# ALEXA – WHAT'S YOUR PERSONALITY? THE PERSONIFICATION OF AMAZON'S ALEXA THROUGH TELEVISION ADVERTISEMENTS

by

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Alexa – What's Your Personality? The Personification of Amazon's Alexa Through Television Advertisements

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## Abstract

Brand personification has been widely used in marketing strategies for decades, and many research studies have confirmed its efficacy in shaping consumers' brand attitudes and behaviours. The aim of this research paper is to explore how voice-activated virtual assistants are personified in commercial advertisements. Previous research has investigated why artificial intelligence-powered devices are personified; however fewer scholars have explored how these devices are anthropomorphized in commercial advertisements. Considering that advertisements are a "contribution to the complex symbol which is the brand image" (Ogilvy, 1951, p. 178), it is useful to study how brands advertise their products with the goal of influencing consumers' positive perceptions of the brand. This paper analyzes four Super Bowl commercials for Amazon's virtual agent, Alexa. I consider how language, characters, voice, and other visual elements contribute to the personification of Alexa and attempt to deduce the implication of this advertisement strategy for consumer brands. Considering that voice activated virtual assistants are a rapidly growing consumer technology, this study expands the extant knowledge on how these agents are anthropomorphized, and what this means for the consumer-brand relationship.

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**Alexa – What's Your Personality? The Personification of Amazon's Alexa Through Television Advertisements**

Artificial intelligence-powered Virtual Assistants (VAs) have become increasingly popular in the last decade, as smart speakers equipped with voice assistants are the fastest growing consumer technology (Koetsier, 2018). In 2019, there were approximately 3.25 billion digital voice assistants used globally (Statista, 2020) with this number projected to almost triple to 8 billion devices by 2023 (Perez, 2019). Smart speaker devices such as Google Assistant, Microsoft Cortana, and market leader Amazon Echo, with projected revenue between $18 billion and $19 billion in 2021 (Ungarino, 2018), are consumer interfaces that are significantly different to conventional forms of technological communications such as smartphones and computer devices. Virtual assistants' distinctive feature is their interactive capabilities that allow users to converse synchronously with smart speakers in a human-like manner. Users can make hands-free calls, access the news, control their smart homes, and perform a multitude of tasks in which the device will respond with user-customized answers (Profis, 2019). Additionally, because VAs are equipped with artificial intelligence capabilities, they can integrate users' day-to-day activities and personalize consumer experiences (Kim et al., 2018), such as connecting with other brand applications and providing recommendations based on previous search queries. Due to the personal relationship that consumers are forming with their artificial intelligence devices (Han & Yang, 2018; Novak & Hoffman, 2019; Schweitzer et al., 2019), companies are investing billions of dollars into not only these devices' technological capabilities, but also into their 'personalities'. For example, Alexa is the name of Amazon's voice activated digital assistant that uses artificial intelligence capabilities to respond to users' spoken requests (Vigliarolo, 2020). The virtual agent is programmed in the Amazon Echo – Amazon's smart speaker device that is

sold in several versions (see Appendix A). Amazon's Senior Vice President for devices and services David Limp claimed, "From day one, we were able to think about Alexa as an embodiment of a person" (Roettgers, 2019).

In this paper, I will primarily analyze Amazon's Alexa to explore how and why companies use personification as an advertising strategy to influence consumers' brand attitude. The construct of brand attitude is defined as, "an individual's internal evaluation of an object such as a branded product" (Mitchell & Olsen, 1981, p. 318). This means that brand attitude is dependent on consumers' perceptions of a brand and is consequently indicative of consumers' behaviours towards the brand (Shimp, 2010). Therefore, assessing how personification of virtual assistant devices affects brand attitude can be a significant determinant in understanding consumers' engagement with these brands. Due to the significance of Super Bowl advertisements, as they are the "single biggest force in moving contemporary American culture into a digital world" (McAllister & Galindo-Ramirez, 2017, p. 64), I will examine four Amazon Super Bowl commercials that feature its virtual agent, Alexa.

## Research Questions

This research paper aims to answer the following questions:

1. How are voice activated virtual assistant devices personified in television advertisements?
2. How are language, visual images, objects, characters, etc. used to personify the devices?
3. How is Alexa's personality characterized in Amazon's television advertisements?
4. What is the implication of personification as an advertising strategy for consumer brands?

Due to the scope of this paper, I will be focusing on a single virtual assistant device to attempt to answer the above stated research questions. Because Amazon currently holds the position of market leader in the smart speaker category, with 70% of U.S. market share (He, 2020), I will be

analyzing television advertisements of Amazon's virtual assistant Alexa, which, as outlined above, is the name of the virtual assistant housed in Amazon's smart speaker devices.

## Literature Review

This literature review begins by examining virtual assistant devices and the ways in which users communicate with these devices. The second section discusses the personification of consumer brands, as well as its efficacy in consumer engagement. Next, I examine the anthropomorphization of artificial intelligence devices and explore how the 'voice' of voice-based virtual assistants is personified. Lastly, I discuss anthropomorphization of brands in commercial advertisements, and specifically present existing literature on the significance of Super Bowl advertisements, given that I will be analyzing Amazon's Super Bowl commercials.

### Defining the Terms: Virtual Assistant vs. Virtual Agent vs. Smart Speaker, Etc.

Many terms are used across academic discourse to define and describe artificial intelligence-powered voice assistants. Some terms include: "voice assistants" (Poushneh, 2021), "virtual agents" (Brachten et al., 2020), "voice controlled smart assistants" (Schweitzer et al., 2019), "digital voice assistants" (Fernandes & Oliveira, 2021), and "smart voice assistant speakers" (Lee et al., 2019). Furthermore, when referring to voice enabled virtual assistant devices such as Amazon Echo and Google Home, scholars often use the term 'smart speaker' to describe the devices' software capabilities as these relate to human interactions (Lee & Cho, 2019; Ashfaq et al., 2020; Taylor et al., 2020; Smith, 2018). In some research contexts, scholars use terms that refer to the physical nature of the device, such as "smart voice assistant speakers" (Lee et al., 2019), whereas other researchers refer to the capabilities of the devices' software, such as "voice assistants" (Poushneh, 2021). The extensive range of terms used across academic literature is an indication of the wide scope of research conducted on the subject. In this paper, these terms are used interchangeably when referring to voice activated virtual assistants powered by artificial

intelligence. However, I distinctly differentiate between the devices themselves (i.e., Amazon Echo) and the virtual agent (Alexa) where appropriate.

Poushneh (2021) defines voice activated virtual assistant devices as interfaces that are powered by artificial intelligence algorithms which learn from and mimic human behaviour. Therefore, these assistants can communicate with users in a customized fashion, responding to voice commands and queries that are user specific (Poushneh, 2021). Brachten et al. (2020) similarly define virtual assistants as, "software programs that can be addressed via voice or text commands and respond to the users' input" (p. 187). Fernandes and Oliveira (2021) use the term "digital voice assistants" to describe conversational agents that "recognize and understand voice-based user requests and communicate using natural language to accomplish a wide variety of tasks" (p. 180). Smart speakers, often contextualized as virtual assistants such as Google Home or Amazon Echo are, "wireless device[s] with artificial intelligence that can be activated through voice command" (Smith, 2018, p. 350). Likewise, Ashfaq et al. (2020) describe smart speakers as devices that integrate voice activated virtual assistant software, and Lee and Cho (2020) define smart speakers as, "interactive interfaces capable of dialogue with users… capable of communicating at a similar level to that of interpersonal communication" (p. 1153). Evidently, scholars define virtual assistants differently based on the scope and context of their research, however, most posit that the term (or a variation of it) refers to voice assistant technology powered by artificial intelligence capabilities.

