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To cite this article: Olesia Nikulina, Allard C. R. van Riel, Jos G. A. M. Lemmink, Dhruv Grewal & Martin Wetzels (20 Feb 2024): Narrate, Act, and Resonate to Tell a Visual Story: A Systematic Review of How Images Transport Viewers, Journal of Advertising, DOI: [10.1080/00913367.2024.2309921](https://doi.org/10.1080/00913367.2024.2309921)

To link to this article: <https://doi.org/10.1080/00913367.2024.2309921>



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## Narrate, Act, and Resonate to Tell a Visual Story: A Systematic Review of How Images Transport Viewers

Olesia Nikulina<sup>a,b</sup>, Allard C. R. van Riel<sup>b</sup>, Jos G. A. M. Lemmink<sup>a</sup>, Dhruv Grewal<sup>c</sup>, and Martin Wetzels<sup>d</sup>

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### ABSTRACT


Marketers today are increasingly using storytelling to engage their audiences. However, the design of narrative visuals is often inspired by a text-centric understanding of narratives. Despite the fast increase in visual content and the distinct processing it induces, extant research on visual narrativity remains fragmented, lacking a comprehensive framework to explain how a single still image can convey a narrative. Our literature review addresses this gap through the lens of narrative transportation theory. Based on a systematic review of 64 articles from marketing and adjacent disciplines, the authors propose that an image must narrate, act, and resonate (NAR) to stimulate narrative processing and transport viewers into its narrative. They also identify specific visual features that can facilitate this process and explore how characteristics of the storyteller, story receiver, and story settings can influence the strength of visual narrative transportation (VNT). Finally, the authors highlight affective, cognitive, and behavioral responses of transported viewers. This research extends narrative transportation theory to the visual domain, offering practical design principles that can be easily applied by marketing professionals. It also outlines an actionable research agenda for marketing scholars to further explore visual narrativity.

Storytelling helps brands engage audiences by grabbing customers' attention and helping them identify core messages. The intrinsic value of stories in marketing communication has been established by research in consumer behavior (Woodside, Sood, and Miller 2008), branding (Escalas 2004a), digital marketing (Ching et al. 2013), and advertising (Escalas 2003). For advertising professionals in particular, storytelling offers benefits that extend beyond creating awareness. Narrative ads, presented in a storylike format (Kim, Ratneshwar, and Thorson 2017), can create strong emotional bonds with consumers. Compared with factual ads that highlight specific product benefits (Padgett and Allen 1997), narrative ads also improve

customers' attitudes toward ad and product (Ching et al. 2013), purchase intentions (Mattila 2000), and engagement (Farace et al. 2017). Because narrative ads stimulate affective rather than cognitive processing (Escalas 2007), they can lead to narrative persuasion too, through narrative transportation (Escalas 2004a).

Narrative transportation refers to a sense of immersion into a story and detachment from the real world (Green and Brock 2000). Grabbed and intrigued by the story (Gerrig 1993; Green and Brock 2000), a story receiver engages in "an integrative melding of attention, imagery, and feelings" (Green and Brock 2000, 247), which implies a transformational experience (Phillips and McQuarrie 2010; Van Laer et al.

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 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/00913367.2024.2309921>.

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2014), through which story receivers feel changed (Gerrig 1993). The ensuing narrative persuasion influences their affective, cognitive, and behavioral responses (Van Laer et al. 2014) in ways that are potent, long-lasting (Green 2008; Green, Garst, and Brock 2003), and independent of the presented argument strength (Escalas 2007). Accordingly, increasing scholarly interest centers on determining which design elements of an advertisement might foster narrative transportation and bring about narrative persuasion.

Many ads, such as those that appear in magazines, on billboards, or in social media, contain visual elements that represent “tendential or quasi-narratives” (Wolf 2003, 193). Visual narratives are processed differently from other narrative modalities as viewers tend to instantly reconstruct their meaning using prior experiences and imagination, which attributes temporality and causality to visual narratives. As there is no comprehensive understanding of the specific image design elements influencing how visuals convey meaning, we seek to extend the theory of narrative transportation into the visual domain. We apply this theory to single still images, building on the work of Green and Brock (2002) and Baetens (2009). Thus, we define visual narrative transportation (VNT) as a temporary state experienced by a consumer of a visual story due to the transfer of their attention, imagery, and emotional involvement—either individually or in combination—from surroundings to the story in an image.

We undertake a systematic review of articles from marketing and adjacent disciplines, from which we derive (1) nine specific visual features that can help marketing, advertising, and branding practitioners evoke VNT among audiences; (2) three theoretical dimensions of visual narrativity that we refer to as NAR (narrate, act, resonate); (3) affective, cognitive, and behavioral outcomes of this process; and (4) factors that can determine the degree of VNT. On the basis of a systematic review, we propose theoretical and practical research agendas. The findings about specific visual features could prove particularly useful in marketing communication contexts, but the proposed theoretic dimensions may also be relevant to analyses of any visual data, irrespective of the context.

## Background

### *Narrative Processing and Persuasion*

Narratives are stories developed by storytellers and interpreted through the experiential lens of story receivers (Van Laer et al. 2014). They are typically

perceived as entertaining rather than persuasive, evoking a different processing mode than nonnarratives which rely on factual information and which have an overt persuasive intent (Green 2006, 2008; Green and Brock 2002; Shen, Sheer, and Li 2015). Processing of a narrative engages story receivers both emotionally (Hamby and Jones 2022) and cognitively (Chang 2009), making them more receptive to narrative claims. As a result, the persuasive power of narratives depends not solely on the strengths and relevance of the arguments or an individual’s predisposition to engage with them but on the narratives’ capacity to offer a relatable story that is engaging and immersive (Green 2004, 2008; Green and Brock 2002).

### *Narrative Transportation*

Narrative transportation refers to the extent to which story receivers become mentally detached from their immediate surroundings and immerse themselves in the narrative world (Gerrig 1993; Green and Brock 2000; Van Laer et al. 2014). The concept of narrative transportation was first introduced by Gerrig (1993), who metaphorically compared reading books to traveling into the stories they tell. Other studies describe narrative transportation as being carried away by a story (Green and Brock 2000), detached from the real world (Escalas 2004b), or engrossed by the narrative (Van Laer et al. 2014). Thereafter, story receivers return in a “somewhat changed” state from their encounter with the narrative (Gerrig 1993, 11). Such transformation can lead to narrative persuasion influencing affective, cognitive, and behavioral responses (Van Laer et al. 2014). Due to story receivers’ perceptions of the unintentionality of narrative cues, narrative persuasion often exerts stronger, longer-lasting, and more certain influences than analytical persuasion (Appel and Richter 2007; Van Laer et al. 2014).

Narrative transportation represents how story receivers’ attention, mental representations, and feelings are combined in response to the narrative (Green and Brock 2000). Narrative attention refers to how strongly a story receiver concentrates on the narrative (Polichak and Gerrig 2003). Mental representations include mental imagery and mental simulation (Moulton and Kosslyn 2009). Mental imagery defines how working memory statically represents received informational stimuli (Peck, Barger, and Webb 2013) as occurs through individuals’ deliberate attempts to form mental representations (Barsalou 2008; Kent and Lamberts 2008). Mental simulation instead is unconscious and evokes dynamic representations of events

or objects (Barsalou 2008; Delgado and Escalas 2004). Finally, narratives can evoke feelings, emotional involvement (Green and Brock 2000), and empathy (Delgado and Escalas 2004) that story receivers direct toward characters in the story. All these elements can contribute to narrative transportation.

### ***Narrative Advertising Media***

Advertising research has firmly established the persuasive power of narrative content, primarily textual (e.g., Escalas 2004b; Kim, Ratneshwar, and Thorson 2017; Yıldız and Sever 2022), across different contexts, including health-related communications (e.g., Green 2006; Russell, Hamby, and Russell 2018), social marketing (e.g., Alonso Dos Santos et al. 2017; Merchant et al. 2010; Van Laer, Feiereisen, and Visconti 2019), digital marketing (Feng, Chen, and Kong 2021; Huang, Ha, and Kim 2018; Seo et al. 2018), and more. This allowed for identifying specific elements of textual ads, such as identifiable characters, an imaginable plot, and verisimilitude, that can narratively transport readers and encourage desirable consumer behaviors (Van Laer et al. 2014).

