When Brand Narratives Are Written in Metaphoric Terms, Can They Weaken Self-Brand Connections?

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ABSTRACT   Previous research has established that brand narratives can strengthen the connection between consumers and brands. The present investigation raises the question of whether this finding holds when narratives are written in metaphoric terms. Three studies, including a pilot study of Amazon.com brand reviews ($N = 1,000$) and two experiments ($N = 4,017$), illustrate that metaphoric (vs. nonmetaphoric) narratives can actually weaken the self-brand connection. The studies illuminate that, while metaphoric narratives are prevalent in consumer reviews, such reviews seem less likely to provide the narrative structure necessary to establish a strong connection with the brand. This work contributes to the novel insight that while consumers often use metaphors as a way to talk about brands, relying on metaphors may actually weaken the review writer's connection with the brand. This effect remains robust even when considering high levels of brand familiarity and linguistic abilities of the brand review writer.

When sharing their experiences with brands, consumers often write in a narrative format (Escalas 2004b; Hamby, Brinberg, and Daniloski 2017; Reimann et al. 2018). Consumers provide such narrative accounts of their interactions with brands in the form of online reviews or in the role of influencers and brand spokespeople who cocreate brand messages. In these narratives, consumers include their thoughts and feelings about the actors in a particular story (often the consumer and the brand themselves), as well as any observations on how the events of the brand interaction unfolded over time. They may also provide insight into the reasons why certain events happened the way they did (Escalas 2004b). In turn, this narrative content shapes consumers' relationships with brands, both for consumers who produce brand narratives and those who read them (Hamby, Daniloski, and Brinberg 2015; van Laer, Feiereisen, and Visconti 2019). For example, a consumer reviewing the Tylenol brand pain reliever writes: "Got this for my nephew who was having COVID-19 symptoms. ER doctor told us to give him this for pain. Works great! Luckily his test came back negative!" Another consumer writes of Dove body soap: "I've used Olay for years and have tried every scent and different types they make. My skin wasn't liking my choices, so I read many reviews of Dove and bought it. So happy I did; it's so easy to use and only a very fresh scent. It's a good product and I'll continue to use!!" These narratives tell stories about connectedness and closeness between consumer and brand. By using a narrative format, consumers can provide a more engaging and compelling review that captures the essence of their experience and helps others make informed decisions about whether or not to engage with the brand (Hamby et al. 2015).

Central to the present investigation is the fact that brand narratives are often written in metaphoric terms (i.e., using

figurative speech), which previous research may have overlooked. This observation raises the question: Does the use of metaphors in brand narratives help or hurt the relationships that consumers have with their brands? Intuition might suggest that consumers utilize metaphors to simplify otherwise complex ideas about brands (Thibodeau and Boroditsky 2013; Pogacar, Shrum, and Lowrey 2018), possibly creating greater narrative depth, which in turn might facilitate consumers to form stronger bonds with their brands. However, contrary to this intuition, we argue—and our preliminary results illustrate—that metaphoric narratives can lead to weaker connections between consumers' selves and their brands. We propose that this outcome occurs in part because metaphorical language may create greater cognitive distance between the metaphor's meaning and the elements within the narrative the metaphor intends to describe. In turn, readers feel less connected to the abstract metaphorical concepts within the story and are thus less apt to identify with the focal brand, resulting in weaker self-brand connections.

We therefore argue that a better understanding of how consumers use and understand metaphors in stories about brands is warranted, answering calls for a closer look into how consumers use narratives to understand their experiences with brands (Escalas and Hamby 2023). Across three studies using two different methods (i.e., analyses of archival review data and experiments), the present research attempts to shed new light on the occurrence of metaphoric narratives in consumers' reviews of branded products (pilot study), shows their effect in weakening self-brand connections among brand review writers (study 1), and highlights key differences in narrative structure between metaphoric and nonmetaphoric narratives among the readers of these reviews (study 2).

CONCEPTUAL BACKGROUND AND HYPOTHESES
The Role of Narratives in Consumer Language
Narratives are ubiquitous in our everyday lives. Much of the marketing-related information we exchange is told in a narrative format (Adaval and Wyer 1998). Consumers themselves communicate their brand experiences using narratives (e.g., describing actors in a story) in online reviews, video content, and other forms of word of mouth. For example, Trader Joe's, a grocery store chain, has been ranked as the most beloved brand on the Yelp review platform, with numerous consumer reviews telling their favorite stories about the brand (Sampey 2023).

While narratives are pervasive in consumer language, the way that they are defined has received considerable debate in consumer research (Escalas 1998, 2004b; van Laer et al. 2014). For example, some work on narratives has argued that they describe chronologically related events from the perspective of a narrator embedded within the story (Barthes and Duisit 1975; Bal 2017), while other work has argued that narratives must consist of story, text, and narration but not necessarily in chronological order (Rimmon-Kenan 2002). At a minimum, many consumer researchers agree that narratives (1) consist of actors engaged in actions to achieve goals, (2) contain a temporal sequence of events, and (3) explain why things happen (Adaval and Wyer 1998; Escalas 2004b). Of these aspects, first, the *actors* in a narrative provide insight into their perspective of the accounts being told. Thus, the events in a story should unmistakably include one or more protagonists' point of views (Woodside 2010). Second, narratives recount personal events in a linear *temporal sequence*, such as when they describe a consumption journey from beginning to end. This linear format not only makes for a good iterative story but also makes generating and processing new pieces of information easier (Bruner 1991). Third, the sequential events in a narrative provide context as to *why things happened* as they did. The story should thus construe reasons for the sequence of events (Adaval and Wyer 1998). Building on these three structural components of narratives, for the purpose of our research we formally define *narratives* as stories that contain actors, follow a temporal sequence, and provide reasons why events in the story happened the way that they did. Also, for the purpose of the present research, we conservatively assume that all three structural components must be present for a narrative to be defined and count as such.

What Is a Metaphoric Narrative?
Building on conceptual metaphor theory, we support the observation that *metaphors*—that is, figurative language that describes one thing or idea in terms of another—are an integral part of people's lives and personal stories (Hawkes 1972; Mac Cormac 1985; Lakoff and Johnson 2003). People often attempt to understand complex concepts (e.g., relationships) in terms of simpler and more familiar ones (Lakoff and Johnson 2003; Landau, Zhong, and Swanson 2017), and metaphors seem to facilitate this process by providing terms and concepts that consumers can grasp more easily. In general, metaphors are said to structure how we perceive new concepts and how we relate to other people (Lakoff and Johnson 2003). In particular, metaphors are

said to provide an important foundation for how people relate to brands (Reimann, Nuñez, and Castaño 2017).

Prior research on narratives has argued that in order to become immersed in (or "narratively transported" by) a story, readers of narratives must employ their imagination (Escalas 2004a; Lien and Chen 2013). We argue that metaphors can fulfill this requirement because figurative speech enables people to immediately apply their imagination (DeRosia 2008). Indeed, when thinking and writing in metaphoric terms, consumers conceive ideas by using symbols that mean more than what is actually being said (Landau et al. 2017). When consumers utilize metaphors in their stories, they generate what we call *metaphoric narratives*, which we formally define as consumer stories that contain both figurative speech and the three required structural components of a narrative (as described herein previously).