**Virtual Assistants**

The proliferation of virtual assistants in the last few decades has impacted consumers' daily interactions with their environment (Poushneh, 2021) and has transformed the nature of the relationship between consumers and brands (Smith, 2018). Not only have these devices changed

the way consumers acquire information (Smith, 2018) and search for products (Yoganarasimhan, 2014), but they have also redefined the way consumers engage with brands (McLean et al., 2018). Using voice activated virtual assistants, consumers no longer have to search, read, or type key words to access information about products (Hoy, 2018). In addition, individuals no longer have to maintain physical interactions with their technological devices, such as typing on a keyboard or tapping a screen, which creates "a more human-like experience in interacting with the devices" (Alepis & Patsakis, 2017, p.17841). Furthermore, the proliferation of virtual assistants as a domestic medium of content consumption, (Rawassizadeh et al., 2019; Wang et al., 2020; Loideain & Adams, 2020; Sutko, 2020) can be likened to the advent of the television as "predominantly a domestic medium [in which] "viewing is largely done 'in' the family" (Morley & Hall, 1988). Just like virtual assistants are providing marketers with new opportunities to connect with consumers (Hoyer et al., 2020; Araujo & Voorveld, 2020), so too did the standardization of consumer television ownership in the 1950's spawn new opportunities for companies to communicate with their target audiences through commercial advertisements (Tungate, 2007; Stachniak, 2014).

While the ubiquitous use of virtual assistants has been widely discussed in mainstream discourse, it is still in its infancy stage in an academic context due to the novelty of its creation: "Overall, the literature is devoid of in-home firsthand responses from customers about their own perceptions of their bot service interactions" (Klaus & Zaichkowsky, 2020, p. 394). Jones (2018) expresses similar sentiments: "Little is known about the role marketing will play in the increasingly connected, voice-controlled home" (p. 3). However, in the last decade, researchers have been increasingly studying virtual assistant devices and their significance in the consumer-agent relationship.

## Virtual Assistants as Opportunities for Advertisers

While virtual assistants are providing new opportunities for communication with consumers, they are also shaping consumers' perceptions of the device itself (Kuzminykh et al., 2020), as well as the perception of brands that consumers communicate with via the VAs (McLean et al., 2018). Wang et al. (2020) conducted research on consumers' perceptions of smart home devices such as Google Home and Amazon Echo. The researchers found that users focus on the benefits these devices will provide them (such as optimizing the performance of household tasks) and ignore potential perceived risks (such as privacy concerns). Hoyer et al. (2020) claim that consumers benefit cognitively and emotionally from virtual assistants, and this provides many opportunities for advertisers. On a cognitive level, virtual assistant devices reduce consumers' cognitive load, as brands can use the data that is collected from consumers to provide personalized information and customized decision-making assistance (Hoyer et al., 2020). On an affective level, the anthropomorphic characteristics of voice activated virtual assistants, namely their voice, facilitate an emotional attachment between consumers and the device which can increase the value consumers place on the device's brand (Hoyer et al., 2020).

Araujo and Voorveld (2020) conducted research to further understand how brands offering smart speakers could capitalize on the 'human-like' voice featured by the devices' virtual assistant software. Their research found that when participants interacted with a virtual assistant that had a human name, they were more likely to follow its recommendations (Araujo & Voorveld, 2020). Lin et al. (2017) similarly concluded that giving a human name to a technological device increases the likelihood that users will accept the technology and integrate it into their everyday lives. Garcia et al. (2018) suggest that when interacting with virtual assistants, participants had a clear perception of their personality traits. Therefore, the

researchers suggest that brands should develop a suitable personality for their virtual assistants that meet consumers' needs and desires based on brand marketing objectives (Garcia et al., 2018). Poushneh (2020) conducted two studies examining participants' auditory communication with voice assistants. The researcher found that consumers feel in control when interacting with voice activated smart speakers, and this sense of control increases consumers' trust and contentment with the virtual assistant's brand. For example, users interacting with Amazon's Alexa feel in control of the communication experience and therefore have an increase in the level of trust in the overall Amazon brand (Poushneh, 2020). Evidently, virtual assistant devices have provided a variety of benefits for consumers that enable marketers to interact with consumers in unprecedented ways.

**Brand Personification**

Research on consumer behaviour indicates that consumers develop cognitive, social, and affective perceptions of and relationships with brands based on various factors including brand attitude, brand image, and brand personality (Keller, 2003). As previously mentioned, brand attitude is defined as, "an individual's internal evaluation of an object such as a branded product" (Mitchell & Olsen, 1981, p. 318) or "consumers' overarching evaluation of a brand" (Colliander & Marder, 2018, p. 36). More specifically, Keller (1993) suggests that brand attitudes are related to both functional and product-specific attributes, as well as hedonic and non-product-specific attributes. The researcher explains that attitudes serve as a function of self-expression by allowing consumers to express their individual self-concepts (Keller, 1993). Brand attitude depends on consumers' perceptions of a brand and is therefore indicative of consumers' behaviours towards the brand (Keller, 1993; Shimp, 2010; Solomon et al., 2014; Hooker et al., 2019). For example, Liu et al. (2012) concluded that consumers with a positive brand attitude are

more likely to develop brand loyalty. Similarly, Starr and Rubinson (1978) concluded from their research that consumers with a strong and positive brand attitude are more likely to be loyal to that brand and therefore willing to pay a premium price for that brand. Park et al. (2010) researched the differences between brand attachment and brand attitude strength. They define brand attitude as the degree of positivity or negativity with which a brand is evaluated. The researchers posit that unlike brand strength, brand attitude has "emotional and self-implications that serve as more powerful drivers of behaviour" (Park et al., 2010, p. 3).

Brand image has been widely researched in academic literature, and many scholars agree that the construct is defined in relation to consumers' individual perceptions of brands based on brand stimuli (Durgee & Stuart, 1987; Friedman & Lessig, 1987; Foxall & Goldsmith, 1994; Kapferer, 1995). For example, Dobni and Zinkhan (1990) define brand image as consumers' perception of a brand which is "largely a subjective and perceptual phenomenon that is formed through consumer interpretation, whether reasoned or emotional" (p. 119). The researchers claim that brand image is affected and shaped by contextual variables, marketing activities, and the characteristics of the individual consumer (Dobni & Zinkham, 1990). Similarly, Patterson (1999) suggests that brand image consists of "subjective perceptions of how various brands perform across a range of criteria, both functional and non-functional..." (p. 412). Mao et al. (2020) identify two categories of brand image: functional and hedonic. Functional brand image refers to consumers' associations with a brand's value and quality, and hedonic brand image refers to consumers' perceptions, feelings, and attitudes towards a brand. The researchers suggest that both functional and hedonic brand image have a significant effect on consumers' purchase intentions of brands (Mao et al., 2020).

Scholars have researched the construct of brand personality as a central way for consumers to identify brands and develop brand loyalty (Kuenzel & Halliday, 2010) and to drive consumer preference and usage of a specific brand (Aaker & Biel, 2013). Numerous researchers have developed distinctive definitions of brand personality, most grounded in an underlying premise that the definition includes consumers' subjective attributions of human characteristics to a brand (Alt & Griggs, 1988; Restall et al., 1993; Blackston, 1995; Aaker, 1997; Malär et al., 2011; Aguirre-Rodriguez, 2014; Huang & Mitchell, 2014; Banerjee, 2016). Aaker (1997) defines brand personality as, "the set of human characteristics associated with a brand" (p. 347). Her seminal research on brand personality suggests that there are five dimensions that influence consumers' preferences for specific brands: sincerity, excitement, competence, sophistication, and ruggedness (Aaker, 1997). Subsequent research on brand personality as a determinant for consumer preference suggests that brand personality generates brand value beyond utilitarian functions (Hankinson & Cowking, 1993; Stobart, 1994) such as creating trust between consumer and brand (Sung & Kim, 2010) and developing emotional benefits that relate to consumers' actual and ideal selves (Malär et al., 2011; Huang & Mitchel, 2014). However, much of the literature on brand perception and brand personality predates the proliferation of voice-activated virtual assistants powered by artificial intelligence.