While other verbal narrative modalities, such as audio (Kang, Hong, and Hubbard 2020; Reinhart et al. 2021; Shen, Sheer, and Li 2015; Zheng 2014) and video narratives (Coker, Flight, and Baima 2021; Feng et al. 2019), have also received scholarly attention, there has been relatively little conceptual emphasis on visual narratives.

However, visual processing is cognitively and affectively different from language processing (Childers 1986; Childers and Houston 1984). From a cognitive perspective, visuals are processed more rapidly than semantic stimuli like texts (Fabre-Thorpe et al. 2001; Simola, Hyönä, and Kuisma 2014), often within 100 milliseconds (Pieters and Wedel 2012), ensuring immediate impact. In addition, visual information is encoded more elaborately in memory due to its vividness, making it readily accessible later for forming judgments. From an affective standpoint, images are faster to access a semantic network with emotional information (Houwer and Hermans 1994). The cognitive ease of processing images and their affective importance imply visual information's superiority in narrative processing, as viewers rapidly decode and emotionally react to a visual story (Escalas 2004a; Schank 1995).

### ***Images as a Source of Narrativity***

Images may appear limited in conveying narrative meaning as they are inherently static and incapable of depicting the progression of events. Offering a single viewpoint, an image may omit objects, people, or situations crucial to extracting its narrative meaning. Viewers, therefore, must rely on their subjective experiences and emotional and cognitive states to extract a narrative from an image, leading to variations in visual narrative processing among individuals. Despite these limitations, semiotics researchers show that a narrative can be effectively conveyed by an image alone. A “frozen action” (Wolf 2003) that visuals portray is reconstructed by viewers who assign a sense of temporality and causality, producing perceptions of visual narrative meaning (Baetens 2009). For instance, for an artwork to qualify as visual narrative art (Megehee and Woodside 2010), the audience must perceive that it captures a snapshot of a larger story (Grigsby, Jewell, and Zamudio 2022). Depicting a person or anthropomorphic being can also enhance visual narrative strength by encouraging viewers' self-identification (Baetens 2009; Wolf 2003).

Thus, an image can be considered a visual narrative when it is chronologically or causally organized to prompt viewers' curiosity to find an outcome, resolution, or ending of a visual story (Baetens 2009) inherently containing narrativity (Baetens and Bleyen 2010; Lim and Childs 2020). This aligns with the definition of a narrative by Green and Brock (2000), recognizing that unanswered questions are primary drivers of narrative strength. Thus, visuals can provide varying degrees of narrativity and transport viewers into stories to different extents.

### ***Visual Narrative Transportation***

Because images can function as narrative sources (Baetens 2009; Wolf 2003) and surpass word-based narratives in capturing attention (Rayner et al. 2001), increasing scholarly interest centers on identifying visual features (image design elements) that facilitate transportation into visual narratives. We define VNT as a temporary state experienced by consumers of a visual story, reflecting the transfer of their attention, imagery, emotional involvement, or any combination thereof, from their immediate surroundings to the story portrayed by an image. Despite the growing number of VNT studies, there is currently no comprehensive overview of all possible visual features facilitating VNT. Therefore, we undertake a systematic review of prior studies from marketing and related fields

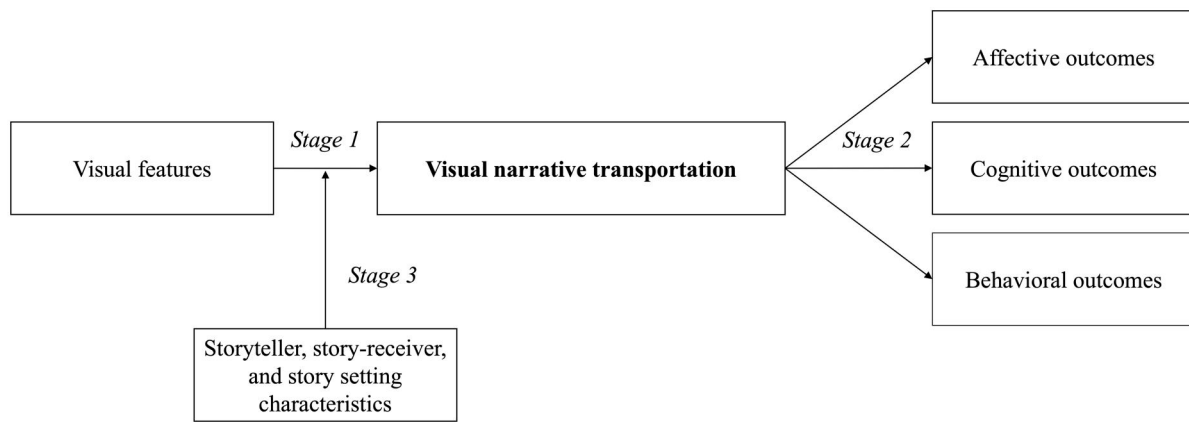


Figure 1. Review steps.

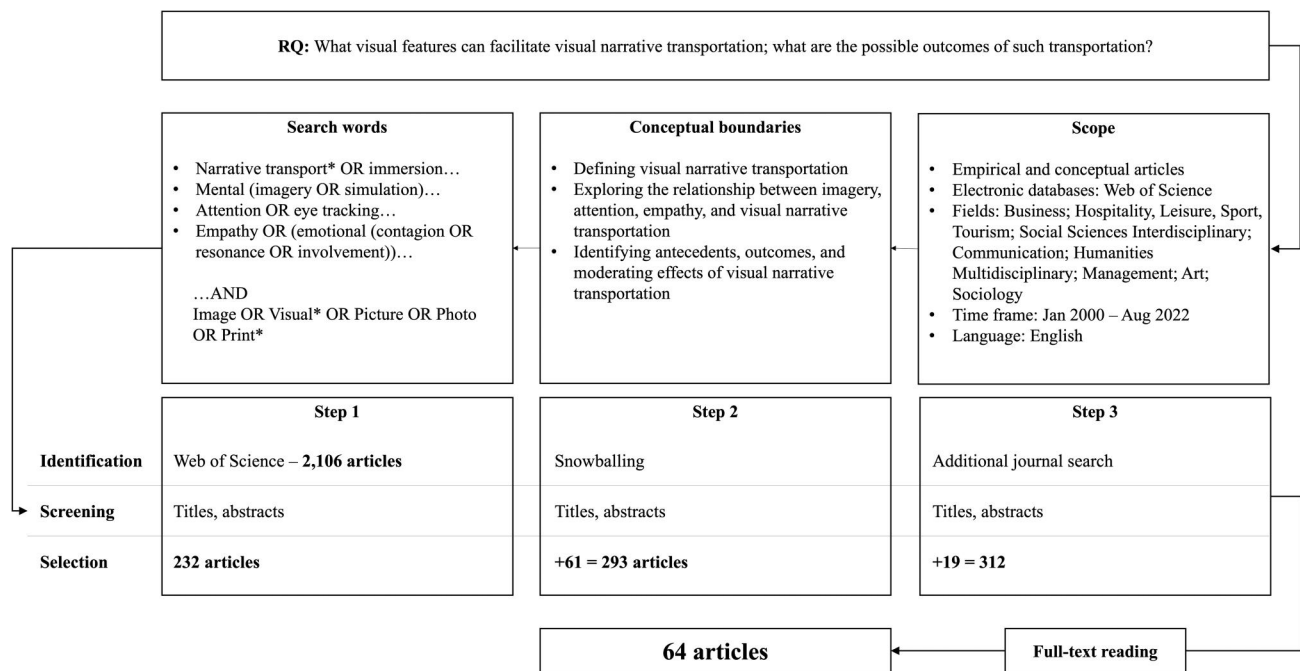


Figure 2. Search process.

addressing VNT and associated cognitive processes, namely, attention, empathy, and emotional involvement. Figure 1 outlines the goal and focus of the review.