Metaphoric narratives are unique in that they use metaphors to tell a story. Importantly, what also distinguishes metaphoric narratives from nonmetaphoric ones is the degree to which the three structural components are applied and understood from the perspective of both the storyteller and the story receiver. We argue that when consumers tell stories in metaphoric (vs. nonmetaphoric) terms (e.g., when reviewing products), they are more likely to use complex figurative speech, abstract ideas, and vague concepts rather than straightforward textual descriptions to detail the actors, temporal events, and reasons why the events of the story unfolded the way that they did. When doing so, consumers must draw upon preexisting information about the comparison made through the metaphor to develop an understanding of the narrative events. In other words, consumers must engage in the cognitive process of using their antecedent knowledge about the metaphorical concepts to transfer meaning to the narrative. The issue at hand is that, because metaphoric storytellers use abstraction to create meaning, there is a possibility that this approach increases the cognitive distance between the storyteller's meaning of the story elements and how the story receiver perceives them. For a story to make sense, story receivers must understand the actions of the actors and derive implications from the sequence of events, which is likely harder when interpreting a story based on metaphors compared to nonmetaphoric narrative. Thus, we argue that metaphors may abstract the interpretation of a narrative, thereby increasing the cognitive distance between the story's elements and the consumer. This process ultimately results in weaker connections between the brand in the story and our sense of self, as we discuss in more detail next.

Metaphoric Narratives and Self-Brand Connections

Narratives can be powerful in connecting consumers with brands. Consumers frequently both evaluate and write narratives about brands to garner and share information in the marketplace. In online product reviews, consumers take on the role of both storyteller and story receiver in a quest to exchange insights about products. In addition, online influencers undertake the role of brand promoter, sharing their experiences about products they love. Once consumers immerse themselves in these stories, they draw links between the actors within the narrative (such as the brand) and their self-structure, yielding a strong self-brand connection (Escalas 2007). However, much of the work in this area has not explored the possible influence of figurative language, such as metaphors, on brand relationships. Therefore, the central question in the present research is whether the use of metaphors in brand narratives helps or hurts the relationships consumers have with brands. We argue that there are several reasons why metaphoric (vs. nonmetaphoric) narratives may lead to lower levels of self-brand connection, in part because metaphors in narratives may engender greater cognitive distance. The first reason is, the more abstract the narrative becomes, the less likely it is to describe the actors in the story in a relatable way. We argue that this abstraction can induce cognitive distance and make it more difficult for consumers to generate a sense of emotional engagement with the brand, rather than interpreting the meaning of the metaphor. The second reason is that well-developed stories require a temporal sequence regarding how events within them unfold (Escalas 2004b). Metaphors contain language that is not always linearly presented (Zaltman and Coulter 1995), and thus their efficacy in generating a relatable story may be problematic. Because consumers must follow the narrative sequence of events while integrating the information contained in the metaphor with their existing knowledge and expectations about the brand, understanding how the narrative events are sequenced becomes more difficult. In turn, this may create additional cognitive distance between the consumer and the narrative, resulting in a less relatable story. Third, in a good narrative, the events in the story are connected by a clear cause-and-effect relationship that provides reasons why events in the story happened the way that they did, which creates a sense of coherence and meaning for the audience (Bruner 1991). Because metaphoric meanings are often contextual (Thibodeau and Boroditsky 2013), the metaphor may be understood differently across narrative contexts. If consumers fail to make sense of the metaphor's meaning as it relates to the story

and their connection with a brand, the causal sequence explaining why the events occurred becomes unclear. Therefore, rather than providing additional clarity to the events of the story, the metaphor distances the reader cognitively from the causal meaning of the events in the story. We formally hypothesize:

> **H1:** Metaphoric (vs. nonmetaphoric) narratives weaken self-brand connections.

> **H2:** Metaphoric (vs. nonmetaphoric) narratives lessen the perceived structure of the brand narrative because of greater cognitive distance between the (*a*) actors, (*b*) temporal sequence, and (*c*) reasons why things happened in the narrative.

OVERVIEW OF STUDIES

This article reports three studies aimed at illustrating the prevalence of metaphoric narratives and their effects on both the self-brand connection of the review writer and on the perceived narrative structure of the review reader. In our pilot study, we coded archival consumer review data scraped from Amazon.com to find preliminary empirical support for our observation that metaphoric narratives are ubiquitously used by consumers. In study 1, we empirically illustrate our main prediction that metaphoric (vs. nonmetaphoric) narratives weaken self-brand connections. In study 2, we take a close look at the extent to which consumers perceive narrative structure in metaphoric (vs. nonmetaphoric) narratives. Further procedural details on our studies are provided in the appendixes accompanying this article (apps. 1–3 are available online). If not otherwise noted, all cases were kept after following our exclusion criteria. Materials, data, and code are available on the Open Science Framework (OSF): https://osf.io/4jp39/.

PILOT STUDY
Overview and Method
The goal of the pilot study was to assess the extent to which consumers actively use metaphoric (vs. nonmetaphoric) narratives when producing reviews on brands they have purchased. We relied on archival data by randomly scraping reviews from bestselling brands listed in five fast-moving consumer-goods categories on Amazon.com, an online retailer. We selected the following product categories: toilet paper, paper towels, over-the-counter pain reliever, laundry detergent, and body soap. Example brands were Bounty

kitchen towels and Tide laundry detergent pods. Review length was set to between 10 and 500 words to ensure consistency across reviews (PowerReviews 2022). Furthermore, we dropped spam reviews (e.g., senseless writing, copy-and-pasting) and reviews in languages other than English. From a total of 1,634 filtered reviews, we randomly pulled 1,000 for coding (see exemplary reviews in appendix table 1; appendix tables 1–5 are available online). To determine whether a review is *narrative*, each review was coded on whether it contains actors, describes temporal events, or states why things happened (1 = *yes*, 0 = *no*; adapted from the definition of narratives by Escalas 2004b). Here we applied the conservative assumption that all three structural components of a narrative must be met for a narrative to be counted as such, in line with many consumer researchers' definitions of a good narrative (Adaval and Wyer 1998; Escalas 2004b). To determine whether a review is *metaphoric*, each review was coded on whether it contained figurative language (1 = *yes*, 0 = *no*). To do so, we recruited 1,000 independent online participants from CloudResearch Connect and asked each participant to code one review on the four components.

Results
Of the 1,000 reviews, 182 were classified as containing narratives (i.e., meeting all three components of a narrative: actors, temporal sequence, and reasons why things happened). Of those, about half (52%) were classified as metaphoric (i.e., containing figurative language). Appendix table 2 breaks down the findings by product categories.

Discussion
The pilot study provides preliminary support for our observation of the commonness of metaphoric narratives when consumers write reviews on the brands they have purchased. While this pilot study has several limitations, such as its focus on specific product categories and material goods, the archival data shed new light on the role of metaphors in brand narratives. Next, to test our first hypothesis, we conducted study 1, a controlled online lab experiment, in which we asked participants to write brand narratives in either metaphoric or nonmetaphoric terms and then assessed the strength of the self-brand connection.