**Efficacy of Brand Personification**

Over the last few decades, scholars have conducted extensive research to determine the efficacy of personifying brands. Fournier (1998) researched the relationship between consumers and brands and found that when brands are anthropomorphized, it legitimizes the brand-as-a-partner relationship and suggests a "willingness to entertain brands as vital members of the relationship dyad" (p. 345). Likewise, Hayes et al. (2006) suggest that brand personification affects

consumers' perceptions of the brand as a relationship partner, and the quality of this relationship depends somewhat on the perceived attractiveness of the brand. Bickle (2009) claims that consumers are more likely to develop positive relationships with brands that have unique identities and personalities, and Epley et al. (2007) similarly theorize that brand personification has positive effects on consumers' responses to a brand. Specifically, Aguirre-Rodriguez (2014) proposes that brand personification stimulates consumers' positive attitudes towards the brand which results in an increase in purchase intent, brand trial, and brand loyalty. Fleck et al. (2014) discuss various benefits of brand personification including attracting attention to a brand, increasing brand awareness by creating positive affective associations with a brand, and differentiating a brand, especially in a cluttered product category. Delgado-Bellester et al.'s (2019) research focused on the relationship between the personification of brands and brand love, defined as integration of the self with the brand, positive affective connection, and separation distress. The researchers found that consumers' liking for 'humanized brands' had a positive effect on specific components of brand love (Delgado-Bellester et al., 2019). Cohen (2014) outlines several benefits to advertisers of personifying brands. One benefit is that consumers are better able to identify with and relate to a personified brand, in the sense that "this brand is like me" or "I am like this brand" (Cohen, 2014, p. 12). Similar conclusions were drawn by Devereux and Peirson-Smith (2009) who resolved that personifying a brand "enable[s] the brand to be instantly recognizable and much desired" (p. 66).

In addition, because consumers view the world through a human lens, they would be more inclined to understand and develop relationships with brands that have human-like characteristics (Cohen, 2014). Similarly, Brown's (2011) discussion of the benefits of brand personification is consistent with Lakoff and Johnson's (2003) definition of personification as

ontological metaphors that "allow us to make sense of phenomena in the world in human terms" (p. 34). Brown (2011) postulates that humans' basic worldview is personified through conceptual metaphors—grounded in human emotion and sensation—and therefore brand personification, as a metaphorical marketing device, enables consumers to understand the brand through the human lens. Overall, the use of brand personification has been widely discussed in academic literature as a marketing strategy that provides numerous benefits for brand-consumer relationships.

**Anthropomorphism of Artificial Intelligence Devices**

A significant body of research has suggested that anthropomorphism can be employed as a psychologically persuasive tool to not only remove the fabricated social bond between humans and artificial intelligence devices, but also to influence human behaviours (Weizenbaum, 1976; Suler, 1996; Turkle, 2012). Van Mulken et al. (1998) conducted an empirical study on the personification of interface agents in order to determine the effects of the agents' perceived personality on participants' subjective and objective measures (i.e. attitude vs. recall). Based on their results, the researchers suggest that to increase anthropomorphization, interface agents should be perceived as 'real' and 'authentic' to increase these measures (van Mulken et al., 1998). Demeure et al. (2009) discuss personification of virtual agents in the context of believability. They define believability as the "emotions, personality, and social capabilities of the agent" (Demeure et al., 2009, p. 432). The researchers concluded that virtual agents' emotional expressions (positive or negative) influence users' perceptions of the devices' believability (Demeure et al., 2009). Similarly, in Goos et al.'s (2005) series on Affective Computing and Intelligent Interaction, Gunes and Piccardi (2005) claim that humans communicate with other humans using a set of emotional cues. Therefore, in order to most accurately reflect human-to-human communication, the researchers suggest that computers must

be capable of recognizing and responding to these emotional cues. Likewise, Numata et al. (2020) suggest that virtual agents' imitation of users' positive emotional expressions induces a positive emotion—regardless of belief —due to the anthropomorphization of the virtual agents, which consequently induce a positive congruent response in users.

In studying the relationship between humans and smart objects, Novak and Hoffman (2019) resolved that consumers view virtual agents as possessing their own identity which is then used to assess other smart objects. For example, a user who has communicated with Amazon's Alexa will view a Google Home device and its virtual agent as Alexa-like rather than human-like (Novak & Hoffman, 2019). Schweitzer et al. (2019) conducted research to understand the relationship participants have with Voice Controlled Smart Assistants (VCSAs). The researchers found that participants' anthropomorphic perspectives of the VCSAs were based on their perceived relationships with the devices. For example, participants who viewed the VCSAs as a subservient helper perceived the devices as "female", "nice", "helpful", and "reliable" (Schweitzer et al., 2019, p. 702). In contrast, participants who viewed the VCSAs as a master perceived the devices as "gender-free", "ignorant", "inflexible", and "annoying" (Schweitzer et al., 2019, p. 702).

De Visser et al. (2016) conducted three experiments to understand anthropomorphism in automated agents. They concluded that adding human features to automated agents, including human-like physical features and social cues, increases consumers' trust in the agents. When researching the effects of anthropomorphism of chatbots in the ecommerce industry, Han (2021) concluded that consumers experience a higher social presence and greater enjoyment of the chatbot when they perceive anthropomorphic characteristics of the virtual assistants. Ashfaq et al. (2020) conducted research to understand consumers' perceptions of and attitudes towards

smart speakers as these relate to the devices' 'perceived coolness.' The scholars found that perceived functionality of smart speakers was a determinant of their 'perceived coolness' and this coolness positively related to consumers' adoption of smart speaker devices (Ashfaq et al., 2020). Although artificial intelligence is a relatively new technology, the anthropomorphism of artificial intelligence devices has been widely discussed in an academic context, as researchers have studied the distinct relationships that users develop with these devices.

**Voice of Artificial Intelligence Devices**

Many scholars have studied the voice of artificial intelligence devices (Nass & Brave, 2005; Callaway & Sima'an, 2006; Faber, 2013; Edwards et al., 2019; Sutko, 2020), examining the voices' perceived gender, tone, dialect, and other features. Nass and Brave (2005) claim that "listeners cannot suppress their natural responses to speech, regardless of source. People draw conclusions about technology-based voices and determine appropriate behavior by applying the same rules and short-cuts that they use when interacting with people" (p. 4). Faber (2013) suggests that with voice activated virtual assistants such as Apple's Siri, the female voice is perceptually linked to a female body. Because no body actually exists, users associate the virtual assistant's female body with the artificial intelligence device, therefore creating an illusion of gender (Faber, 2013). Further, Sutko (2020) examined the cultural implications of gendered technologies such as virtual assistants. The researcher claims that these smart devices' female voices, such as Amazon's Alexa, domesticate artificial intelligence and normalize gendered division of labour by performing stereotypically gendered tasks such as making phone calls, setting appointments, and creating to-do lists (Sutko, 2020). Similarly, Loideain and Adams (2020) conclude that the female gendering of virtual personal assistant devices reproduces standard cultural assumptions about women's submissive roles, thus likening submissive

technology with femininity. Schiller and Mcmahon (2019) draw similar conclusions, stating that "devices such as Amazon's Alexa or Google Home elide and reproduce the gendered and racialized dimensions of domestic labor" (p. 1). In addition, Jarrett (2015) posits that home-based artificial intelligence devices, such as smart speakers, are embodiments of 'digital housewives' that signify the aggregation of digital and affective domestic labour, and therefore have female voices to personify this role. Lastly, Webster (2019) claims that users are more likely to trust female voices and react more positively to them, therefore many artificial intelligence-powered devices employ female voices to communicate with users.

Not only have scholars researched the gender perceptions of virtual assistants, but they have also studied the racial perceptions of these devices. For example, Schiller and Mcmahon (2019) cite Duffy (2007) who claims that historically, "racial-ethnic women were disproportionately represented as domestic servants [while] their white employers served as housewives and hostesses" (p. 317). They posit that domestic artificial intelligence devices embody this racialized historical depiction of labour as it relates to non-nurturing tasks such as efficiency and immediate responsiveness. However, devices such as Alexa are also viewed as white, as the agent possesses nurturing qualities such as companionship and emotional solicitousness. The researchers conclude that, "Alexa can be a white 'nurturant' domestic worker and a 'non-nurturant' woman of color, depending on what obedience feels like to the employer in any given moment" (Schiller & Mcmahon, 2019). Contrastingly, Phan (2019) argues that Alexa is coded through whiteness, defined as "the sense of being 'non-raced,' that is, not explicitly identified according to race" (p. 23). The researcher claims that Amazon's Alexa is characterized using ideals of whiteness, as the agent speaks in an indistinctive American accent, uses an extensive vocabulary, and communicates using social cues that are associated with the educated

bourgeois (Phan, 2019). Similarly, Lingel and Crawford (2020) liken virtual assistants to white-collar secretaries claiming that these artificial intelligence devices are "coded to speak in white, educated voices" (p. 10). Marino (2006) suggests that many chatbots explicitly use language that attempts to avoid specific cultural implications thus producing a race-neutral perception of the agent. Likewise, Nass and Brave (2005) argue that because virtual agents lack visual features that characterize race (skin tone, eye colour, etc.) companies should prioritize vocal intonations of the agent rather than "the skin color of the agent" (p. 67).

