animated.

Target	Attribute Predicting Perceived Realness	β	t
Human ($N = 164$)	Knowledge/Familiarity	.15	2.51, $p = .01$
	Similarity	.07	.94, $p = .35$
	Liking	.59	7.27, $p = .00$
Cartoon ($N = 28$)	Knowledge/Familiarity	.24	1.95, $p = .06$
	Similarity	.18	1.44, $p = .16$
	Liking	.58	4.02, $p = .00$

as a favorite and a secondary (e.g., Rachel from *Friends*), others (e.g., Phoebe from *Friends*) were only nominated as favorites. All of the characters were thus not equivalently distributed across favorite and nonfavorite categories, as would have been the case had we used a yoked design.¹ Study Two was thus designed both to minimize demand and to yoke favorite and nonfavorite characters.

To minimize demand characteristics, Study Two was designed to assess individuals' perceptions of television characters without asking them directly about the characters. Instead, Study Two capitalized on the classic findings that the mere presence of another person facilitates performance on simple, well-learned tasks and inhibits performance on complex, novel tasks (e.g., Zajonc, 1965). A favorite or nonfavorite television character was incidentally "present" in the room via a computer desktop background. Ostensibly participating in a study of motor skills, participants engaged in two two-minute copying tasks in which they copied nonsense words with their dominant and nondominant hand in counterbalanced order. To the extent that favorite television characters are perceived as more real than nonfavorites, social facilitation and inhibition effects should be stronger when a favorite rather than nonfavorite character is present. Study Two also featured a yoked design, ensuring that each television character was presented an equal number of times as a favorite and as a control. Thus, any idiosyncratic differences between characters could not account for the differences in effect

STUDY TWO

Just as the presence of another person facilitates performance on well-learned tasks and impedes performance on novel tasks, we hoped to illustrate parallel effects using favorite television characters. To the extent that favorite television characters are experienced more like real people than non-favorites, individuals exposed to an image of their favorite character should perform better on a simple, well-learned task and worse on a complex, novel task than individuals exposed to an image of a

1. An exploratory analysis, in which just a subset of the data that had matched favorite and nonfavorite characters, revealed that the correlation between liking and perceived realness was equally strong in the matched subset, $r(60) = .79$, as it was in the full data set $r(199) = .73$, z comparison = .95, $p = .35$. Thus, the idiosyncratic character nomination, although not as ideal as a yoked design, did not appear to artificially inflate the strength of this association.

control, nonfavorite television character. These predictions were tested by manipulating passive exposure to a favorite or control, nonfavorite television character between-subjects and the novelty of the task within-subjects.

METHOD

Participants

Seventy-one undergraduates (46 females, 25 males) participated in the study in return for experimental credit. All had taken part in an earlier pre-testing session in which they named their favorite television character. Individuals who listed a very obscure favorite character (e.g., Balki from *Perfect Strangers*) were not included in the study because coincidental exposure to an image of such characters in the study would likely arouse suspicion, and, given the obscurity of the show, it would also make yoking difficult.

MATERIALS AND PROCEDURE

Two to six weeks after the pre-testing session, participants took part in the study individually in enclosed cubicles. On the computer desktop in each cubicle, an image of a television character was displayed. For half of the participants, this image depicted participants' favorite television character. The other half of the participants were in the yoked control condition, seeing an image of another participants' favorite character. Such yoking, by ensuring that each television character was presented an equal number of times as a favorite and as a control, keeps features of any specific character image (e.g., size, brightness, vividness) equivalent across conditions. To reduce suspicion about these unusual desktop images, the experimenter impatiently commented that "those Media study folks left their materials out again" while within hearing range of the participants. To further this cover story, a *TV Guide* and office supplies were messily strewn on the desk, and "Media Experiment" signs were taped on the cubicle doors. The experimenter noisily tore down the "Media experiment" signs while participants signed their consent forms, but she left the images displayed on the monitors.

After introducing the study as one pertaining to motor skills, the experimenter asked the participants to complete two word-copying tasks. Each task consisted of 60 nonsense words (e.g., *ghusdmu*, *freants*) and 60 blanks. Participants were instructed to copy the nonsense words onto the blanks as quickly as possible, and were stopped after two minutes. In a counterbalanced order, participants were instructed to complete one task using only their dominant hand (well-learned) and one task using only their nondominant hand (novel). Following the two copying tasks, participants completed a measure of mood (PANAS; Watson, Clark, & Tellegen, 1988), as well as demographics and handedness. No participants reported being ambidextrous.