STUDY 1
Overview and Method
The goal of study 1 was to empirically illustrate hypothesis 1, which suggested a negative effect of metaphoric (vs. nonmetaphoric) narrative on self-brand connection. In this study,

participants were asked to write a promotional brand message in either metaphoric or nonmetaphoric terms for brands of headphones that varied in the degree of brand familiarity. Our intention was to simulate the context of brand influencers, who are sometimes tasked to cocreate brand messages (Hughes, Swaminathan, and Brooks 2019; Leung et al. 2022).

Participants. In total, 2,015 members of the Cloud Research Connect consumer panel were recruited for online participation. Of those, 40 were removed due to incomplete responses and are hence not further discussed. A final sample of 1,975 participants (50.6% female, $M_{age} = 39.76$ years) were included in our analysis.

Procedures and Materials. Study 1 employed a 2 (narrative type: metaphoric, nonmetaphoric) $\times$ 2 (brand familiarity: low, high) between-subjects experimental design, with narrative type and brand familiarity as between-subjects independent variables and self-brand connection as dependent variable. After providing informed consent, participants were informed that the objective of this study was to gather valuable input on marketing promotion ideas for a headphone brand.

Participants were then randomly assigned to one of the two narrative type conditions. In the metaphoric narrative condition, we defined a metaphor as figure of speech that describes an object or an action in a way that is not literally true, but used as a comparison or an analogy that explains an idea or concept (e.g., "she is an early bird" and "he is a shining star"). In the nonmetaphoric narrative condition, we defined a narrative as a story or account of events, experiences, or imaginary worlds, presented through a sequence of connected events or actions (e.g., "She enjoys waking up at 6 a.m. in the morning, having breakfast, and commuting to work" and "He studied hard in college, landed a great job and is now a successful manager in his organization"). In addition to providing a metaphorical or narrative promotional message (depending on the assigned condition), participants in all conditions were told that their promotional message should (1) contain a storyline with a beginning, middle, and end; (2) contain actors in the storyline; and (3) explain why things happen, that is, what caused things to happen. These instructions were included to ensure that participants in both conditions were producing narratives. Participants were then shown three comprehension questions to (1) gauge whether they had understood the definition (either metaphoric or nonmetaphoric narrative, depending on their condition) and (2) ensure that their message included the three

components of a narrative (i.e., actors, temporal sequence, and reasons why things happened).

Participants were also assigned to one of the two brand familiarity conditions. In the low-brand familiarity condition, we presented participants with an unknown brand name, Vivida, which we had generated using ChatGPT. In the high-brand familiarity condition, we presented participants with the widely known Bose headphone brand. The two brand familiarity conditions were collected several weeks apart because of the large sample size and to avoid overlapping participation. In addition, participation in the high-brand familiarity condition was restricted to subjects who were not part of the earlier low-brand familiarity condition. In the high-brand familiarity condition, participants were also asked to confirm whether they knew of the brand Bose prior to participation in this study ("Do you know the headphone and sound equipment brand Bose?"). Images of headsets were also shown (see appendix table 3).

Participants were then asked to provide their promotional brand narrative (see example reviews in appendix table 4). After writing their brand narratives, participants responded to the previously established self-brand connection scale (Escalas 2004b). Items were "[Brand] reflects who I am"; "I can identify with [Brand]"; "I feel a personal connection to [Brand]"; "I can use [Brand] to communicate who I am to other people"; "I think [Brand] could help me become the type of person I want to be"; "I consider [Brand] to be 'me' (it reflects who I consider myself to be or the way that I want to present myself to others)"; and "[Brand] suits me well" ($1 =$ *not accurately at all*, $7 =$ *extremely well*). The items were averaged to form an index of self-brand connection ($\alpha = .96$). Next, participants were asked whether they enjoy writing creatively, like to play with language, and are proficient in the English language ($1 =$ *strongly disagree*, $7 =$ *strongly agree*). Our focal effects were qualitatively robust when including these three covariates in an analysis of variance and are hence not further discussed. There was also an attention screener embedded, which asked participants to select the second scale point on a Likert scale. Our focal results at different comprehension and attention levels are reported in appendix 2. Finally, participants responded to three questions about their linguistic ability (appendix 2) and stated their gender and age for demographic purposes. Participants were then debriefed.

Results
Data were submitted to an analysis of variance. As expected, results revealed a negative main effect of narrative type on

the strength of the self-brand connection, $F(1, 1971) = 5.647$, $p = .018$, $\eta_p^2 = .003$. Further analysis of the estimated marginal means confirmed that participants in the metaphoric narrative type condition had a weaker self-brand connection ($M = 4.02$, SD = 1.58) than did those in the nonmetaphoric narrative type condition ($M = 4.18$, SD = 1.53). Results also revealed a positive main effect of brand familiarity on the strength of the self-brand connection, $F(1, 1971) = 14.782$, $p < .000$, $\eta_p^2 = .007$, such that participants with high brand familiarity had stronger self-brand connections ($M = 4.24$, SD = 1.46) than did participants with low brand familiarity ($M = 3.98$, SD = 1.63). There was no statistically significant interaction effect between the narrative type condition and the brand familiarity condition on the strength of the self-brand connection ($F(1, 1971) = 1.625$, $p = .203$).

Discussion

Study 1 empirically illustrates our theoretical argument that when consumers write narratives about brands in metaphoric terms, it can weaken their self-brand connections. This means that, after using metaphors in their brand narrative, consumers feel less attached to the brand and possibly find it to be less reflective of themselves. In addition, study 1 highlights that, regardless of the extent of a consumer's familiarity with the brand they are writing about, the use of metaphoric narratives has a detrimental effect on the strength of consumers' relationship with the brand. While we find that brand familiarity predicts self-brand connections (which adds to the nomological validity of our study), the finding that narrative type and brand familiarity did not interact indicates that even if consumers have strong knowledge of the brand, metaphors still have a negative effect on their self-brand connections. This finding adds to literature attempting to differentiate the effects of brand (un-) familiarity on consumers' cognitions and attitudes related to the brand (e.g., Guo and Zhang 2020). The experimental design of study 1 also controlled for linguistic ability (appendix 2).

While study 1 tested the effect of metaphoric (vs. nonmetaphoric) narratives on the self-brand connections of brand narrative *writers*, the following study 2 tested the downstream consequences of metaphoric (vs. nonmetaphoric) narratives on brand narrative *readers*. We were particularly interested in unearthing differences in the narrative structure of metaphoric (vs. nonmetaphoric) narratives, as we expected that these differences could shed light on possi-ble explanations for why metaphoric (vs. nonmetaphoric) narratives weaken self-brand connections.

STUDY 2
Overview and Method
The goal of study 2 was to shed light on hypothesis 2, which suggested a negative effect of metaphoric (vs. nonmetaphoric) narrative on narrative structure. Specifically, we aimed to explore whether the narrative type (metaphoric vs. nonmetaphoric) influences the perceived narrative structure of the brand narrative. Participants in study 2 were asked to read the brand narratives produced by participants in the previous study 1 and then rate its narrative structure.