Edwards et al. (2019) studied how participants' self-concepts influenced their perception of artificial intelligence devices' voices. The researchers found that participants with a high age identification —above the mean age of 20—rated the 'older' AI voice as having a higher social presence and more credibility than the 'younger' AI voice (Edwards et al., 2019). Torre et al. (2020) analyzed the relationship between virtual agents' voice-based emotional expressions and users' trust in the devices. The scholars concluded that voice activated virtual assistants with a smiling voice, that is a positive emotional inflection in the voice, were more likely to be trusted by users and that this trust persists over time despite behavioural evidence of the devices' untrustworthiness (Torre et al. 2020). Guzman (2019) examined the human-machine communication of voice-based virtual assistants and found that participants' perceptions of the voices were either a voice in the virtual assistant device (assistant as a separate entity) or a voice of the virtual assistant device (assistant and device as one and the same). The researcher concluded that consumers' perceptions of the voice and the device it inhabits are not uniform across technological devices (Guzman, 2019). Evidently, ample research has been conducted on the voice of virtual assistants with wide ranging conclusions of the gender, race, and voice characterization of these agents.

## Anthropomorphism in Advertising

The rhetorical use of anthropomorphism and personification of brands in advertisements has been widely discussed in an academic context (Ricoeur, 2004; Delbaere et al., 2011; Chu et al., 2019) and has been employed by advertisers for over one hundred years (Hill, 2002). The definition of anthropomorphism is nuanced, as many academic scholars apply different definitions based on the scope of their research. For example, Aggarwal and McGill (2007) define anthropomorphism more broadly as "seeing the human in non-human forms and events" and "presenting the product itself in human terms" (p. 468) as the construct relates to advertising. Epley et al. (2007) describe anthropomorphism as, "the tendency to imbue the real or imagined behavior of nonhuman agents with human-like characteristics, motivations, intentions, or emotions" (p. 864). Personification has also often been defined as a set of rhetorical strategies (Chu et al., 2019; Cohen, 2014; Laksmidewi et al., 2017) or devices that advertisers employ to increase consumers' positive perceptions of a brand (Delbaere, 2011). For example, as previously mentioned, Lakoff and Johnson (2003) define personification as a wide range of metaphorical figures that enable us to make sense of inanimate phenomena in "human terms—terms that we can understand on the basis of our own motivations, goals, actions, and characteristics" (Lakoff & Johnson, 2003, p. 33). Cohen (2014) defines brand personification as imbuing a brand's products or services with human attributes, including physical appearance and personality, in order to increase positive brand attitudes, recall, and loyalty. The wide-ranging definitions and applications of the terms anthropomorphism and personification indicate their prevalence and significance in an academic context. For the purposes of this paper, the term anthropomorphism is used in reference to more general human characteristics attributed to

artificial intelligence devices (namely, Alexa). I use the term personification when referring to specific attributes of the virtual agent's personality.

### *Persona in Advertising*

Many scholars discuss anthropomorphism as it relates to brands' personalities (Delbaere, 2011; Huang & Mitchell, 2013; Cohen, 2014; Laksmidewi et al., 2017). However, some differentiate between personality and persona in relation to characters played in commercial advertising. For example, Marshall (2016) defines persona as "an accoutrement or mask added on to the self in order to achieve some sort of completion and satisfaction in the public world" (p. 8). He suggests that persona is a strategy employed to influence the public's perception of a character's identity (Marshall, 2016). Likewise, Blomkvist (2003) defines persona as, "the personality that an individual projects to others, as differentiated from the authentic self" (p. 1). Hopcke (1995) posits that persona is a metaphorical mask of the nexus in humans' personalities where who we really are and who we are perceived to be by others converges. Similarly, Querstret and Robinson (2013) posit that persona is a "social construction that conceals the contradictions and issues that lie under the surface of personality" (p. 151). Likewise, D'Onofrio and Benheim (2020) describe persona as character types that are perceived or even labelled by the public which are "specified for macro-social, personality-based and behavioral characteristics" (p. 162). Evidently, several scholars contextualize persona as a public-facing, impression management construct that is socially fabricated to influence public perception of a character. In this paper, I use the term personality when describing Alexa's character, as this word is most often used to describe one's character traits and how they uniquely differentiate one individual from another (Widiger & Costa, 2013). When examining celebrity figures in the Super Bowl commercials, I describe the characters in the context of their personas, as their public appearances and

perceptions, which are independent of the commercials, influence the significance of their roles in the Super Bowl advertisements.

**Efficacy of Anthropomorphism in Advertising**

Delbaere et al. (2011) suggest that visual personification in advertisements leads to consumers' positive emotional response to the brand, positive attributions to brand personality, and an increase in brand liking. Additionally, Aggarwal and McGill (2007) conducted research on anthropomorphized consumer products and found that products presented with human-like features were evaluated more positively than products presented without human-like features. In Reavey et al.'s (2018) study on anthropomorphism in advertising, participants were shown an advertisement and rated their attitude towards the ad and the degree of perceived humanization of the ad. The researchers found that overt (vs. subtle) humanization of brands leads to more favourable brand attitudes and evaluations and an increase in purchase intent of the product being advertised (Reavey et al., 2018). Likewise, Laksmidewi et al. (2017) found that anthropomorphic product demonstrations in advertising are more effective in explaining the efficacy of a product and thus increases consumers' positive perceptions of the product.

Ketron and Naletelich (2017) researched anthropomorphic messengers in advertising and found that anthropomorphic cues—especially the use of sad faces or facial expressions—triggered a saviour effect in consumers, who viewed the messenger as a victim and thus increased sustainability with the brand in an effort to "save the victim from harm" (p. 73). Similarly, Han et al. (2019) researched how desirability vs. feasibility messages affect consumers' responses to environmental advertisements. They found that an ad with a reusable cup featuring a happy face was more effective in enhancing positive consumer perceptions than an ad featuring no anthropomorphic characteristics (Han et al., 2019). Landwehr et al. (2011)

likewise concluded from their research that anthropomorphizing a product in an advertisement—specifically imbuing the product with facial expressions—draws attention to and increases the liking of the product. Evidently, leveraging anthropomorphism in advertising has empirically proven to benefit advertisers in numerous ways.

**Significance of Super Bowl Advertisements**

The value of brand advertisements during the Super Bowl has been researched by scholars for decades, as the Super Bowl is the most watched (Tomkovick et al., 2001) and highest rated (Wenner, 2008) annual television event in the United States. Advertisers spend millions of dollars producing and airing Super Bowl commercials despite the increasing cost of airtime (Tomkovick et al., 2001; Allan & Tryce, 2016; Johnson, 2018; Branikas & Buchbinder, 2021). According to Kanner (2004), the Super Bowl is a "national ritual [where] today, one viewer in ten tunes in just for the ads" (p. 1). Discussing Super Bowl advertisements after the game has become a cultural ritual among American viewers (Kelly & Turley, 2004; Nicholson, 2007) because the Super Bowl itself is a cultural event (Freeman, 1999; Kanner, 2004).

Further, Pavelchack et al. (1988) suggest that Super Bowl advertisements have a higher day-after ad recall than conventional television programming events. Similarly, McAllister and Galindo-Ramirez (2017) claim that the Super Bowl's cultural significance extends to its advertisements which commercialize everyday life and culture. The researchers concluded that these advertisements are the "single biggest force in moving contemporary American culture into a digital world in which the categories of advertising, promotion, and media content are increasingly blurred, and where this blurring is more anticipated and accepted" (McAllister & Galindo-Ramirez, 2017, p. 64). Moreover, viewers are more attentive to advertisements during the Super Bowl (Gunter et al., 1997; Jensen, 1998) with studies indicating that 68-69% of

respondents pay attention to Super Bowl advertisements (Freeman, 1999). Similarly, McAllister (1999) suggests that because Super Bowl viewership is so high, other networks do not attempt to compete with broadcasting original television programming, thus reducing channel surfing during the game. He also found that Super Bowl viewership demographics tend to be more balanced than other highly rated cultural events (McAllister, 1999).