## Methodology

Our systematic review integrates existing insights to establish the state of the art of VNT research and suggest clear research directions. We employ a PRISMA (preferred reporting items for systematic reviews and meta-analyses) framework (Moher et al. 2009) to ensure the replicability and reliability of the results (Booth, Sutton, and Papaioannou 2012; Tranfield, Denyer, and Smart 2003). This approach includes

searching, screening, and synthesizing phases (Macpherson and Holt 2007), as illustrated in Figure 2.

Our focus was on articles exploring the effects of visual features on narrative transportation and/or associated cognitive processes: (1) attention to the narrative, (2) active imagination to form mental representations, and (3) emotional connection with the setting or characters, so we included articles linking visual features with all these concepts. To establish the effect of visual features on narrative transportation, we included visually focused search words (e.g., visual\* OR picture OR image OR photo OR print\*). Table 1 presents the search strings and short explanations. The search was applied to the titles and abstracts of published articles.

**Table 1.** Overview of the search strings.

Theoretical Concept	Search Query	Explanation
Narrative transportation	TOPIC: (((narrative AND transport*) OR immersion) AND (visual* OR picture OR image OR photo OR print*))	"Narrative transport*" aims to extract articles focused on narrative transportation (or "transportability," "transported," etc.). The additional term "immersion" was added after the preliminary literature search as an often-used synonym for "narrative transportation."
Mental representations	TOPIC: (((mental AND (imagery OR simulation)) AND (visual* OR picture OR image OR photo OR print*))	"Mental imagery" aims to extract articles focused on mental representations as a construct associated with visual narrative transportation (VNT). The additional term "mental simulation" was added after the preliminary literature search as a dimension of mental representations.
Attention	TOPIC: ((attention OR eye-tracking) AND (visual* OR picture OR image OR photo OR print*))	"Attention" aims to extract articles dealing with attention as a construct associated with VNT. The term "eye-tracking" was added after the preliminary literature search; it is a commonly used method in attention studies.
Empathy	TOPIC: ((empathy OR (emotional AND (contagion OR resonance OR involvement))) AND (visual* OR picture OR image OR photo OR print*))	"Empathy" aims to extract articles in which empathy is a construct associated with VNT. Additional terms "emotional contagion," "emotional resonance," and "emotional involvement" were added after the preliminary literature search because they represent similar academic concepts.

### Data Collection

We first searched for relevant articles in the Web of Science (WoS) citation database using the search strings in Table 1. As the oldest citation database, WoS applies a strict selection process to index only high-quality academic journals. We also employed snowball sampling (backward and forward) of the references of these identified articles. Finally, we conducted an additional journal search to find articles that might fit our review objectives but lacked relevant keywords.

Our research question determined the initial selection criteria, focusing on empirical and conceptual studies from marketing-related WoS fields. The systematic review included articles from the year 2000 when the first study of narrative transportation appeared (Green and Brock 2000). The search yielded 2,106 documents downloaded into the citation management software EndNote. We retained only academic articles from peer-reviewed journals published in English, excluding books, book chapters, conference papers, editorials, and other document types in different languages. Similar to Calabrò et al. (2019), we then assessed whether titles and abstracts fell within the previously determined scope and conceptual boundaries of the systematic review. At this stage, 1,874 articles not meeting these standards were discarded, leaving 232 articles for analysis. Excluded articles predominantly focused on attention, imagery, empathy, or narrative transportation without integrating a visual component, not aligning with the systematic review's visual focus.

In the second stage, we sourced additional papers from the references of the 232 initially identified articles using a snowballing approach, such that we

analyzed citations of and to selected articles (Webster and Watson 2002), yielding 61 articles with relevant titles and abstracts not discovered in the first stage. Thus, we proceeded with 293 articles in our sample.

The third stage aimed to identify potentially relevant articles that might not feature our search terms as keywords. We analyzed the journal distribution of the 293 selected articles to search the leading journals in terms of frequency separately. We used these journals' websites and the same search strings (Table 1) to ensure consistency in the results. This search yielded an additional 19 articles, which brought the number of preselected articles to 312.

### Full-Text Reading

The first author read the full texts of all 312 articles and applied the inclusion criteria to identify those for the systematic review. To be included, a study's research design had to include visual feature(s) of an image as an independent variable. Each selected article focuses on how these visual features influence visual narrative transportation, attention, imagery, or emotional connection. Applying these criteria resulted in 64 relevant articles for systematic review. Figure 3 shows the distribution of relevant articles per year and research concept, and Table 2 details the top-occurring journals. Most reviewed articles fall within the contexts of business-to-consumer (B2C) product marketing, general advertising, and branding. Of these, a comparable proportion of articles focused on social media and luxury marketing (4.7%, three articles). E-commerce (7.8%, five articles) and retail, specifically packaging (10.9%, seven articles), also emerge as researched contexts. In addition, service

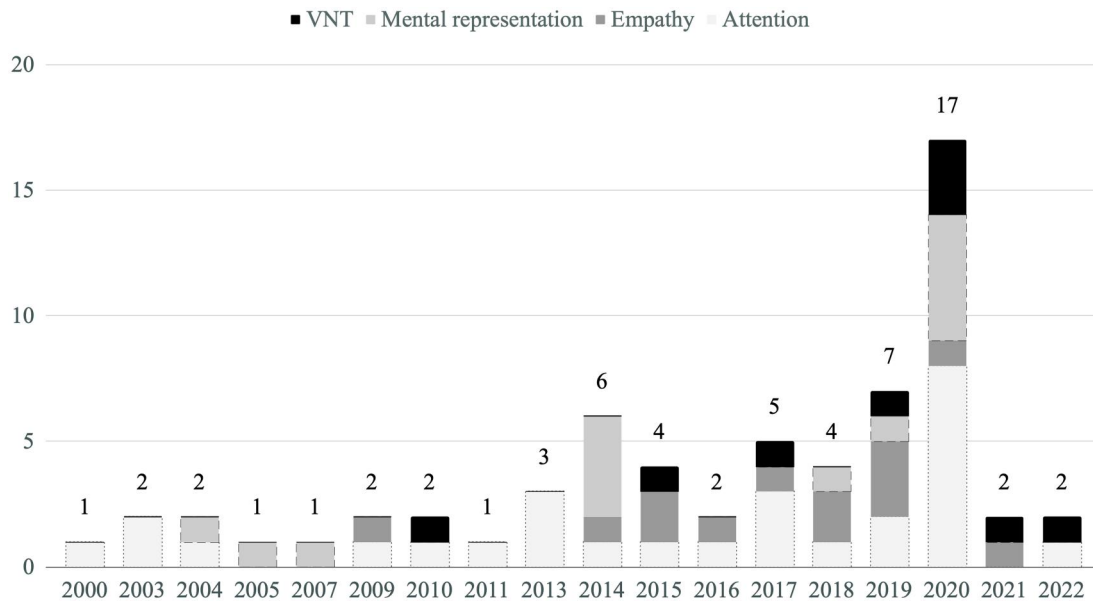


Figure 3. Distribution of articles for review.

Table 2. Most prolific journals contributing to visual narrative transportation (VNT) research.

Journal Title	Frequency	Impact Factor (WoS)	Citation Indicator (WoS)
<i>Journal of Advertising</i>	6	6.53	1.83
<i>Journal of Business Research</i>	6	10.97	2.14
<i>Journal of Consumer Research</i>	6	8.61	1.72
<i>International Journal of Advertising</i>	4	5.89	1.54
<i>European Journal of Marketing</i>	3	5.18	0.90
<i>Journal of Advertising Research</i>	3	3.03	0.84
<i>Journal of Marketing Research</i>	3	6.66	1.22
<i>Journal of Retailing and Consumer Services</i>	3	10.97	2.13
<i>International Journal of Research in Marketing</i>	2	8.05	1.26

Note. Only journals appearing more than once in the selection are included in Table 2. WoS = Web of Science.