Participants. Two thousand and forty-two members of the Cloud Research Connect consumer panel (52.1% female, $M_{age} = 39.83$ years) participated in exchange for monetary compensation. Data for each brand were collected at two different points in time to avoid overlapping recruitment.

Procedures and Materials. Study 2 employed a 2 (narrative type: metaphoric, nonmetaphoric) $\times$ 2 (brand familiarity: low, high) between-subjects experimental design, with narrative type and brand familiarity as between-subjects independent variables and narrative structure as dependent variable. After providing informed consent, participants were informed that the objective of this study was to rate a story about a headphone brand. Participants were randomly assigned to read a brand narrative from one of the two narrative type conditions. Participants were also assigned to one of the two brand familiarity conditions used in study 1.

After reading the assigned brand narrative, participants in all conditions were asked to rate its structure using the established narrative structure coding scale (Escalas 2004b). The items were "To what extent does this story consist of actors engaged in actions to achieve goals?"; "To what extent does this story let you know what the actors are thinking and feeling?"; "To what extent do these thoughts provide you with insight about the personal evolution or change in the life of a character?"; "To what extent do these thoughts explain why things happen, that is, what caused things to happen?"; "To what extent do these thoughts have a well-delineated beginning (initial event), middle (crisis or turning point), and ending (conclusion)?"; and "To what extent do these thoughts focus on specific, particular events rather than on generalizations or abstractions?" (1 = *not at all*, 4 = *very much so*). In addition to analyzing the three structural narrative components of actors, sequential events,

and causal inferences individually, all six items were also averaged to form an index of narrative structure ($\alpha = .84$). There was also an attention screener embedded in one of our scales, which asked participants to select the second scale point on a Likert scale. Our focal effects were qualitatively robust across different levels of attention and are hence not further discussed (see app. 3 for details). Finally, participants stated their gender and age for demographic purposes.

Results

Data were submitted to an analysis of variance. As expected, for the six dependent measures that we had averaged into an index of narrative structure, results revealed a negative main effect of narrative type on the overall structure of the brand narrative, $F(1, 2038) = 89.870$, $p < .000$, $\eta_p^2 = .042$. Further analysis of the estimated marginal means confirmed that participants in the metaphoric narrative type condition perceived the brand narrative to be less structured ($M = 2.13$, SD $= .78$) than did those in the nonmetaphoric narrative type condition ($M = 2.44$, SD $= .72$). Results also revealed a positive main effect of brand familiarity on the narrative structure of the brand narrative, $F(1, 2038) = 9.281$, $p = .002$, $\eta_p^2 = .005$, such that narratives about the brand with high brand familiarity were perceived to be more narratively structured ($M = 2.33$, SD $= .76$) than were narratives about the brand with low brand familiarity ($M = 2.23$, SD $= .77$). There was a marginally significant interaction effect between the narrative type condition and the brand familiarity condition on the extent to which the brand narrative was perceived to be structured narratively ($F(1, 2038) = 3.417$, $p = .065$).

When separately examining the three focal narrative elements of actors, temporal sequence, and reasons why things happened, results revealed negative main effects of narrative type on the extent to which the brand narrative appeared to include actors ($F(1, 2038) = 135.429$, $p < .000$, $\eta_p^2 = .062$; follow a temporal sequence, $F(1, 2038) = 28.599$, $p < .000$, $\eta_p^2 = .014$, and contain reasons why things happened, $F(1, 2038) = 24.765$, $p < .000$, $\eta_p^2 = .012$. Further analysis of the estimated marginal means confirmed that participants perceived the metaphoric narrative to include actors ($M = 2.28$, SD $= 1.07$), follow a temporal sequence ($M = 1.99$, SD $= 1.01$), and contain reasons why things happened ($M = 2.00$, SD $= .99$) to a substantially lesser extent than did participants who read the nonmetaphoric narrative (actors: $M = 2.82$, SD $= 1.02$; temporal sequence: $M = 2.23$, SD $= .99$ reasons why things happened: $M = 2.22$, SD $= 1.02$). There were also positive main effects of brand

familiarity such that narratives about more-known brands were perceived to include actors ($F(1, 2038) = 18.500$, $p < .000$, $\eta_p^2 = .009$), and temporal events ($F(1, 2038) = 5.283$, $p = .022$, $\eta_p^2 = .003$) more than less-known brands. The main effect of brand familiarity on whether the narrative was perceived to explain why things happened was significant ($F(1, 2038) = 4.369$, $p = .037$). While the interaction effect of brand familiarity and narrative type on the degree to which the narrative was perceived to include actors ($F(1, 2038) = .201$, $p = .654$) and temporal events ($F(1, 2038) = 2.140$, $p = .144$) was nonsignificant, the interaction effect was significant on the extent to which the story was perceived to explain why things happened ($F(1, 2038) = 6.198$, $p = .013$, $\eta_p^2 = .003$; appendix table 5 shows full results of brand familiarity on narrative structure).

Discussion

Study 2 supports our account that when consumers read narratives about brands in metaphoric terms, they perceive them to be less narratively structured than when the narratives are written in nonmetaphoric terms. This means that consumers who write narratives about brands (study 1) are perceived to describe the narrative elements to a lesser extent in metaphoric (vs. nonmetaphoric) narratives, possibly because of the reliance on metaphoric language to detail the story. The findings of study 2 complement the insights of study 1, as they imply that even when participants are asked to write stories with all narrative elements present, metaphoric (vs. nonmetaphoric) narratives lack detail regarding the story's actors, temporal sequence of events, and cause-and-effects relationships.

GENERAL DISCUSSION

Across three studies, this research has shed light on the common use of metaphors in consumers' written accounts (pilot study) and illustrated that when consumers write narratives in metaphoric terms, it leads them to feel less connected to a brand (study 1). One possible explanation that we explored for this effect is the cognitive distance that the use of a metaphor in a brand narrative may create between consumer and brand (study 2).

Theoretical Contributions

The present research contributes to prior work in at least four ways. First, despite the ubiquitous usage of and extensive consumer research on narratives (e.g., Escalas 2004b;

Hamby et al. 2015, 2017), few prior works have systematically studied how the use of metaphors in narratives affect consumer–brand relationships. To address this gap, we bridge and integrate two separate streams of literature: work on narratives and work on conceptual metaphors. Conceptual metaphor theory argues that consumers' conceptual system—that is, how consumers both think and act—is fundamentally metaphorical in nature, making metaphors prevalent in everyday language and life (Hawkes 1972; Mac Cormac 1985; Lakoff and Johnson 2003). In support of this theory, we argued and empirically elucidated that metaphors commonly play a role in narratives. Our preliminary results thus underscore recent observation that consumers experience feelings of social connectedness after activating schemata of human-like traits in brands they deeply love, with these human-like traits being used in metaphorical ways to describe their relationships (Reimann et al. 2017). Beyond this observation, the present work finds that consumers use metaphors more broadly than just for brands with which they have strong relationships (pilot study). Our finding that consumers often use metaphors when writing stories about brands highlights the importance of better understanding the language consumers use to describe their experiences with brands. Indeed, metaphors can be powerful tools to convey complex ideas, thoughts and feelings (Marin, Reimann, and Castaño 2014), and when writing stories about brands, consumers use metaphors to describe their experiences with the brand in a way that seems engaging. For example, a consumer might describe a brand as a "breath of fresh air," perhaps to convey a sense of excitement they feel when using it. However, there is a downside to this approach: when consumers utilize metaphors to write brand narratives, it can lead them to feel less connected to the brand they are writing about, which shines through in their writing (study 1). This may be because metaphors create greater cognitive distance between the brand and the story's structural components (study 2).