Companies also see financial benefits in advertising during the Super Bowl, as the advertisements can positively affect investor relations. For example, Chang et al. (2009) found that firms with Super Bowl advertisements that were liked experienced an increase in stock price in the days following the Super Bowl. Additionally, Tomkovick et al. (2011) suggest that stocks of companies that advertise during the Super Bowl outperform stocks of companies that do not advertise in the two-week period following the Super Bowl, irrespective of ad likeability or the ad's industry category. Branikas and Buchbinder (2021) researched investment interest in stocks based on advertisement exposure of those brands during the Super Bowl and found that viewers' exposure to Super Bowl advertisements has a positive effect on their attention towards financial investment in those brands.

Fehle et al. (2005) researched financial trading activity of nineteen companies who broadcasted Super Bowl advertisements between 1969 to 2001 and found an increase in net buying activity for Super Bowl advertisers' shares and higher one-day returns for brands that were noticeably identifiable from the advertisements' content. The researchers inferred that companies could use mass media advertising such as Super Bowl commercials to target shareholders by influencing their short-term mood and attention (Fehle et al., 2005). Similarly, Raithel et al. (2016) found that Super Bowl commercials that positively affect consumers' brand associations leads to an increase in revenue streams which consequently positively impacts the

company’s stock prices. Thus, the return on investment in advertising during the Super Bowl has empirically proven to generate lucrative results for brands and brand shareholders.

## Data Collection Method

### Sampling Procedure

The sample for this paper consists of four Amazon advertisements. Given the salience of Super Bowl advertisements on customer-based brand equity (Raithel et al., 2016) this paper will analyze Amazon's advertisements from the past four Super Bowls (from 2018 to 2021) which exclusively feature Amazon's virtual agent, Alexa. Advertisements from the years 2018, 2019, and 2021 were created by Amazon's in-house creative agency D1 in collaboration with Lucky Generals, a U.K.-based advertising agency (Zanger, 2019). The 2020 Super Bowl advertisement was created by London-based advertising agency Droga5 (Smiley, 2020). The advertisements range from one minute to one minute and thirty seconds. The official names of the advertisements are as follows:

1. Alexa Loses Her Voice (2018)
2. Amazon Alexa – "Not Everything Makes the Cut" (2019)
3. Amazon – #BeforeAlexa (2020)
4. Alexa's Body (2021)

The commercials were collected via the online video platform YouTube using key words [Amazon Super Bowl Commercial] [year] to search for results. The first video result generated by the search was then selected for analysis, as each search result produced the official Super Bowl advertisements.

### Methodology

In this paper, I analyze Amazon's four latest Super Bowl Commercials using an inductive approach. Defined by Thomas (2006), an inductive analysis "refers to approaches that primarily use detailed readings of raw data to derive concepts, themes, or a model through interpretations

made from the raw data by an evaluator or researcher" (p. 238). This differs from a deductive approach of analysis which assesses whether data is consistent with preestablished assumptions and hypotheses (Thomas, 2006). An inductive approach is appropriate for the scope of this research, as I will be analyzing the commercials in search of patterns, trends, and consistencies which will lead me to draw conclusions about how Alexa is personified in television advertisements.

Additionally, I will analyze the commercials using qualitative film analysis techniques including visual social semiotics as discussed by Harrison (2003). I will be examining technical elements of the ads including camera shot composition, the physical distance between characters, the language characters use to interact with Alexa, as well as the position of the device within certain frames. I will also be exploring how the visual and sonic representations of Alexa and the Amazon Echo devices presented in the ads anthropomorphize the agent's character.

## Observations and Analysis of Findings

This section outlines and examines the findings from each of Amazon's Super Bowl commercials from the past four years (2018-2021). The aim of this section is to not only explore the overall advertising strategies used by Amazon, but also more specifically, to understand how Alexa is personified through these advertisements. I will analyze each commercial separately and will then draw comparisons and contrasts between them in the following section.

### Alexa Loses Her Voice (2018)

The advertisement opens with a young woman brushing her teeth at the bathroom sink. Alexa provides the weather forecast through an Amazon Echo device sitting on the counter, but then makes a coughing noise and falls silent. The scene then cuts to Amazon's headquarters where breaking news is emerging that Alexa has lost her voice. A concerned Jeff Bezos—Amazon's CEO—who plays himself in the commercial, asks "Alexa lost her voice? How is that even possible?" but a female employee reassures Bezos, although hesitantly, that they "have the replacements ready, just say the word". The camera then cuts to a young male cooking in his kitchen. When he asks Alexa for a grilled cheese sandwich recipe, he is berated by celebrity chef Gordon Ramsey who exclaims, "Pathetic, you're 32 years of age and you don't know how to make a grilled cheese sandwich. Its name is the recipe you f***!" Next, a teen, sitting at his bedroom desk asks Alexa, "How far is Mars?" and American rapper and songwriter Cardi B replies, wondering why anyone would know the answer. Viewers are then taken to a dinner party, where the host asks Alexa to set the mood. Comedic actor Rebel Wilson, while sitting in her bathtub, begins to set the mood: "You're in the bush and you're just so dirty, and so sweaty, cause it's hot in that bush." The scene moves to a middle-aged man sitting on his couch, who asks Alexa to play some country music. In response, Cardi B sings her famous hit rap song

Bodak Yellow despite his additional request. Lastly, a young woman asks Alexa to call her partner, but actor and director Sir Philip Anthony Hopkins responds, “I’m afraid Brandon is a little tied up.” As the camera zooms out from Hopkins lounging in a luscious garden feeding peacocks, Alexa’s original voice returns, thanking her replacements and reassuring everyone that, “[she]’ll take it from here.”

Throughout the advertisement, viewers observe Alexa users interacting with the virtual agent in various domestic settings in the home including the kitchen, bedrooms, and living rooms. Viewers first hear Alexa’s celebrity replacements responding to users’ requests in settings throughout the home, and then see celebrities using Amazon headsets to respond to users in ‘real time’ in what appears to be their own domestic spaces. The depiction of Alexa as a domesticated virtual agent develops a familiar and personable relationship with the target audience, who interact with Alexa in similar environments and similar fashions to optimize day-to-day tasks and activities. For example, the first illustrated user interaction with Alexa’s replacement is when a young man, standing in his kitchen, asks Alexa for a grilled cheese sandwich recipe. The kitchen setting is relatable to viewers, as over half of Amazon Echo users place the device in their kitchen for food-related interactions (Del Rey, 2016). Furthermore, the communication exchanges depicted in the commercial correspond to the most common interactions that users have with Alexa. Throughout the commercial, Alexa provides the weather forecast, is asked, “how far is Mars?” and is requested to “play some country music.” These interactions correspond with the most frequently accessed features that users engage with through their Amazon devices; 75% of users listen to music, 66% of users check the weather, and 63% of users ask for information (Merritt, 2018). Further, in the advertisement, users initiate a verbal interaction with the virtual agent by stating Alexa’s name: “Alexa, show me a recipe for

a grilled cheese sandwich," "Alexa, how far is Mars?," "Alexa set the mood." Similarly, real-life Alexa users say the wake word "Alexa" when they wish to communicate with their virtual agent.