(10.9%, seven articles) and social marketing (17.2%, 11 articles) present a prominent focus of the reviewed articles.

## Results

We systematically reviewed 64 articles to establish the state of the art of VNT research (see [Supplemental Online Appendix 1](#)). To present the results, we start with a detailed discussion of the visual features that were found to contribute to VNT or to one of the associated cognitive processes: attention, imagery, or empathy. The proposed visual features specify options for designing transporting images that are likely to persuade audiences.

### Visual Features as Antecedents of VNT

Because the current systematic review primarily focuses on visual features that evoke VNT, we start with a detailed description of all visual features extracted from the reviewed articles: visual complexity,

background, color, composition, people, objects, realism, dynamism, and taboo.

*Visual complexity* is the level of detail and intricacy in an image (Snodgrass and Vanderwart 1980). The reviewed articles focus on its impact on attention and imagery and, in line with Pieters, Wedel, and Batra (2010), differentiate between two types of visual complexity: feature and design complexity. Low feature complexity, subjectively assessed by visual element density, can draw attention to an image overall (An et al. 2020; Bialkova, Grunert, and van Trijp 2013; Li et al. 2020; Myers et al. 2020; Orth and Crouch 2014) and encourage heightened mental imagery (Lee and Shin 2020; Zhao, Dahl, and Hoeffler 2014) but can reduce attention to depicted objects (Li et al. 2020; Pilelienė and Grigaliūnaitė 2016). Medium feature complexity appears to facilitate visual processing (Li et al. 2020). Conversely, high design complexity, assessed by the image's creativity and metaphorical elements, enhances attention (Beard, Henninger, and Venkatraman 2022; García-Madariaga et al. 2020) and mental imagery (Walters, Sparks, and Herington

2007). All 10 reviewed articles (100%) focusing on visual complexity found a statistically significant effect on imagery or attention.

Our review suggests that *background* design also can strongly influence visual processing (Wu and Li 2021), with more complex backgrounds enhancing attention and mental imagery. Two background complexity types appear in the literature: feature and contextual. The former corresponds to regular feature complexity, as described previously. Contextual backgrounds, as opposed to plain ones, present a relevant product or service use case, helping the viewer position an image in a context (Maier and Dost 2018). Both feature and contextual complexity of a background can enhance viewers' attention (Li et al. 2020) and stimulate more vivid mental imagery (Maier and Dost 2018; Wu and Li 2021; Yoo and Kim 2014; Zhang, Xiao, and Nicholson 2020), with 83.3% of reviewed articles finding statistically significant effects.

*Color* as a powerful marketing tool can significantly impact visual attention and empathy. While some studies find no differences between black-and-white and colorful images in generating attention (Zhang, Wedel, and Pieters 2009), others suggest colorful images attract more attention and empathy (Fernandez and Rosen 2000; Zhou and Xue 2019). Reviewed studies do not conclusively establish the effect of color warmth either (Choi et al. 2020; García-Madariaga et al. 2019). Regarding color hues, basic colors, especially green, red, and blue, attract more attention than non-basic colors (Jansson, Marlow, and Bristow 2004). Despite three out of five (60%) reviewed articles indicating a certain effect of color on attention or empathy, findings are inconclusive, necessitating further research for validation. Due to unclear links between color and VNT's related constructs, color is omitted from the following discussion.

Visual *composition*, or the arrangement of elements in an image, can influence VNT, attention, and mental imagery. The reviewed research focused on the depicted perspective, centrality (arrangement of portrayed objects around a central axis), and symmetry (similarity of image parts across an axis). In detail, first-person perspective images are associated with higher VNT (Farace et al. 2017; Mou, Gao, and Yang 2019) and mental imagery levels (Hur, Lim, and Lyu 2020; Jiang et al. 2014). Centrality and symmetry capture viewers' attention, with central and vertically symmetric areas drawing the most attention (Lacoste-Badie, Gagnan, and Droulers 2020; Orquin et al. 2020). However, Lacoste-Badie, Gagnan, and Droulers (2020) also find that overall symmetric images attract

less attention than nonsymmetric ones. Composition's impact on VNT, attention, or imagery is statistically significant across all six (100%) reviewed articles, establishing it as a highly certain visual feature in VNT contexts.

Images depicting *people* or anthropomorphized objects elicit stronger emotional responses from viewers through emotional transfer (Waytz, Cacioppo, and Epley 2010), fostering imagery, attention, empathy, and VNT. These effects might be evoked by the presence of a human in general, a human face, or different characteristics of the portrayed model. The very presence of humans or humanlike representations in visual stimuli can facilitate VNT (Back et al. 2020; Grigsby, Jewell, and Zamudio 2022), imagery (Aydınoglu and Cian 2014), attention (Guido et al. 2019), and empathy (Mogaji, Czarnecka, and Danbury 2018), independent of the number of portrayed people (Baberini et al. 2015). The perceived attractiveness of portrayed individuals can also influence consumer responses, recommending the use of unattractive models (Fisher and Ma 2014) or an attractive model within an unattractive group (Grinstein, Hagtvedt, and Kronrod 2019) to increase empathy. Furthermore, a model's gaze averted from the viewer (versus direct) enhances VNT (To and Patrick 2021) and attention (Adil, Lacoste-Badie, and Droulers 2018; Hutton and Nolte 2011), most strongly when averted gazes are directed toward the advertised product (Adil, Lacoste-Badie, and Droulers 2018; Hutton and Nolte 2011). Finally, intense emotions displayed by models can increase emotional transfer (Hasford, Hardesty, and Kidwell 2015) and attention (Badenes-Rocha, Bigne, and Ruiz-Mafé 2022; Beard, Henninger, and Venkatraman 2022). However, the emotional valence portrayed should align with the marketing goal, with sad models evoking greater empathetic responses for social marketing campaigns (Baberini et al. 2015; Pham and Septianto 2019; Small and Verrochi 2009) and happy models increasing attention (Berg, Söderlund, and Lindström 2015) and empathy (Kulczynski, Ilicic, and Baxter 2016; Mogaji, Czarnecka, and Danbury 2018) in product advertising. Authentic and evident happiness, particularly when a model has a genuine and large smile, garners more attention (Wang et al. 2017) and empathy (Isabella and Vieira 2020). The effects of portrayed people on VNT and the related cognitive processes of attention, empathy, or imagery have been examined in 26 reviewed articles, of which 15 (57.7%) reported congruent and significant results.



Because viewers perceive images as a combination of presented elements, manipulating depicted *objects* or their characteristics can affect viewers' attention, empathy, or VNT. Featuring objects related to the advertised product increases attention (Badenes-Rocha, Bigne, and Ruiz-Mafé 2022; Clement et al. 2017; Radach et al. 2003; Simola, Kuisma, and Kaakinen 2020), with similar effects observed for nature (Hartmann, Apaolaza, and Alija 2013); the inclusion of animals can enhance empathy (Mogaji, Czarnecka, and Danbury 2018). Larger portrayed objects attract attention (Orquin et al. 2020) and facilitate transportation (Back et al. 2020), suggesting enlarging representations of the promoted product can yield positive outcomes. All seven reviewed articles (100%) found a significant effect of portraying objects on VNT, attention, or empathy, establishing objects as a visual feature with high certainty in VNT contexts.

Image *realism* implies a degree of consistency between portrayed objects and their real-life representations. Viewers can rely on past experiences and knowledge to process more realistic images, which can facilitate VNT or imagery. Two elements of image realism contribute to higher VNT (Buskermolen et al. 2015; Farace et al. 2017; Lim and Childs 2020). The first is image intentionality, determined by the level of its artificial manipulation; unintentional images (unedited images or unstaged photos) foster more VNT than intentional ones (Farace et al. 2017; Lim and Childs 2020). The second element is vividness, indicating how closely an image represents real events; more vivid images enhance mental imagery (Miller and Stoica 2004; Petrova and Cialdini 2005; Kim, Choi, and Wakslak 2019) or VNT (Buskermolen et al. 2015). Realism warrants further investigation from researchers as only 42.9% (three out of seven) of the reviewed articles found evidence that it can significantly affect VNT or mental imagery.