Second, we contribute to seminal work that has established that narrative processing in response to *reading* narratively structured ads is positively related to self-brand connections (Escalas 2004b). Based on this work, one could intuitively predict a positive effect on self-brand connections when consumers *write* brand narratives in metaphoric (vs. nonmetaphoric) terms. However, in the present work, we found the opposite: metaphoric narratives can weaken self-brand connections. Because metaphors make an implied comparison between two unlike things, consumers must fill the gap between the metaphorical meaning and their connection with a brand (DeRosia 2008). The use of metaphors may thus introduce cognitive distance between consumer and brand, making it harder for consumers to relate to it. While previous research suggests that story-based consumer reviews result in increased narrative processing and more positive evaluations (Hamby et al. 2015), our findings indicate that the presence of metaphors in brand stories—which are also prevalent in consumer reviews—may weaken self-brand connections.

Third, the present work sheds light on differences in the structure of metaphoric (vs. nonmetaphoric) narratives. Studying these differences is an important addition to prior work, which argued that narratives pay attention to specific details of events to explain and interpret such events (Escalas 2004b). To a much lesser extent, metaphoric (vs. nonmetaphoric) narratives may tell a well-developed story. This can make it more difficult for consumers to produce a brand narrative that reflects their sense of self, as they may have difficulty interpreting the metaphorical language being used while processing the actors, temporally sequential events, and reasons for why events in the narrative happened. This can lead to a sense of disconnection between consumer and brand that can manifest in several ways, such as a lack of engagement with the narrative and reduced recall of brand information (Thibodeau and Boroditsky 2011). In contrast, nonmetaphoric language may be more effective at reducing such disconnection and promoting a stronger connection between the consumer and the brand. The likely reason for this is that nonmetaphoric language is typically more concrete and easier to understand with less room for interpretation, which can lead to a more immersive and engaging brand narrative experience for the consumer.

Fourth, the notion of *brand relationship* can be seen as a metaphor itself, in the sense that it uses a linguistic comparison between two different things: in this case, the relationship between a person and a brand is compared to the relationship between two people (Alvarez and Fournier 2016). This comparison helps to convey the idea that the relationship between a person and a brand is more than just a transactional exchange of goods and services but, rather, involves an emotional connection (MacInnis and Folkes 2017), as well as the potential for emotional detachment if the brand betrays its consumers (Reimann et al. 2018). Overall, while the notion of brand relationship can be seen as a metaphor, our findings suggest that when inserted in consumer narratives, brand relationships may influence the emotional connections between consumers and brands.

Limitations and Avenues for Future Research

This study has some limitations that offer pathways to possible future insights. First, we asked participants in our study 1 to produce brand narratives only in written form. Future work could directly compare different modes in which metaphoric brand narratives are produced, such as through writing, reading, or mental simulation. These are three cognitively different modes of producing information, which could possibly activate different cognitive processes that could influence the impact of metaphoric language on self-brand connections. For example, when consumers simulate metaphoric brand narratives in their minds, they may be more focused on producing the narrative as a whole. This could potentially reduce the negative effect of metaphoric language on self-brand connections.

Second, there are several theoretically relevant individual difference variables that could possibly moderate the negative effect of metaphoric (vs. nonmetaphoric) narratives on self-brand connection. We believe studying the roles of relevant moderators could yield important future findings, given that researchers have pointed out a possible context-dependence of the effectiveness of metaphors (Lee and Schwarz 2014; Marin et al. 2014). One such variable is the need for cognition, which refers to the extent to which individuals enjoy engaging in effortful cognitive activities, such as thinking and problem-solving (Cacioppo and Petty 1982). Consumers with a high need for cognition may be more likely to engage with the metaphorical language used in a brand narrative and may be less affected by the cognitive distance that can result from using metaphors. Additionally, while our study 1 found that the enjoyment of playing with language did not qualitatively alter our focal effect, it does predict a consumer's connection to a brand. Thus, an experiment that manipulates the need for cognition seems warranted. Furthermore, another individual difference variable that could play a critical moderating role is cognitive style, which refers to an individual's preferred way of processing information (Guilford 1980). For example, consumers with a more concrete (vs. abstract) cognitive style may be less likely to apply metaphoric language in their own thinking about brands and may be more affected by the cognitive distance that can result from using metaphors. Moreover, although study 1 of this article controls for linguistic ability, a more systematic approach may be needed to determine how writing ability may influence our effects. Of course, other factors may further alleviate, mute, or exacerbate the effect of metaphors on self-brand connections.

Third, our primary studies examined narratives that are relatively short in length. Although consumers commonly write and read brief narratives in the marketplace, shorter narratives are limited in their ability to fully detail the elements included in a narrative. Thus, although we find that participants can identify narrative elements in these brief texts, future work should examine whether length is a moderating factor in the effect of narrative processing.

Implications for Marketers and Consumers

In today's social media–driven marketing environment, brand-related information multiplies quickly (Hudson et al. 2016). Because metaphors are often thought to ease the understanding of complex concepts, they are frequently employed by both consumers and firms. However, because of the linguistic characteristics of metaphors, such as their abstractness, vagueness, and unclear causality, they are actually likely to reduce required features that make a brand story relatable, and thus they can become an enemy of the brand. As the present research shows, the use of metaphors can reduce the attachment and relatedness that consumers feel toward brands.

Consumers who write product reviews frequently for professional purposes (e.g., influencers) should be mindful of the language used in their brand narratives and, if metaphors are used, should seek out those that are generally clear and coherent. Specifically, in writing their brand narratives, they should look for metaphors that provide a clear causal relationship between events with little room for interpretation and that include relatable actors and a clear temporal sequence. By doing so, they can achieve a better understanding of and engagement with the brand narrative, perhaps leading to a stronger sense of attachment and loyalty to the brand.

Marketers should also be aware of the potential downsides of using metaphors in the narratives about their brands. While metaphors can be effective in simplifying complex concepts, they can certainly also reduce the relatability of a narrative, leading to weaker consumer attachment and relatedness to the brand. Therefore, marketers should carefully monitor the text that is produced about their brands by both consumer and expert reviewers as well as by product influencers. When employing metaphors in their own brand communications (e.g., brand slogans, mission statements, and advertising messages), marketers should also prudently consider the use of metaphors and assess whether they enhance or distract from the overall relatability of their brand.

REFERENCES

Adaval, Rashmi, and Robert S. Wyer Jr. (1998), "The Role of Narratives in Consumer Information Processing," *Journal of Consumer Psychology*, 7 (3), 207–45, https://doi.org/10.1207/s15327663jcp0703_01.

Alvarez, Claudio, and Susan Fournier (2016), "Consumers' Relationships with Brands," *Current Opinion in Psychology*, 10 (August), 129–35, https://doi.org/10.1016/j.copsyc.2015.12.017.