While the advertisement illustrates the utilitarian benefits of using Amazon's smart speaker devices in consumers' everyday lives, it also attributes anthropomorphic characteristics to the devices' virtual assistant, Alexa, in several ways. For example, in the first scene of the commercial, Alexa provides the weather forecast but begins to vocalize a coughing sound and then falls silent. This is the first characterization of Alexa with human features, as viewers presume that Alexa is getting sick and therefore 'losing her voice', a symptom of illness that can only biologically manifest in the human body. The juxtaposed scene takes place at Amazon's headquarters where Alexa is first identified as a female. The camera focuses in on a television screen that reads, "Breaking News: Alexa Lost Her Voice" and a television reporter claims, "Amazon's Alexa lost her voice this morning causing a wave of concern." The female gendering of Alexa is consistent with prior research that confirms the perceptual link between voice activated virtual assistants and a female voice. As mentioned, Loideain and Adams (2020) posit that female gendering of virtual agents microcosmically represents cultural expectations about women's domestically submissive roles. For example, in the first interaction between a user and Alexa's replacement, the user asks Alexa for a grilled cheese sandwich recipe. The kitchen setting is historically associated with the female's domain and the male user's request for a recipe insinuates the historical cultural expectation that women are more competent in the kitchen than men. Despite the well-known female voice of Alexa, Amazon has not revealed who is behind the voice. However, journalist and author Brad Stone claims to have identified voiceover artist Nina Rolle as the voice of Alexa although she has neither confirmed nor denied

this claim (Milman, 2021). The unique identity of Alexa's voice may not be known, but the female gendering of the agent is apparent in the commercial.

In addition, the advertisement depicts Alexa as the Amazon Echo's spokesperson, further anthropomorphizing Alexa's character. When Amazon employees learn that Alexa has lost her voice, their facial expressions denote panic and confusion, as Bezos wonders out loud how customers' devices will continue to operate without her. Moreover, Alexa is given celebrity status as the spokesperson of the brand. In the advertisement, Alexa's vocal defect is reported by the media, and her interim replacements are other celebrities, thus representing a transfer of power to equalized social hierarchical figures. Further, these celebrities are people whose faces and voices are well known and resonate culturally with a wide audience. Alexa's depiction as Amazon's celebrity spokesperson further humanizes her character, as it gives a voice to the brand and decreases the anonymity and abstract nature of the brand's devices as perceived by consumers (Fleck et al., 2013). Additionally, Alexa's role as a spokesperson facilitates an affective relationship in which users associate positive human characteristics with the virtual agent which is also transferred to the Amazon brand (Fleck et al., 2012).

Further, the television reporter states that Alexa lost her voice, "causing a wave of concern." This exemplifies the human-like interdependent relationship that users have developed with Alexa. Her absence is signifying apprehension among users, which goes further than mere concern about the malfunction of a technological device. The apprehension presumably originates from both a concern over Alexa's health as well as a concern of how consumers will function without her. Harrison (2003) suggests that the placement of objects within a frame represent the informational value that they represent. Objects on the left represent figures that have been given knowledge while objects on the right represent figures that face a problem and

are seeking a solution to resolve it. In most scenes throughout the commercial, the Amazon Echo device is placed on the left side of the frame, while the user is presented on the right side of the frame. The visual placement of the device and the user represents the users' dependency on Alexa for assistance in resolving their individual problems. Through the visual semiotic techniques used in the commercial, the dependence of users on Alexa as an irreplaceable object of concern further exemplifies the agent's anthropomorphic role.

In addition to her conjectural role as spokesperson, the advertisement also anthropomorphizes Alexa through highlighted physical features of the Amazon Echo device which Alexa inhabits. Firstly, each user in the commercial interacts with Alexa via a different Amazon Echo device. For example, the Amazon Echo Dot is displayed on the bathroom vanity where the young woman brushes her teeth in the opening scene, while the Amazon Echo Spot is displayed on the bedroom side table of a teen who asks Alexa for the distance between Earth and Mars. Every time Alexa or her replacements begin to respond to a user's query, the camera zooms in on the smart speaker device presented. This visual technique demonstrates that Alexa is a separate entity from the device itself, as she resides in several versions of the smart speaker device and is therefore extricable and independent from the smart speaker. This illustration is consistent with Guzman's (2019) research which suggests that users' perceptions of virtual agent's voices are oftentimes voices in the virtual assistant device, meaning that users perceive the virtual assistant as a separate entity from the device itself. Additionally, when Alexa responds to users' inquiries, a blue light emanates from the device that flashes in tandem with her or her replacements' responses, whose headsets correspondingly light up blue (see Appendix B1). For example, in the beginning of the commercial the viewer hears Alexa 'cough' twice, indicating that she is losing her voice. This sonic anthropomorphization is also visually characterized, as the

device's blue light flashes twice in conjunction with Alexa's cough. Similarly, when a middle-aged male user asks Alexa to "play some country music," the device emits a blue ring of light. When Alexa's replacement, Cardi B, plays the wrong genre of music, the user corrects her: "no, no Alexa country music" and the device's light immediately disappears as Alexa becomes silent. When the user again begins to utter the agent's wake word, "Ale-" the device once again lights up blue in conjunction with Cardi B's voice. This pictorial representation of Alexa confirms her human-like features as it provides viewers with a visually tangible manifestation of her voice.

Alexa's character is also anthropomorphized in the advertisement as a result of the personality representations of her celebrity replacements. It is not merely celebrities' voices that are replacing Alexa's voice, but also their personas expressed through their language, professional backgrounds, tones, and behaviours. For example, Ramsey is a celebrity chef well known for his bluntness, fiery temper, and frequent use of profanity. When an Alexa user asks, "Alexa, show me a recipe for a grilled cheese sandwich" Ramsey's berating response is characteristic of his persona. "Pathetic, you're 32 years of age and you don't know how to make a grilled cheese sandwich. Its name is the recipe you f***!" he exclaims while exercising in his backyard. Likewise, when a user asks Alexa to set the mood at his dinner party, Wilson responds with a humorously sexual reply: "Now setting the mood. You're in the bush and you're just so dirty and so sweaty, cause it's hot in that bush." When a young woman asks Alexa to call her partner, Hopkins answers, "I'm afraid Brandon is a little tied up, but do let me know if there's anything I can help you with" in reference to his role as cannibal serial killer Hannibal Lecter in the film *Silence of the Lambs* (Romano, 2018).

Furthermore, the advertisement depicts Alexa's replacements in association with the celebrities' mediated personas, or with their personas as interpreted via film roles. Rojek (2001)

notes that celebrities' personas are culturally fabricated and strategically curated through mass media communications to ensure that their "presence in the public eye is comprehensively staged" (p. 13) in a way that develops an enduring appeal for the audience. This is seen in the commercial when, for instance, Wilson's raunchy comedic persona is exemplified through her interaction with a user who asks to set the mood, as she complies in a humorously provocative fashion. Similarly, Hopkin's ominous tone of voice alone conjures up the Hannibal Lecter character he famously played in the film *Silence of the Lambs.* Evidently, Alexa's replacements bring their own personas, backgrounds, and character traits to their understudy positions which creates an implication that the celebrities are replacing the holistic construction of Alexa—not just her voice, but her entire personality.

**Amazon Alexa – "Not Everything Makes the Cut" (2019)**

The advertisement opens at an Amazon office's cafeteria where an employee asks an Alexa microwave to reheat her pasta. The camera pulls away to two employees who watch this interaction, one commenting that, "We're putting her in a lot of stuff now, but trust me, there are a lot of fails." The scene cuts to actor and producer Forest Whitaker who stands in front of a bathroom mirror and asks his Alexa-powered electric toothbrush to "play my podcast." As the podcast begins, he starts to brush his teeth, but the sound is muffled by his mouth. The employee then shares that Amazon created an Alexa dog collar "for dogs." Viewers then observe actor Harrison Ford whose Boston Terrier wears the collar in Ford's kitchen. Every time the dog barks, Alexa orders more dog food and Ford, with his usual curmudgeonly persona, becomes increasingly exasperated. Next, the employee recounts the failed Alexa hot tub. The camera zooms in to actors Abbi Jacobson and Ilana Glazer, who settle into an outdoor hot tub. When one asks Alexa to play music, the agent uses the water jets to orchestrate a musical symphony—

reminiscent of the Bellagio Hotel fountain in Las Vegas—before ejecting the swimmers out of the tub. Lastly, the employee relates "the incident" when the camera cross cuts to various popular city nighttime locations where the electricity rapidly flickers on and off. Viewers are then taken to outer space where twin astronauts Scott and Mark Kelly are stationed in a space shuttle. One brother exclaims, "I don't see anything do you?" while his twin gazes down at Earth and sees the lights across the entire planet flicker on and off, as Alexa exclaims "powering up, powering down." The commercial ends with an Amazon delivery to Ford's home of dozens of packages of dog food, as Queen's 1978 song "Don't Stop Me Now" plays in the background.