*Dynamism* refers to how static images convey an indication of movement, creating dynamic imagery and mental time sequences for viewers (Escalas 2004a; Wolf 2003). Movement can be depicted directly through actions or indirectly through visual patterns. Scholars agree that directly showing movement increases VNT, especially when combined with previously mentioned image vividness (Farace et al. 2017; Grigsby, Jewell, and Zamudio 2022). Indirectly, regular patterns, as opposed to irregular ones, convey a sense of motion, facilitating mental imagery (Farace et al. 2020; Kress and Van Leeuwen 1996). Despite dynamism's popularity in VNT research, more

evidence is needed as only three out of four (75%) reviewed articles found it to predict VNT or mental imagery.

Finally, images may incorporate taboos to stand out from visual clutter, involving objects, events, or behaviors that defy socially accepted norms (Myers et al. 2020), such as sexual, grotesque, or other shocking content (Dahl, Frankenberger, and Manchanda 2003). The impact of sexual content in visual ads is debated; it can increase attention (Fidelis et al. 2017), which, however, tends to focus on the model rather than the brand or overall image (Cummins, Gong, and Reichert 2020). Shocking elements in images can facilitate VNT (An et al. 2020), attention (Dahl, Frankenberger, and Manchanda 2003; Myers et al. 2020; Parry et al. 2013), or empathy (Albouy 2017; Allred and Amos 2018). A subset of research on grotesque visuals, defined as bizarre, odd, absurd, or deviant, reveals that they induce greater transportation than nongrotesque ones (An et al. 2020; Phillips and McQuarrie 2010). Of the nine reviewed articles that examined taboo, 77.7% reported its significant effect on VNT, attention, or empathy.

Figure 4 visualizes which image features affect VNT, attention, imagery, or empathy; Supplemental Online Appendix 2 presents recent social media examples of branded images corresponding to each visual feature.

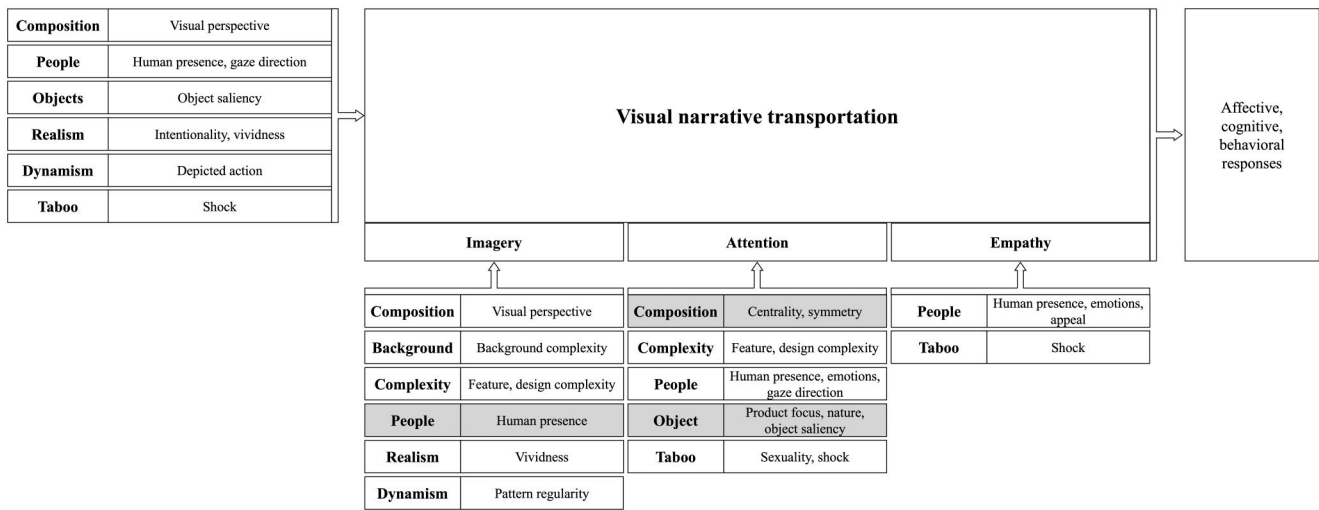
### **Dimensions of Visual Narrativity**

Linking the insights from the reviewed literature with the extended transportation-imagery model (Van Laer et al. 2014) and narrative studies (Bruner 1990; Escalas 2003; Stern 1994), we propose three dimensions of visual narrativity: narrate, act, and resonate, collectively referred to as NAR. These dimensions aggregate previously identified visual features, providing a higher-level overview of what a transporting image should do: frame its narrative, introduce an actor, and resonate with a viewer.

Using NAR, we further discuss possible VNT outcomes and moderators, as well as identify research gaps and suggest future research avenues. For additional article-level findings, consult Supplemental Online Appendix 1. Each dimension and its visual features are defined in the sections that follow, acknowledging their non-mutual exclusivity. Figure 5 presents visual examples.

#### **Narrate**

The *narrate* dimension refers to the setting of an image. It reflects a still representation of the plot of a



**Figure 4.** Image features.

Note: Grey-highlighted blocks indicate that only a direct—not mediating—effect of a visual feature on a corresponding construct was examined in the reviewed articles.



**Figure 5.** Examples of the three dimensions of visual narrativity. Source: <https://www.pexels.com/@cottonbro/> (copyright-free).

word-based narrative, as often pursued by book jacket or movie poster designers who seek to provide a static snapshot of the story events. This dimension includes the following visual features: complexity, background, colors, and composition.

**Act**

Tied to the image’s main actor (person or object), the *act* dimension corresponds to an identifiable character in word-based narratives (Van Laer et al. 2014).

Reviewed articles suggest both people and objects can be actors.

**Resonate**

As a snapshot of a temporal event, an image can present elements that build suspense or signify climax resolution, *resonating* with a viewer. The degree of resonance depends on story receivers’ collective experiences, combining memory, imagination, and emotional state to assign meaning and form vivid representations. We propose three features—realism,

dynamism, and taboo—that can make an image resonate with its viewers.

### **Outcomes of Visual Narrative Transportation**

Transported viewers likely experience narrative persuasion and altered beliefs (Green and Brock 2002; Van Laer et al. 2014). However, there remains a limited understanding of which consumer responses can be elicited through the VNT process. We qualitatively coded all outcomes that visual features in our sample could evoke, revealing three main groups. Affective outcomes encompass all emotion-oriented and attitudinal consumer responses. Cognitive outcomes involve consumers' thinking and mental processes, including how they perceive, elaborate, interpret, and memorize information. Behavioral responses incorporate all action-oriented responses and inclinations that consumers may form during or after a cognitive evaluation.

In the following paragraphs, we present an overview of consumer responses that can be triggered by identified visual features. Within the context of our NAR theoretical framework, we further term images showcasing these features as transporting, with their viewers referred to as transported viewers.

#### **Affective**

Viewers of transporting visuals can elicit affective responses, fostering an emotional connection with the image. The affective responses studied in VNT and related contexts include feelings (Allred and Amos 2018; Berg, Söderlund, and Lindström 2015), emotions (e.g., Albouy 2017; Hartmann, Apaolaza, and Alija 2013; Lim and Childs 2020), and attitudes (e.g., Farace et al. 2020; Jiang et al. 2014; Lee and Shin 2020). Transporting visual narratives can convey feelings that viewers internalize (e.g., Albouy 2017; Baberini et al. 2015), such as joy (Berg, Söderlund, and Lindström 2015) or guilt (Allred and Amos 2018), as well as positive emotions (Hartmann, Apaolaza, and Alija 2013; Yoo and Kim 2014). In addition, transporting images can lead to a more positive attitude toward the advertised product (e.g., Farace et al. 2020; Jiang et al. 2014), brand (Adil, Lacoste-Badie, and Droulers 2018; Kulczynski, Ilicic, and Baxter 2016), and a brand's social media (Hur, Lim, and Lyu 2020).