Bal, Mieke (2017), *University of Toronto Press - Narratology*, Toronto: University of Toronto Press, https://utorontopress.com/9781442628342/narratology.

Barthes, Roland, and Lionel Duisit (1975), "An Introduction to the Structural Analysis of Narrative," *New Literary History*, 6 (2), 237–72, https://doi.org/10.2307/468419.

Bruner, Jerome (1991), "The Narrative Construction of Reality," *Critical Inquiry*, 18 (1), 1–21.

Cacioppo, John T., and Richard E. Petty (1982), "The Need for Cognition," *Journal of Personality and Social Psychology*, 42 (1), 116–31, https://doi.org/10.1037/0022-3514.42.1.116.

DeRosia, Eric D. (2008), "The Effectiveness of Nonverbal Symbolic Signs and Metaphors in Advertisements: An Experimental Inquiry," *Psychology and Marketing*, 25 (3), 298–316, https://doi.org/10.1002/mar.20210.

Escalas, Jennifer Edson (1998), "Advertising Narratives: What Are They and How Do They Work?" In *Representing Consumers*, ed. B. Stern, London: Routledge.

——— (2004a), "Imagine Yourself in the Product: Mental Simulation, Narrative Transportation, and Persuasion," *Journal of Advertising*, 33 (2), 37–48, https://doi.org/10.1080/00913367.2004.10639163.

——— (2004b), "Narrative Processing: Building Consumer Connections to Brands," *Journal of Consumer Psychology*, 14 (1–2), 168–80, https://doi.org/10.1207/s15327663jcp1401&2_19.

——— (2007), "Self-Referencing and Persuasion: Narrative Transportation versus Analytical Elaboration," *Journal of Consumer Research*, 33 (4), 421–29, https://doi.org/10.1086/510216.

Escalas, Jennifer Edson, and Anne Hamby (2023), "Narratives: Understanding How Consumers Use and Respond to Stories," *Journal of the Association for Consumer Research*, 9 (1), in this issue.

Guilford, J. P. (1980), "Cognitive Styles: What Are They?" *Educational and Psychological Measurement*, 40 (3), 715–35, https://doi.org/10.1177/001316448004000315.

Guo, Fu, and Xuefeng Zhang (2020), "The Impact of Brand History on Consumers' Cognitive Process and Brand Attitude," *Journal of Neuroscience, Psychology, and Economics*, 13 (4), 191–203, https://doi.org/10.1037/npe0000136.

Hamby, Anne, David Brinberg, and Kim Daniloski (2017), "Reflecting on the Journey: Mechanisms in Narrative Persuasion," *Journal of Consumer Psychology*, 27 (1), 11–22, https://doi.org/10.1016/j.jcps.2016.06.005.

Hamby, Anne, Kim Daniloski, and David Brinberg (2015), "How Consumer Reviews Persuade through Narratives," *Journal of Business Research*, 68 (6), 1242–50, https://doi.org/10.1016/j.jbusres.2014.11.004.

Hawkes, Terence (1972), *Metaphor*, London: Routledge.

Hudson, Simon, Li Huang, Martin S. Roth, and Thomas J. Madden (2016), "The Influence of Social Media Interactions on Consumer-Brand Relationships: A Three-Country Study of Brand Perceptions and Marketing Behaviors," *International Journal of Research in Marketing*, 33 (1), 27–41, https://doi.org/10.1016/j.ijresmar.2015.06.004.

Hughes, Christian, Vanitha Swaminathan, and Gillian Brooks (2019), "Driving Brand Engagement through Online Social Influencers: An Empirical Investigation of Sponsored Blogging Campaigns," *Journal of Marketing*, 83 (5), 78–96, https://doi.org/10.1177/0022242919854374.

Lakoff, George, and Mark Johnson (2003), *Metaphors We Live By*, Chicago: University of Chicago Press.

Landau, Mark J., Chen-bo Zhong, and Trevor J. Swanson (2017), "Conceptual Metaphors Shape Consumer Psychology," *Consumer Psychology Review*, 1 (1), 54–71.

Lee, Spike W. S., and Norbert Schwarz (2014), "Framing Love: When It Hurts to Think We Were Made for Each Other," *Journal of Experimental Social Psychology*, 54 (September), 61–67, https://doi.org/10.1016/j.jesp.2014.04.007.

Leung, Fine F., Flora F. Gu, Yiwei Li, Jonathan Z. Zhang, and Robert W. Palmatier (2022), "Influencer Marketing Effectiveness," *Journal of Marketing*, 86 (6), 93–115, https://doi.org/10.1177/00222429221102889.

Lien, Nai-Hwa, and Yi-Ling Chen (2013), "Narrative Ads: The Effect of Argument Strength and Story Format," *Journal of Business Research*, 66 (4), 516–22, https://doi.org/10.1016/j.jbusres.2011.12.016.

Mac Cormac, Earl R. (1985), "A Cognitive Theory of Metaphor," *Journal of Aesthetics and Art Criticism*, 45 (4), 418–20, https://doi.org/10.2307/431337.

MacInnis, Deborah J., and Valerie S. Folkes (2017), "Humanizing Brands: When Brands Seem to Be like Me, Part of Me, and in a Relationship with Me," *Journal of Consumer Psychology*, 27 (3), 355–74, https://doi.org/10.1016/j.jcps.2016.12.003.

Marin, Alex, Martin Reimann, and Raquel Castaño (2014), "Metaphors and Creativity: Direct, Moderating, and Mediating Effects," *Journal of Consumer Psychology*, 24 (2), 290–97, https://doi.org/10.1016/j.jcps.2013.11.001.

Pogacar, Ruth, L. J. Shrum, and Tina M. Lowrey (2018), "The Effects of Linguistic Devices on Consumer Information Processing and Persuasion: A Language Complexity × Processing Mode Framework," *Journal of Consumer Psychology*, 28 (4), 689–711, https://doi.org/10.1002/jcpy.1052.

PowerReviews (2022), "Ratings and Reviews Benchmarks: Review Length," PowerReviews, April 27, https://www.powerreviews.com/benchmarks/review-length/.

Reimann, Martin, Deborah J. MacInnis, Valerie S. Folkes, Arianna Uhalde, and Gratiana Pol (2018), "Insights into the Experience of Brand Betrayal: From What People Say and What the Brain Reveals," *Journal of the Association for Consumer Research*, 3 (2), 240–54, https://doi.org/10.1086/697077.

Reimann, Martin, Sandra Nuñez, and Raquel Castaño (2017), "Brand-Aid," *Journal of Consumer Research*, 44 (3), 673–91, https://doi.org/10.1093/jcr/ucx058.

Rimmon-Kenan, Shlomith (2002), *Narrative Fiction: Contemporary Poetics*, 2nd ed., London: Routledge.

Sampey, Kathleen (2023), "Trader Joe's Tops Yelp's Most-Loved Brands," April 24, https://streetfightmag.com/2023/04/24/trader-joes-tops-yelps-most-loved-brands/.

Thibodeau, Paul H., and Lera Boroditsky (2011), "Metaphors We Think With: The Role of Metaphor in Reasoning," *PLoS One*, 6 (2), e16782, https://doi.org/10.1371/journal.pone.0016782.