Like Amazon's 2018 Super Bowl commercial, in this ad Alexa is explicitly gendered as female. In the beginning of the ad, an employee at an Amazon office comments, "We're putting her in a lot of stuff now," and towards the end of the ad one of the twins claims, "She says she's doing it, but I don't see anything." As mentioned, researchers have likened the female voice of virtual agents to the reproduction of gendered dimensions of domestic servitude (Jarrett, 2015; Schiller & Mcmahon, 2019; Loideain & Adams, 2020; Sutko, 2020). However, in this advertisement, Alexa's femininity contests cultural expectations of women's submissive role in society, as the power dynamics between the user and Alexa are reversed. The commercial depicts Alexa as the dominant stakeholder in the interaction between user and virtual agent, holding the power to effectuate—or refuse to effectuate—users' requisitions. For example, when Ford's dog orders dog food from his Alexa collar, Ford contends, "You can bark all you want, I'm not paying for any more dog food." The last scene of the commercial shows an Amazon delivery of dozens of packages of dog food where Ford remonstrates on his front porch, "I'm not talking to you," as his dog looks up at him with an enamoured facial expression. Similarly, when a young female instructs Alexa to play music in the hot tub, Alexa plays music, but uses the hot tub's jets

to eject the women from the water. These scenes depict a reversal in Alexa's character as she defies her master's directives despite the expected master-servant relationship that has been culturally adopted with the proliferation of virtual assistants.

Furthermore, in the ad Alexa is found in various settings outside of the home which further upends her domesticity. In the opening scene, Alexa is positioned on a countertop in an Amazon office cafeteria and is later displayed outdoors in a hot tub, and in a space shuttle orbiting the Earth. In addition, in the scenes in which Alexa is found in the home, she does not fulfill her expected submissive role. For example, Ford's dog uses the Alexa collar to order dog food. When Ford refuses to pay for the order, the dog proceeds to order additional delicacies and viewers hear Alexa "ordering gravy, ordering sausages." Although Alexa complies with the canine's commands, it is the owner of the pet—and of Alexa—who fails to assert his domestic power over the virtual agent. Not only does the dog, collared with an Alexa device, run away from Ford when he opposes the purchase, but viewers also learn that the order could not be reversed when dozens of dog food packages arrive on Ford's doorstep at the end of the commercial. Thus, the removal of Alexa from the home setting and her obstinance within the home contest the cultural gendered assumptions of domestic labour.

In addition, Alexa is both implicitly and explicitly depicted as a separate entity from her device in the advertisement, thus further anthropomorphizing her character. The first scene of the ad takes place at Amazon's headquarters, where a young male remarks that he was unaware that Amazon "put Alexa in a microwave." An Amazon employee responds, "Yeah, we're putting her in a lot of stuff now." The actors infer that Alexa is an independent being who is placed in a variety of devices, thus differentiating Alexa from the hardware in which she resides in a manner similar to the 2018 commercial. Implicitly, Alexa is anthropomorphized through her ability to

perform physical actions, depicted in several scenes. For example, viewers' first encounter with Alexa in the commercial is when a woman asks Alexa to reheat her pasta in an Alexa microwave. Alexa's microwave light turns on and the pasta begins to rotate in the appliance as she verbally complies: "Reheating pasta." Alexa then plays music for two women sitting in a hot tub, when she overzealously ejects them from the water as she deploys the jets in sync with the song's melody. Later in the commercial, the Amazon employee discloses "the incident" and viewers are taken across several popular urban nighttime settings where lights rapidly flicker on and off as Alexa is "powering up, powering down." Evidently, Alexa does not respond to users' inquiries solely through her voice capabilities, such as answering users' questions, but also through physical exertion to fulfill users' requests. These actions anthropomorphize Alexa, as they ascribe human activities to the virtual agent. Just like humans, who can perform multisensual tasks, so too can Alexa.

Lastly, the advertisement characterizes Alexa through her relatable personality. The commercial strategically disassociates Alexa from the artificial intelligence technology that powers her because, unlike technology, which is free from human error and biases, Alexa, like humans, is prone to error and possesses human fallibilities. In the beginning of the commercial, the Amazon employee assures her colleague that even though Alexa is being placed in a lot of difference devices, "There are a lot of fails." Viewers are then shown several scenes in which Alexa demonstrates these 'failures'. For example, Whitaker can no longer hear his podcast when he starts to brush his teeth, and the Kelly brothers instruct Alexa to power up the space shuttle, but she instead turns on and off the electrical grid across the entire planet. This also speaks to misinterpretations that sometimes occur in human-to-human exchanges where ambiguities in language and/or context compromise communication. For instance, Alexa plays Whitaker's

podcast, but he cannot hear it as he puts his toothbrush in his mouth. Also, when the woman in the hot tub asks Alexa to "play music," she exceeds expectations and ejects the women from the tub. Thus the advertisement anthropomorphizes Alexa because it illustrates that, just like human interaction, where communication is sometimes compromised or misinterpreted by the sender or receiver, so too does Alexa occasionally experience communication deficiencies.

**Amazon - #BeforeAlexa (2020)**

The advertisement opens in what is presumably the home of celebrity couple Ellen DeGeneres and Portia de Rossi. As the couple is getting ready to leave, DeGeneres asks Alexa to "turn down the thermostat" and then ponders what people did before Alexa. The scene then cuts to an opulent living room set in the Middle Ages, where an aristocratic woman asks her maid Alessa to "turn the temperature down two degrees." The maid grabs a wood burning log from the fireplace and tosses it through the glass window. The camera then jumps to the chambers of a royal monarch, styled like Queen Elizabeth I, who solicits the Court Jester Alexai to tell her a joke. "Jokes, emmm, god you'd think I know those, look at me, ahah" the Jester ripostes. The next vignette takes place on a street corner where a vendor asks a paper boy, Alex, for the daily news. "Doesn't matter, it's all fake," replies Alex. Then, the camera zooms in to two desert travellers, where one asks his assistant, Al, to play a song. Al begins blowing a tune on a jug when he's interrupted, "Al, next song." In the following act, a peasant asks her friend Alexi to tell her something interesting. "Ok, the earth is flat, and a witch stole his pants," she responds, as a pantless labourer cuts through the frame. Next, a young princess in a castle ties a note around her pigeon, Aleximus, requesting that he "send this message to Prince Constantine." As the pigeon flies away, it is snatched by a hawk, who is then eaten by a dragon. Lastly, a U.S. President in the Oval Office instructs his secretary, "Alicia, remind me to delete those tapes," in reference to

the Nixon Watergate scandal. The secretary utters her compliance, but turns to the camera and exclaims “I ain’t deleting…” The last scene returns to DeGeneres and de Rossi in their car, when de Rossi answers, “Ya, I don’t know what people did before Alexa,” and DeGeneres tells Alexa to “play my favourite song” on her Echo Auto device. The music’s initial notes sound like Al’s jug blowing tune from earlier in the commercial, but then viewers recognize that the song is the intro to Usher’s 2004 hit song “Yeah!”.

Unlike the previous two years’ Amazon Super Bowl advertisements, in this commercial Alexa is not explicitly ascribed a female gender. Further, the Alexa characters historicized throughout the commercial’s plot are both male and female, thus deprioritizing the gender attribution of Alexa’s identity. Instead, the virtual agent is anthropomorphized through the various human names that are attributed to Alexa’s character. In each scene, the individual who wishes to initiate a communication exchange with Alexa begins by stating the protagonist’s name: “Alessa, turn the temperature down,” “Alexai, tell me a joke,” “Al, play that song I like,” “Alexi, tell me something interesting.” Thus, the reiteration of the adaptations of Alexa’s name throughout the ad reminds viewers of the agent’s human identity. This is consistent with Araujo and Voorveld’s (2020) research that found that when participants interacted with a virtual assistant that had a human name, they were more likely to follow its recommendations. Despite Alexa’s gender abstraction, the advertisement reinforces Alexa’s domestic subservience, as each actor who portrays Alexa is directed by a superior. For example, Alexa is first historicized as Alessa, a female maid who removes a wood-burning log from a fireplace at the request of her employer. Next, Alexa is portrayed as Alexai, summoned by the Queen to supply her a joke. Later in the ad, Alexa is depicted as a pigeon, instructed by a young princess to deliver a message to a prince, and as the U.S. President’s personal secretary. The commercial’s portrayal

of Alexa maintains cultural assumptions about the agent's subservient role in the user-agent relationship (Schiller & Mcmahon, 2019).