#### **Cognitive**

Transported viewers invest cognitive effort in image processing, enhancing ad comprehension, activating

their memory, and helping them form preferences. First, transporting images are generally perceived as personally relevant, stimulating increased cognitive load (García-Madariaga et al. 2019; Kim, Choi, and Wakslak 2019) and processing fluency (Orth and Crouch 2014). Second, they can improve recall (e.g., Adil, Lacoste-Badie, and Droulers 2018; Dahl, Frankenberger, and Manchanda 2003; Fidelis et al. 2017) and recognition (e.g., Adil, Lacoste-Badie, and Droulers 2018; Guido et al. 2019; Hartmann, Apaolaza, and Alija 2013) of the ad, portrayed product, or brand. Third, viewers perceive transporting visuals as more effective (To and Patrick 2021), interesting (Radach et al. 2003; Simola, Kuisma, and Kaakinen 2020), pleasant, original, and intellectually challenging (Simola, Kuisma, and Kaakinen 2020) than nontransporting ones. In addition, these images lead to a better perception of the consumer experience (An et al. 2020; Phillips and McQuarrie 2010) and of the connection with an advertised brand (Hur, Lim, and Lyu 2020; Lim and Childs 2020). As a result, products from transporting visual ads are perceived as better performing (Buskermolen et al. 2015), more reliable (Isabella and Vieira 2020), and typical (Berg, Söderlund, and Lindström 2015), leading viewers to form preferences toward an ad (Guido et al. 2019) and a portrayed product (e.g., Clement et al. 2017; García-Madariaga et al. 2019; Simola, Kuisma, and Kaakinen 2020).

#### **Behavioral**

Advertisers rely on consumer behavioral responses to gauge the impact and effectiveness of visual ads. According to the reviewed studies, transporting images can lead to behavioral responses such as consideration, choice, and actual intentions. Viewers of such images are more likely to include the product in their consideration set (Fernandez and Rosen 2000) and ultimately choose it (Fernandez and Rosen 2000; Petrova and Cialdini 2005). They also tend to advocate for a brand (Badenes-Rocha, Bigne, and Ruiz-Mafé 2022), including sharing its ad via word of mouth (Buskermolen et al. 2015; Farace et al. 2017; Yoo and Kim 2014), extend their information search (Hur, Lim, and Lyu 2020; Yoo and Kim 2014), and engage in prosocial behavior such as donations (e.g., Choi et al. 2020; Grinstein, Hagtvedt, and Kronrod 2019; Small and Verrochi 2009). Finally, transporting images are linked to a greater intention to purchase (e.g., Chen et al. 2021; Maier and Dost 2018; Wang et al. 2017) and a willingness to pay price premiums

(Back et al. 2020; Hasford, Hardesty, and Kidwell 2015; Yoo and Kim 2014).

### **Moderators of Visual Narrative Transportation**

Visual narrative is cocreated by a storyteller and a story receiver, as the former encodes a story into an image and the latter decodes it (Van Laer et al. 2014). We propose three moderator categories for visual features and VNT. The first group focuses on how storytellers encode their messages; the second on how characteristics of story receivers affect decoding visual narrative; and the third on how a visual narrative is presented. The moderators featured in the sections that follow were selected based on three criteria, including theoretical relevance for advertising research, generalizability, and significance in the reviewed articles.

#### **Storyteller**

As storytellers, companies design their visual ads to help consumers interpret them, for example, by presenting different types of advertised products. Beyond ensuring product–ad alignment (An et al. 2020; Kulczynski, Ilicic, and Baxter 2016), advertisers should consider product characteristics. For instance, research indicates that anthropomorphism benefits unpopular products, boosting empathy and purchase intentions (Chen et al. 2021). For experience and ambiguous products, placing them against contextual backgrounds aids imagery formation (Maier and Dost 2018). Consumers often struggle with purchase decisions for such products (McCabe and Nowlis 2003), and brands can assist by providing additional visual cues to facilitate product liking and purchase intentions (Chen et al. 2021; Maier and Dost 2018).

#### **Story Receivers**

Story receivers are not passive consumers but rather active interpreters of stories, shaping narratives based on cognitive preferences, consumption goals, emotions, and prior experiences (Van Laer et al. 2014). First, cognitive preferences, including information processing style, need for status, self-esteem, telepresence, and focus on internal experiences, moderate the impact of visuals. Visually oriented individuals generally experience greater mental imagery (Yoo and Kim 2014). Viewers with a high need for status (Mou, Gao, and Yang 2019) and low self-esteem (Ayđinođlu and Cian 2014) can experience increased immersion and imagery for first-person perspective images, enhancing their emotional, cognitive, and behavioral responses.

The level of telepresence, or how strongly a viewer is immersed in digital technology, amplifies the effect of transporting visuals on consumer cognitive responses (Lim and Childs 2020); and high focus on internal experiences, denoting that individuals can reflect on and be aware of their emotional state, facilitates mental imagery and attention to complex stimuli (Petrova and Cialdini 2005; Orth and Crouch 2014). Second, the reviewed articles explored the moderating effect of different consumption goals. Consumers focused solely on acquiring product information are more sensitive to visual cues (Jiang et al. 2014), favoring more complex backgrounds (Wu and Li 2021); for consumers with utilitarian (versus hedonic) goals, visual cues can enhance product attractiveness (Orth and Crouch 2014). Third, consumers' emotional intelligence can foster visual narrative comprehension too (Hasford, Hardesty, and Kidwell 2015; Grinstein, Hagtveldt, and Kronrod 2019). However, higher emotional awareness tends to decrease emotional contagion from a visual ad, weakening product judgments (Hasford, Hardesty, and Kidwell 2015). Finally, consumers' familiarity with the ad source prompts automatic pleasant feelings (Kulczynski, Ilicic, and Baxter 2016); involvement with a cause influences transportation and willingness to express prosocial behaviors (Albouy 2017).

#### **Story Situation**

Story situation refers to how a transporting image is presented. The ad message type and exposure time significantly impact the effectiveness of a transporting image. For example, anticipatory (versus retrospective) visual ads (Zhao, Dahl, and Hoeffler 2014) accompanied by instructions to imagine (Petrova and Cialdini 2005; Walters, Sparks, and Herington 2007) stimulate mental imagery, especially for simple images. Emotional ads enhance narrative, particularly when the model's gaze is averted (To and Patrick 2021), while recognition (versus request) ads work best in combination with happy (versus sad) portrayed emotions (Pham and Septianto 2019). Long ad exposure times can decrease attention to the ad (Guido et al. 2019).

Figure 6 offers an integrated framework of VNT that brings together the three dimensions of visual narrativity, their corresponding visual features, possible outcomes of VNT, and the storyteller, story receiver, and story setting characteristics that are likely to affect the transportation experience. The model is presented at an aggregated level, listing all possible variables and connections identified in the reviewed research.