RESULTS AND DISCUSSION

Two research assistants blind to participant condition counted the number of words successfully copied in each task. These data were entered into a 2 (condition: favor-

ite character, yoked control) \times 2 (task order: novel first, well-learned first) \times 2 (task type: well-learned, novel) ANOVA with condition and task order as between-subjects factors, task type as a within-subjects factor, and mood as a covariate. Neither mood ($\alpha = .92$) nor task order impacted performance on the copying tasks, all F s $<$ 1.06, *ns*. Predictably, there was a main effect of task type, $F(1, 66) = 45.81, p < .05$, such that participants copied more words with their dominant hand/well-learned task ($M = 33.90, SD = 5.07$) than with their nondominant hand/novel task ($M = 10.98, SD = 4.08$). More importantly, analyses yielded a task type \times condition interaction, $F(1, 66) = 4.19, p < .05$. Participants' performance when exposed to their favorite television character was facilitated on the well-learned task as compared to a control character ($M = 34.96, SD = 4.39$ vs. $M = 32.84, SD = 5.59$) and inhibited on the novel task as compared to a control character ($M = 10.59, SD = 4.78$ vs. $M = 11.36, SD = 3.27$). The significant interaction and pattern of means as shown in Figure 1 support the notion that individuals' favorite television characters indeed appear to be treated as "more real" than non-favorites. Comparable to an audience of real persons, "audiences" of an individuals' favorite TV character enhanced performance on a well-learned task and impeded performance on a novel task. Importantly, the control condition also presented images of television characters, and due to the yoked-control procedure, any idiosyncratic differences between images could not account for the differences in effect, as every character was used an equal number of times as a favorite and non-favorite. Also, these effects could not be accounted for by participants' mood. Finally, unlike Study One in which participants were aware that we were assessing perceptions of realness of favorite as compared to nonfavorite characters, participants in the current study believed that they were in a motor skills experiment and their exposure to images of television characters was unintentional. By eliminating demand as an alternative explanation, the social facilitation found on the well-learned task and inhibition on the novel task among those in the presence of a favorite versus nonfavorite television character can be interpreted as support for our hypothesis.

GENERAL DISCUSSION

We began this research with the same questions originally raised by *The Velveteen Rabbit*: What does it take for a target to become real? Does realness depend solely upon features of the target, or can it be created out of the feelings of the perceiver? The results of the current studies suggest that the affection of a perceiver for a target plays a role in anthropomorphism. Fictional television characters, whether represented as cartoons or by human actors, were experienced as more real to the extent that they were liked. In Study One, liking for a target was associated with perceived realness more strongly than either the depth of perceiver knowledge about the target, or perceiver similarity with the target. Study Two demonstrated that these realness effects were not limited to self-reports; the presence of a favorite television character also induced greater social facilitation and inhibition effects in motor performance as compared to the presence of a nonfavorite character. Taken in combination, these findings suggest that love (or at least, liking) may make a target real. Of course, because in both studies we capitalized on idiographic reports of favorite characters, it is also possible (and plausible) that participants came to initially favor characters that seemed more real to them. However, compelling recent work by Kozak, Marsh, & Wegner (2006) manipulated liking of novel human targets and

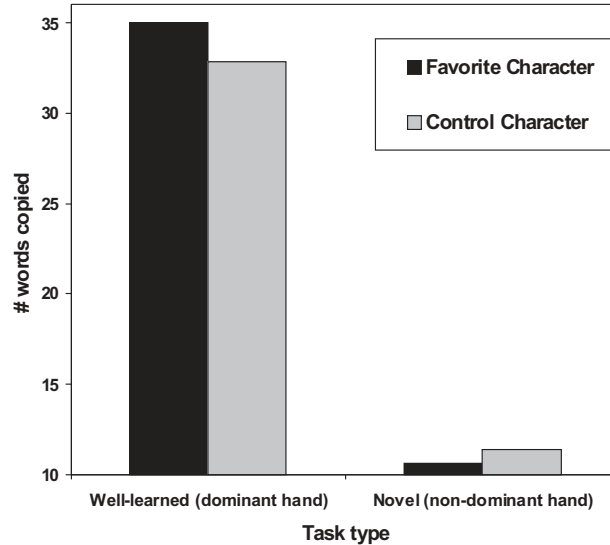


FIGURE 1. Number of words copied as a function of task type and condition in Study 2