——— (2013), "Natural Language Metaphors Covertly Influence Reasoning," *PLoS One*, 8 (1), e52961, https://doi.org/10.1371/journal.pone.0052961.

van Laer, Tom, Ko de Ruyter, Luca M. Visconti, and Martin Wetzels (2014), "The Extended Transportation-Imagery Model: A Meta-Analysis of the

Antecedents and Consequences of Consumers' Narrative Transportation," *Journal of Consumer Research* , 40 (5), 797–817, https://doi.org/10.1086/673383.

van Laer, Tom, Stephanie Feiereisen, and Luca M. Visconti (2019), "Storytelling in the Digital Era: A Meta-Analysis of Relevant Moderators of the Narrative Transportation Effect," *Journal of Business Research*, 96 (March), 135–46, https://doi.org/10.1016/j.jbusres.2018.10.053.

Woodside, Arch G. (2010), "Brand-Consumer Storytelling Theory and Research: Introduction to a Psychology and Marketing Special Issue," *Psychology and Marketing*, 27 (6), 531–40, https://doi.org/10.1002/mar.20342.

Zaltman, Gerald, and Robin Higie Coulter (1995), "Seeing the Voice of the Customer: Metaphor-Based Advertising Research," *Journal of Advertising Research*, 35 (4), 35–51.

WHEN BRAND NARRATIVES ARE WRITTEN IN METAPHORIC TERMS, CAN THEY WEAKEN SELF–BRAND CONNECTIONS?

WEB APPENDICES

These Web Appendices are organized as follows:

Web Appendix 1: Methodological Details on the Pilot Study

Web Appendix 2: Methodological Details on Study 1

Web Appendix 3: Methodological Details on Study 2

The information provided in the main article and in these Web Appendices is intended to help the reader to comprehend the procedures, manipulations, and measures of our studies. Both our main article and these Web Appendices thus represent illustrations of our empirical procedures following a typical peer review process. For exact materials, data, and code, please see our repository on the Open Science Framework: https://osf.io/4jp39/.

WEB APPENDIX 1
METHODOLOGICAL DETAILS ON THE PILOT STUDY

Appendix Table 1: Exemplary review text for narrative types and different product categories

Narrative type	Product category	Review text
Metaphoric	Soap & detergent	"This body wash has a creamy rich lather… even with a wash cloth! It's fresh sent leaves you feeling refreshed and moisturized. My husband often compliments how good I smell even hours after I've showered. I buy two at a time and they last me and my girls around two months. My two pre- teen girls say their Dove gives them that 'Spa' feel. A little goes a long way but I won't lie I use extra pumps just because I love it so much. Let your body thank you and give it a try!"
		"The pricing was good and I love the premeasured pods. And I did not have to lug it from my car to my laundry room. It came straight to my front door."
	Pharmaceutical products	"I loved the size of the pill and how it took quick action of pain relief."
		"I am all set. After the regular Tylenol,I purchased the PM Tylenol. I am full. I haven't used more than

		3. However, I feel good to know it is there when needed."
	Pulp & paper products	"I was always a user of another brand of "Ultra Strong" toilet paper, the one with the bears in the ads. I decided to give this a try based on reviews to see if I would like it the same or better than their competitor's product because it was a little cheaper. Big mistake. One thing that was more annoying than truly negative was that it was like this toilet paper wasn't "cut" all the way through. Like when you order a pizza and they don't cut all the way through it. You would try and tear off the sheets of toilet paper on the perforation and it would just rip where it wanted all lopsided and jagged. Like I said, not truly a huge issue but it was annoying and kinda funny. The worst things about this toilet paper is all the lint and dust it creates. Example being when I had a watery eye I grabbed a couple squares to wipe the moisture from my eye. Afterwards I looked in the mirror and had little pieces of white fuzz all underneath my eye from the toilet paper. If you can imagine, it also left this fuzz behind in...other places....it was used as well. Like what you normally use toilet paper for. You get what I mean. Who wants a fuzzy linty bottom after they use the restroom?"
		"Up until recently, I'd been using Brawny paper towels. Then Ukraine was invaded, and that is relevant to this review. Georgia-Pacific makes Brawny paper towels, and Georgia-Pacific is owned by Koch Industries, and Koch Industries has no

		intention of shutting down operations in Russia. So, no question I had to switch brands. Tried the Bounty and was AMAZED. These towels are RADICALLY better than Brawny: thicker, more robust, able to absorb significantly more liquid and still be usable once it's wet. I'm sorry it took such a tragedy for me to try them, but Bounty is now my paper towel of choice in perpetuity."
Non-metaphoric	Soap & detergent	"I bought this on Amazon because I was too lazy to remember to buy it at the store. I also like that it is really big and has the pump handle on it. I usually use 2 pumps which creates a lot of lather with my loofa. At first, I loved this soap! I was able to stop using lotion when I got out of the shower, and could really tell the difference between this with the "nutrium moisture", and the generic brands at the grocery store that claim to be the same. But, apparently I need to start using body lotion again, because I have noticed that my skin isn't as soft now, and I'm starting to get little patches of dry skin on my arms. Overall, it is a good product, and I might buy this again on Amazon. Or maybe I will just buy the generic when it is on sale at the grocery store."
		"I used Tide Unscented Tide and went on vacation and they only had this kind of Tide. So I used it and had no rashes Now I use Tide Pods 3 in 1, Laundry Detergent Pacs, Spring Meadow Scent, 81 Count I buy the largest bottle I can purchase. Amazon, with their doupon, is cheaper than at Walmart.

		I highly recommend the scent and the size and always I recommend Tide!!"
	Pharmaceutical products	"Had a pounding headache and decided to take one of these. Started feeling relief within 5 minutes and headache was mostly gone within 15 minutes. Highly recommend."
		"I have used rapid release since they first came out. When I've got pain worth taking medication for, I turn to rapid release. Two nights ago, I couldn't sleep because of shoulder pain, took the rapid release got back in bed and was asleep within 5 minutes. I had rolled around for hours trying to get comfortable, but Tylenol Rapid Release did the trick."
	Pulp & paper products	"Of course there are cheaper products out there but I found this to be pretty good. Rolls are soft and large, and comfortable to use. I'd order again if I can't find any in stores."
		"Don't buy your toilet paper on here, all of it is far overpriced!! Shop at sams or Cosco I pay $25 for a huge case of toilet paper like 8 packs and it's softer then cottonelle, I am picky about my toilet paper too!"

Note. The review text in Study 1 was scraped from Amazon.com in April 2023 for purchases made between 2015 and 2023. Data were categorized based on the International Standard Industrial Classification (ISIC) of all economic activities.