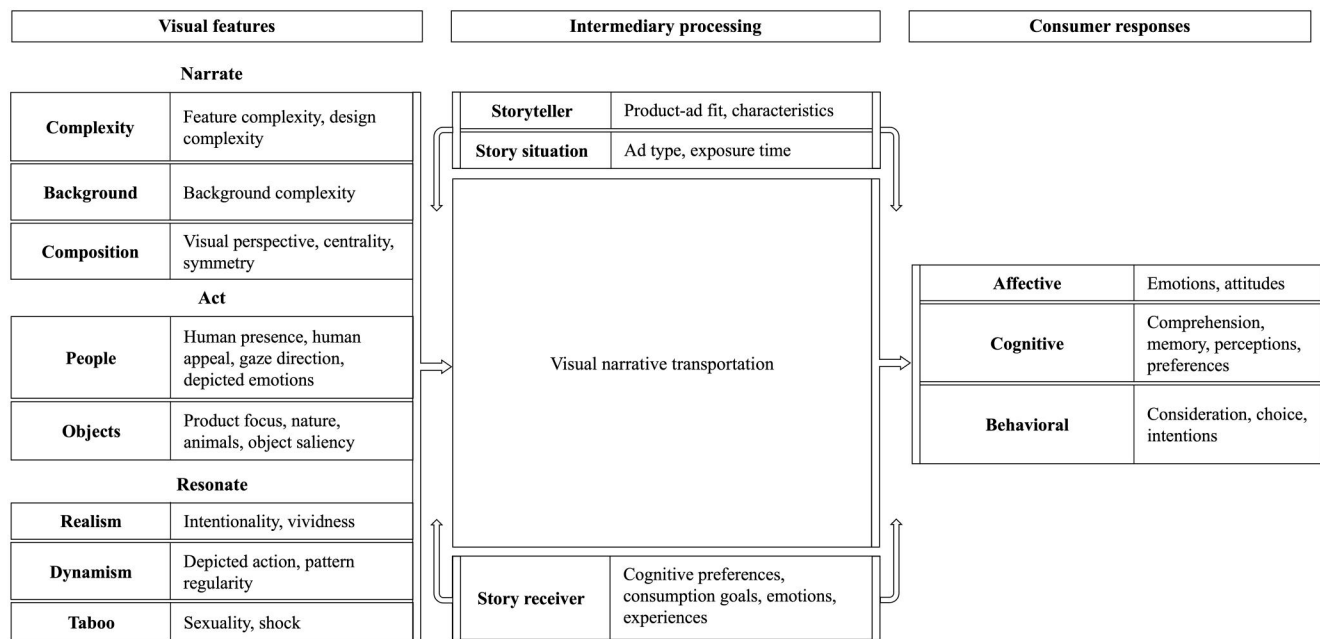


Figure 6. Visual narrative transportation (VNT) model.

Table 3. Research agenda.

Research Gaps	Priority	Research Avenues
Outcomes of visual narrative transportation (VNT): What responses transported viewers elicit	1	1. What actual behaviors (versus behavioral intentions) does VNT evoke and why? 2. How can brands benefit from visual storytelling?
New visual features: What previously unaddressed visual features can transport viewers	2	1. How can visual perception components (e.g., illuminance, materiality) transport viewers? 2. Do some visual features carry more transportation power than others and why?
Interaction of visual features: How presence of certain visual features affects transportation power of others	3	<i>Complexity × Color</i> 1. Does color-induced complexity (color variation) have a similar effect on VNT as regular complexity? Why or why not? 2. How do analogous and complementary color pairs affect visual complexity and, consequently, VNT? <i>Dynamism × Composition</i> 1. Does the size of the depicted moving element mediate the effect of motion on VNT? Why or why not? 2. How do the orientation (left-right facing) and positioning (top-bottom, left-right) of the moving object affect VNT? What about the rule of thirds? <i>Realism × People</i> 1. Does the effect of image intentionality also hold for images with no humans portrayed (e.g., product shoots)? Why or why not? 2. Does the congruence between an advertised product/service and model demographics affect VNT? Why or why not?
Visual narrativity dimensions: How different visual narrativity dimensions (NAR) and their combinations affect VNT	4	1. What dimension of visual narrativity or their combinations facilitate visual narrative transportation best and why? 2. How can one measure each visual narrativity dimension within an image? 3. What visual features resonate the most with the viewer?
External environment of VNT: What external factors affect VNT	5	1. How does the environment in which a viewer sees the image affect transportation levels? 2. What is the role of multimodal interaction (e.g., image and text, image and video, image and audio)?
Other narrative modalities	6	1. What role do visual elements of a video play in its narrative transportation power?

## Research Agenda

Building on the VNT framework suggested here, we highlight areas needing more attention from marketing scholars. Table 3 summarizes the research gaps and promising research directions. We list the suggested future research directions based on their

relevance for marketing research and practice. First, we propose focusing on actual consumer behaviors evoked by VNT to enhance communication and ad campaign outcomes. In addition, expanding beyond the nine visual features studied in VNT contexts is crucial for a more comprehensive understanding, including a systematic study of interactions between

visual features. Once the VNT framework is thoroughly examined, we advocate for reevaluating the external environment's impact on visual narrative consumption, for example by exploring how visual aspects of complex narrative modalities, such as video, contribute to transportation power. These suggestions create a research flow for a comprehensive understanding of VNT.

### **Outcomes of VNT**

Articles in our systematic review predominantly analyze the effect of VNT on behavioral intentions, but intentions indicate only a willingness to perform a particular behavior, which is not guaranteed to occur (Fishbein and Yzer 2003). Building on long-standing calls (Patrick and Peracchio 2010), we encourage scholars to track consumer decision making and actual behaviors in response to their VNT. Conducting field experiments and studies appears to be a rational and reliable approach to achieving this goal.

### **New Visual Features and Interactions among Features**

Our systematic review identifies nine visual features that help transport viewers (complexity, background, composition, colors, character, objects, realism, dynamism, and taboo). However, many promising visual features remain unexplored in terms of their impact on VNT. To further advance research, we recommend prioritizing studying overlooked visual features and their interactions. First, researchers should revisit the impact of color (hue, saturation, and lightness) on VNT to address conflicting findings in existing literature. Second, we encourage researchers to focus on the core components of visual perception, as detailed by Sample, Hagtvedt, and Brasel (2020), such as image illuminance, materiality, portrayed shapes, and locations of entities and objects and their role in the VNT process.

In addition, existing research often focuses on the impact of a single visual feature, overlooking the interaction effects of visual features. Human perceptions of certain visual features can change drastically in the presence of other features (e.g., color and size perceptions; Hagtvedt and Brasel 2017; illuminance and color perception; Chetverikov and Ivanchei 2016), calling for more research in this area. Only 5 out of 64 reviewed articles explore interactions among visual features, such as intentionality (Farace et al. 2017; Lim

and Childs 2020) and human presence (Grigsby, Jewell, and Zamudio 2022) with image dynamism, taboo with visual complexity (Maier and Dost 2018), and portrayed emotions with gaze direction (Baberini et al. 2015), thus predominantly focusing on higher-level (versus lower-level) visual feature interactions. Higher-level visual features present semantically more meaningful concepts and patterns derived from a combination of lower-order, basic visual features detected early in visual processing. We encourage researchers to explore the interaction effect among lower-level visual features, for example, shapes and colors, aligning with a call for advanced marketing research methods and wider use of unstructured field data (e.g., Balducci and Marinova 2018; Grewal, Gupta, and Hamilton 2021; Ordenes and Zhang 2019; Wagemans et al. 2012).

### **Visual Narrativity Dimensions**

While we derive three visual narrativity dimensions—using the initialism NAR—based on prior research, their interrelationships and combined effects in transporting viewers lack adequate conceptualizations. Evidence from reviewed articles and narrativity literature (e.g., Baetens 2009; Wolf 2003) suggests that visual narrativity increases with the combination of more dimensions, with resonating images contributing most strongly. Further research is crucial to define the comparative and combined contributions of narrate, act, and resonate, as illustrated in Figure 7. In addition, future research could aim to empirically assess these dimensions and formulate reliable scales for their measurement.

### **External Context of VNT**

The current state of VNT research exclusively focuses on the effects of a single still image, neglecting external factors. However, the world is inherently multimodal, and meaning is commonly conveyed through the combination of multiple information modalities (Grewal et al. 2022). Researchers can enhance the understanding of VNT by separating the pure effect of visual features from external influences. Using our proposed framework, we suggest systematically reviewing evidence on how external factors affect VNT, contributing to the ecological validity of the VNT model.

In addition, visual narratives often appear alongside other narrative modalities, such as texts. Because consumers process textual and visual narratives



**Figure 7.** Selected examples of NAR dimensions combinations.  
Source: <https://www.pexels.com/@cottonbro/> (copyright-free).

differently, it may interfere with the transportation power of a visual narrative. We align with other scholars in calling for deeper insights into the interaction effects between texts and images (Labrecque and Milne 2012; Ordenes and Zhang 2019).