found that participants attributed more complex cognitive and emotional properties (greater mind attributions) to liked than disliked others. The evidence that liking can be causally linked to greater mind attributions for other people may suggest one pathway through which liking may be associated with greater anthropomorphism of fictional targets. To the extent liking for a character may lead to greater attributions of mind, goals, and emotional complexity, they may be also responded to as more “real.”

More importantly, the strong association between liking and realness, regardless of causal direction, may offer greater insight into why the tendency to anthropomorphize may increase in an attempt to satisfy social needs (Gardner et al., 2005; Epley, et al., 2008, this issue). To the extent that attachment to a fictional character makes them appear more like a real companion, or that anthropomorphizing a religious entity makes them seem a more real presence in an individual’s life, this enhanced sense of presence may provide social succor when actual social connections are lacking. Indeed, recent research in our own laboratory has shown that the presence of favorite television characters may significantly reduce the negative impact of rejection on both self-esteem and cognitive performance, in a way that is remarkably similar to what is seen with reminders of real friends and loved ones (Gardner & Knowles, 2007). The ability of a fictional character to buffer a social rejection experience would seem puzzling were it not for the present research demonstrating that, when one is attached to a character, they become more like real social targets, and thus may serve the role of a social surrogate.

The current work also affirms the importance of perceiver characteristics in predicting the anthropomorphic treatment of targets. In their recent review, Epley et al.

(2007) presented a three factor model of anthropomorphic thinking that emphasized the importance of perceiver social and effectance motivation in addition to target qualities in encouraging anthropomorphic representation. Our findings, focusing on perceiver affect and attitudes, affirms this new model by demonstrating how objectively identical images of television characters were associated with significantly different anthropomorphic endorsements and behaviors as a function of perceivers' interpersonal liking for the character. Our favorite and nonfavorite targets in Study Two were identical in terms of being two-dimensional representations of fictional characters, all of whom had human features but none of whom showed movement. Individuals' affection for these fictional targets was sufficient to psychologically create conspecifics out of two-dimensional images, as reflected in exposure to these anthropomorphized agents producing complex behavioral patterns heretofore associated with actual human presence.

Although the creation of conspecifics out of fictional characters may initially seem psychologically extreme, at its core, these effects underscore a central tenet of social cognition: one must consider a person's subjective reality, in addition to environmental affordances, to explain and predict behavior. The fact that two individuals can view an image of the same fictional agent and only one individual—the one viewing her favorite character—engages in a social way with the target further affirms the importance of understanding individual cognition and construal in predicting social behavior.

Indeed, the study of how individuals may sometimes socially respond to non-human entities may provide new opportunities to explore the boundary conditions of "social" cognition. The budding literature linking anthropomorphism and parasocial interaction with unsatisfactory social connections (e.g., Gardner et al., 2005; Epley et al., 2008, this issue; Gardner & Knowles, 2007) provides a valuable window into motivated social cognition, as well as potent testament to the power of belonging needs. A wealth of research on motivated cognition has revealed how successful we are at shaping our perceptions and memories to restore and maintain self-esteem and positive affect (see Molden & Higgins, 2005, for review). Granted, altering attributions for past achievements and failures (e.g., Taylor & Brown, 1988), or motivated misremembering of how often one uses dental floss (Ross & Fletcher, 1985) may seem trivial illusions compared to perceiving relationships with fictional characters, but given the fundamental importance of belonging needs (recall that Maslow himself viewed belonging as more important than esteem needs) it is perhaps no surprise that we are capable of biasing or even creating perceptions of social connection in the service of belonging regulation. Like the little boy in *The Velveteen Rabbit* who depended on his beloved stuffed animal for company during a long illness, these results show that affection for anthropomorphized targets may possibly make them psychologically 'real' enough to feel their presence.

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