Appendix Table 2: Pervasiveness of metaphoric narratives by product category

	Narrative type				
Product categories	Metaphoric narrative	Non-metaphoric narrative	Metaphor only	Uncategorized	Total
Pharmaceutical products	**11** (1%)	**16** (2%)	**21** (2%)	**146** (15%)	**194** (19%)
Pulp & paper products	**44** (4%)	**31** (3%)	**41** (4%)	**347** (35%)	**463** (46%)
Soap & detergent	**40** (4%)	**40** (4%)	**20** (2%)	**242** (24%)	**342** (34%)
Total	**95** (9%)	**87** (9%)	**82** (8%)	**736** (74%)	**1000**

Note. Chi-square test of independence between product categories and narrative type (metaphoric vs. non-metaphoric): X^2 (5, 1000) = 15.18, p = 0.02

WEB APPENDIX 2
METHODOLOGICAL DETAILS ON STUDY 1

Appendix Table 3: Pictorial stimuli

Stimulus presented in *low* brand familiarity condition	Stimulus presented in *high* brand familiarity condition
Vivida	Bose

Note. The Vivida and Bose datasets were collected several weeks apart from each other in April and May 2023 because of the large sample size and to avoid overlapping participation. Although data for each brand were collected at two different points in time to avoid overlapping recruitment, there is no theoretical reason to expect that there would be differences caused by an event that occurred between the time the data were collected. In addition, participation in the Bose condition was restricted to subjects who were not part of the earlier Vivida condition.

Appendix Table 4: Example brand messages for different narrative types

Narrative type	Brand message
Metaphoric	"Bose is the cream of the crop. I opened them, I used them, and enjoyed superior sound quality from the noise canceling."
	"She was feeling down, so she put on Bose headphones and listened to calming waves. Bose is her vacation."
	"Mary found solace in her Bose headphones. The sound was so vivid that it felt like a concert. This is where she found joy"
	"A person on a plane puts on Bose headphones. They're immediately transported to an island paradise. It takes them away!"
Non-metaphoric	"She wakes up, grabs her coffee, and then enjoys listening to music on her Bose headphones while walking to class."
	"She drives to the gym, puts on her Bose headphones, and then lifts weights for 30 minute."
	"I got a new pair of Bose headphones, I put them on, cranked up the noise suppression and had a great
	"She woke up and felt very sleepy but put her Bose headphones on and it energized her to get through the

Manipulation Check for the Narrative Type Condition

- True/false question, which was only shown in the non-metaphoric narrative condition ('True' is the correct answer): "**True or false**: A **narrative** promotional message is a story or account of events, experiences, or imaginary worlds, presented through a sequence of connected events or

actions." In support of our manipulation, 97.1% of participants in the non-metaphoric narrative condition responded 'True'.

- True/false question, which was only shown in the metaphoric narrative condition ('True' is the correct answer): "**True or false**: A **metaphorical** promotional message describes an object or an action in a way that is not literally true, but used as a comparison or an analogy that explains an idea or concept." In support of our manipulation, 97.4% of participants in the metaphoric narrative condition responded 'True'.

Manipulation Check for the Brand Familiarity Condition

- Low brand familiarity condition: By design, the Vivida brand was either unknown or perceived to be little known (perhaps because of its familiar pronunciation), because it was created by the authors using ChatGPT.

- High brand familiarity condition: "Do you know the headphone and sound equipment brand **Bose**?" 100% of participants checked 'Yes'. When 'No' was selected, the study was ended automatically.

Comprehension and Attention Check Questions

- Question 1, shown in all conditions (multiple-choice question with four answer options; 'All of the above' is the correct answer): "Your promotional message should contain which of the following? Contain a storyline with a beginning, middle, and end; Contain actors in the storyline, including Bose; Explain why things happen, that is, what caused things to happen; All of the above.

- Question 2 (embedded among other scale items): "If you read this, select 2."

Condition Comparison Results at Different Levels of Comprehension and Attention

- All participants: $F_{narrative\ type}$ = 5.647, p = .018; $F_{brand\ familiarity}$ = 14.782, p < .000; $F_{interaction}$ = 1.625, p = .203 (total n = 1975)

- None of three questions correct: F test = n/a (total n = 0)

- One of three questions correct: $F_{narrative\ type}$ = .020, p = .896; $F_{brand\ familiarity}$ = .872, p = .419; $F_{interaction}$ = 0 (total n = 6)

- Two of three questions correct: $F_{narrative\ type}$ = 3.854, p = .051; $F_{brand\ familiarity}$ = .041, p = .840; $F_{interaction}$ = 2.259, p = .134 (total n = 240)

- Three of three questions correct: $F_{narrative\ type}$ = 4.646, p = .031; $F_{brand\ familiarity}$ = 15.995 p < .000; $F_{interaction}$ = .468, p = .494 (total n = 1674)

Analyses When Controlling for Linguistic Abilities

Linguistic ability index (α = .65):

- I enjoy writing creatively.

- I like to play with language.

- I am proficient in the English language.

Results:

- $F_{linguistic\ ability}$ = 136.320, p < .000; $F_{narrative\ type}$ = 5.363, p = .021; $F_{brand\ familiarity}$ = 17.594, p < .000; (n = 1975)

WEB APPENDIX 3

METHODOLOGICAL DETAILS ON STUDY 2

Comprehension and Attention Check Questions

- Question 1 (embedded among other narrative structure scale items): "If you read this, select 2."

Condition Comparison Results at Different Levels of Attention

- All participants: $F_{narrative\ type} = 89.870$, $p < .000$; $F_{brand\ familiarity} = 9.281$, $p = .002$; $F_{interaction} = 3.417$, $p = .065$ (total n = 2,042)

- Attention check question correct: $F_{narrative\ type} = 91.315$, $p < .000$; $F_{brand\ familiarity} = 8.884$, $p = .003$; $F_{interaction} = 3.126$, $p = .077$ (total n = 2,038)

Appendix Table 5: Results of brand familiarity on narrative structure

Scale item	Brand familiarity condition	Mean	Standard Deviation
To what extent does this story consist of actors engaged in actions (perhaps to achieve goals)?	Present	2.65	1.07
	Absent	2.45	1.08
To what extent do these thoughts have a well delineated beginning (initial event), middle (crisis or turning point), and ending (conclusion)?	Present	2.16	1.02
	Absent	2.06	.98
To what extent do these thoughts explain why things happen, that is, what caused things to happen?	Present	2.16	1.02
	Absent	2.07	1.00

Condition Comparison Results for Three Focal Narrative Elements

DV: To what extent does this story consist of actors engaged in actions (perhaps to achieve goals)?

- $F_{narrative\ type}$ = 135.429, p < .000; $F_{brand\ familiarity}$ = 18.500, p < .000; $F_{interaction}$ = .201, p = .654 (n = 2042)

DV: To what extent do these thoughts have a well delineated beginning (initial event), middle (crisis or turning point), and ending (conclusion)?

- $F_{narrative\ type}$ = 28.599, p < .000; $F_{brand\ familiarity}$ = 5.283, p = .022; $F_{interaction}$ = 2.140, p = .144 (n = 2042)

DV: To what extent do these thoughts explain why things happen, that is, what caused things to happen?

- $F_{narrative\ type}$ = 24.765, p < .000; $F_{brand\ familiarity}$ = 4.369, p <= .037; $F_{interaction}$ = 6.198, p = .013 (n = 2042)

Note. Although we performed ANOVA on individual scale items rather than the composite index, ANOVA's robustness often ensures that violations of normality assumptions do not significantly impact results, especially with adequate sample sizes.