### Other Narrative Modalities

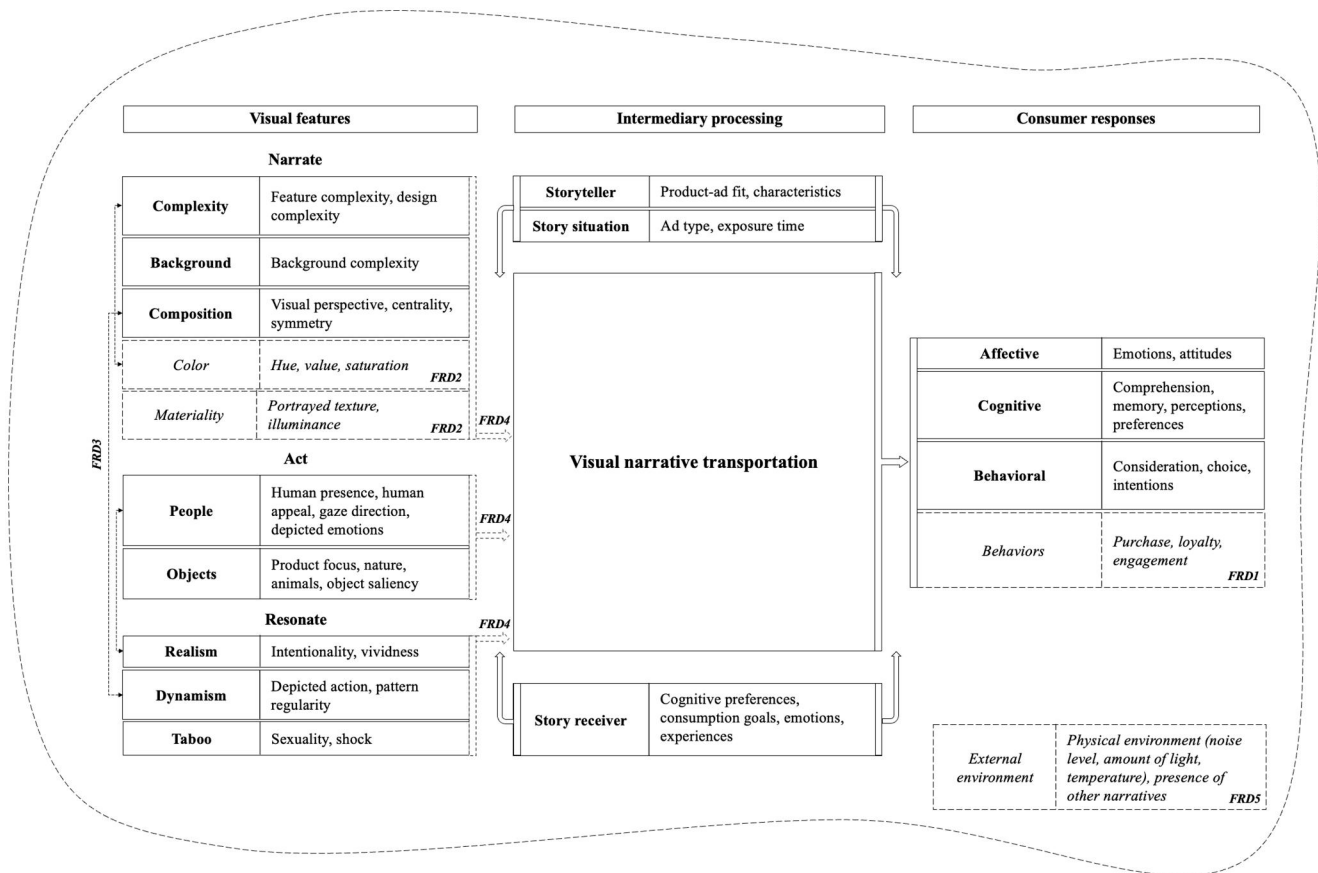
Examining image narrativity may inspire future research on multimodal narratives, shedding light on more complex narrative structures. A notable example is a video clip representing a dynamic combination of visual, audio, and textual narratives. As video-based brand–consumer communication gains traction, researchers investigate factors influencing its storytelling impact (e.g., Chang 2019; Coker, Flight, and Baima 2021; Dessart 2018). However, video narratives have traditionally been studied through text-based frameworks, such as Freytag’s pyramid (Freytag and MacEwan 1894/1900), neglecting visual and audio roles. The video’s visual aesthetics, such as colors or frame composition (Wooley et al. 2022), can

significantly impact its popularity (Moghaddam et al. 2019; Zhou et al. 2021), appeal (Moorthy, Obrador, and Oliver 2010), and effectiveness (Li, Shi, and Wang 2019), potentially influencing transportation power. Because each video consists of still frames, future research can extend insights from this review to multimodal narratives, including visual data like videos.

Figure 8 presents the final model of VNT, including suggested future research directions. The proposed future research directions are indicated by dashed lines and dashed boxes with a italicized font.

### Conclusion

Despite the recent increase in visual marketing research, there exists no comprehensive framework for defining the determinants of visual storytelling power. To address this gap, we conducted a systematic review of visual narrative transportation based on 64 articles from marketing and related fields. In so doing, we (1) note specific visual features that can transport viewers,



**Figure 8.** Final visual narrative transportation (VNT) model, including future research directions.  
*Note:* Dashed lines and dashed boxes with cursive font illustrate the proposed future research directions.

(2) identify the dimensions of visual narrativity, (3) suggest VNT outcomes, and (4) propose factors affecting transportation processes.

Based on our insights, we propose that a transporting image should narrate, act, and resonate, presenting the setting where a visual story takes place, a focal actor, and elements for viewer resonance. For each dimension, we list practice-relevant visual features: complexity, background, composition, people, objects, realism, dynamism, and taboo. Finally, we discuss the affective, cognitive, and behavioral responses of viewers of transporting images, providing valuable insights for theoreticians and practitioners on how visual storytelling, specifically VNT, impacts consumers. Unexplored questions, such as the optimal visual narrativity dimension or external environments facilitating VNT, are highlighted in the developed future research directions.

Our systematic review contributes to scholarly conversations about visual perception, as initiated by Sample, Hagtvedt, and Brasel (2020). We identify inconsistencies and gaps in existing research, then propose ways to address them and set a research agenda. Beyond academia, our review has practical

implications by listing specific visual features, illustrated with real social media posts, to help image creators better connect with audiences and convey compelling stories.

## Limitations

This systematic review attempted to create a literature-based framework for visual narrative transportation; however, it has several limitations. First, it focused on the impact of visual features without considering external factors, suggesting a need for cross-sectional studies beyond our scope. Similarly, the review's guidelines apply only to narrative images; we acknowledge that factual visual ads may require different design approaches. In addition, we acknowledge that while narrative ads are generally more effective in conveying brand messages (e.g., Chang 2009; Kim, Ratneshwar, and Thorson 2017), factual ads may be more appropriate for certain advertising purposes (Janssen and Non 2009).

Second, the focus on marketing outcomes may hinder nonmarketing studies. Opening doors to other disciplines, like neuroscience or computer science,



could strengthen the link between visual features and narrative transportation, extending beyond advertising, branding, and marketing.

Third, despite a rigorous search process, there might be articles the current review did not capture, as we did not focus on working and forthcoming papers. Revisiting the systematic review in several years could be a good way to include newly published studies and update the NAR framework. The search strings and methodology described can guide replication.

Finally, the review represents the first attempt to catalog visual features for narrative transportation comprehensively. While broadening the scope and capturing articles focusing not only on VNT but also on attention, imagery, and empathy introduced additional visual features, outcomes, and moderators, it may also have introduced noise into the conceptual model. Nevertheless, given that our goal is to offer an inclusive overview of all potential transporting visual features, we firmly believe that this approach in this regard yields the most comprehensive results.

## Acknowledgment

The authors gratefully acknowledge the suggestions of Dr. Tom van Laer.

## Disclosure Statement

No potential conflict of interest was reported by the author(s).

## Funding

This work was supported by the Fondetenschappelijk Onderzoek (ISE5123N).

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