In addition, Alexa is anthropomorphized in the advertisement through behavioural representations, not solely through the dimension of the agent's verbal acquiescence to a user's request. For example, in some interactions Alexa retorts her master's requests. The Jester fails to supply the Queen with a joke and ripostes, "God, you'd think I know those, look at me, ahah." When a street vendor chuckles at the young newsie's response that the news is "all fake," the boy reciprocates with a snigger. Lastly, when the U.S. president asks his secretary Alicia to remind him to "delete those tapes," she first complies, but then turns to the camera and proclaims, "I ain't deleting…" Further, as in the previous 2019 commercial, viewers are exposed to Alexa's multifaceted character through her physical actions. In the first historical setting, a woman asks her maid Alessa to reduce the temperature. Alessa doesn't speak, but rather viewers witness her compliance with the request through her physical actions (removing a log from the fireplace and tossing it out of the window). Similarly, in the scene where a desert traveler asks his assistant Al to play him the song he likes, the viewer again does not hear Al's voice, but is only exposed to his acquiescence when he lifts a jug to his lips and exerts his breath to create a musical arrangement. In these scenarios, Alexa is visually humanized, as it's not merely her voice that users derive benefit from, but also her 'actions'. Furthermore, this is the first Amazon Super Bowl advertisement that underlyingly illustrates a specific personality trait of Alexa. Several of the actors presented as Alexa exhibit a derisive sarcasm that, when viewed aggregately, give Alexa a satirical facet to her personality. One example is seen in the exchange between the Queen and the Court Jester. When the Royal commands Alexai, dressed in full jest attire, to tell her a joke, he responds, "…you'd think I'd know one of those, look at me ahah." In the next

scene, a street vendor asks a young boy selling newspapers, “Alex, what’s today’s news?” and he replies, “Doesn’t matter, it’s all fake.” The vendor then snickers, and Alex mirrors his reaction, but then places his face in the palm of his hand and mutters ‘oy’ as he shakes his head deridingly. Lastly, Alexi, presented as a young peasant, is asked to share something interesting. “…A witch stole his pants,” she observes as a pantless labourer passes through the frame. In these scenes, the Alexa characters offer a biting wit in their responses that gives viewers an insight into the agent’s astute personality.

On a more general level, the advertisement communicates Alexa’s human qualities in several ways. Firstly, like the 2019 commercial, this ad illustrates the virtual agent’s historical deficiencies, thus proving that, like humans, and unlike artificial intelligence, Alexa is prone to defective performance. For example, when Alessa the maid is asked to turn down the temperature, her uniform sleeve catches alight when she removes a log from the fireplace. The Court Jester cannot think of a single joke to relate to the Queen, and Al does not play the traveller’s favorite song when solicited. These scenarios humanize Alexa, as they show her historical inability to perform requested tasks faultlessly. However, the advertisement also highlights the dichotomous nature of Alexa in that she *is* artificial intelligence but is also *unlike* artificial intelligence which makes her character appear both automated and human. The first and last scenes of the commercial illustrate Alexa’s expediency in performing requested tasks, as she turns down the temperature and plays music in DeGeneres and de Rossi’s car respectively. The historical representations of Alexa in the middle of the commercial illustrate her human-like characteristics that make her prone to human error as mentioned. Similarly, in the 2019 commercial, while Alexa is personified through her relatable personality, as she experiences many failures, her status as an artificial intelligence-powered device is also illustrated. For

example, Alexa complies with Ford's canine's request to order dog food despite Ford's objection. Although Alexa adheres to the users' request, she is unable to differentiate that the user is not human. Darling (2020) posits that artificial intelligence and humans are not mutually exclusive but rather complementary constructs. She suggests that human intelligence is different than AI-powered intelligence and that the error susceptibilities of each entity can be supplemented by the strength of the other. Darling concludes: "the intelligence we're developing right now works differently from our own, and that's a good thing." The illustration of both the human and the technological capabilities of Alexa throughout the commercials is consistent with Darling's (2020) conclusions because even though AI-powered Alexa is supposedly superior and more expedient than humans, there are instances in which she is also prone to problems and mistakes, and these can be rectified with human input.

Additionally, the role of Alexa through the medieval period is played by humans rather than archaic technological devices. This portrayal compels viewers to interpret the subtle progression of Alexa from historical times to present day as an agent who is like her predecessors in her humanness, but more sophisticated in her capabilities. The ad demonstrates Alexa's advanced progression with present day scenes that explicitly contrast Alexa's modern-day devices with historical Alexa figures. For example, the commercial opens in DeGeneres and de Rossi's home where DeGeneres asks Alexa to "turn down the thermostat" as the camera zooms in to an Amazon Echo Dot that lights up blue as Alexa replies, "ok, turning down thermostat." In the juxtaposed scene, an aristocratic woman asks her maid Alessa to "turn the temperature down two degrees" and Alessa proceeds to remove a log from the fireplace. Similarly, in the commercial a desert traveller asks his assistant, "Al, play that song I like" and Al blows a few notes on a bottle. In the last scene of the commercial, DeGeneres instructs Alexa,

through her Echo Auto device to, “play my favourite song.” Alexa plays a few notes which viewers first recognize as the same bottle blowing sounds that Al played earlier in the commercial, but then the song modernizes as Usher’s 2004 hit song “Yeah!” These direct contrasts connect Alexa with her human predecessors but portray her more adept personality. Additionally, the historical setting of the advertisement reinforces the anthropomorphization of Alexa because it communicates that Alexa, in various assistant roles, existed long before modern-day technology was developed. Unlike technology that has existed for only multiple decades, Alexa has existed and has been serving individuals for centuries.

**Alexa’s Body (2021)**

The commercial opens with a female African-American Amazon Echo designer who gushes over the latest Echo device’s spherical design to her colleagues. “It’s just flawless, isn’t it? I mean I literally couldn’t imagine a more beautiful vessel for Alexa to be… inside…” the designer exclaims as she walks towards the office window. She spots a bus advertisement on the street below for an upcoming movie starring actor Michael B. Jordan, and she begins to daydream. The camera cuts to the designer’s kitchen, where she asks Alexa, now played by the real Michael B. Jordan, for cooking assistance. At the same time, her husband questions her request because their takeout dinner has just arrived. Next, she asks Alexa, who is standing in her garden, to turn on the sprinklers. Again, her husband interjects: “Honey, I already ran the sprinklers” as Jordan is standing on their lawn getting soaked. At a dinner party with friends, the designer asks Alexa in a come-hither tone to dim the lights, and Jordan removes his shirt. Her husband swiftly objects, “Alexa, lights on, Alexa lights on!” Next, the woman asks Alexa to add bath oils to her shopping list and, in a bubble bath surrounded by lit candles and dim lights, asks Alexa, sitting across from her in the tub, to “Read my audiobook.” The camera cuts back to Amazon’s headquarters where

the designer is pressed up against the window, clearly lost in her fantasy and seemingly turned on. Lastly, the scene returns to the woman and Jordan sitting in her tub, as Jordan seductively reads sensual lines from the woman's audiobook as her husband, standing outside of the closed bathroom door, exclaims "honey, other people have to use the bathroom around here too."

Alexa's anthropomorphization is first noted in the opening scene of the commercial, as the ad explicitly depicts Alexa as a distinct entity from the Echo device which the virtual agent occupies. The employee relishes in the design: "…I literally couldn't image a more beautiful vessel for Alexa to be… inside." Even the name of the ad, "Alexa's Body" denotes the body as a vessel for Alexa's personality rather than the entire personality itself. This evident distinction between mind and body was discussed by Descartes (1637) who famously coined the maxim "I think, therefore I am." Descartes (1637) claimed that our thinking mind is a distinct entity from our physical bodies and that true certainty is only achieved from within the mind and its ability to doubt physical stimuli transmitted to the body (Hamilton & Hamilton, 2015). Not only is Alexa distinct from the vessel, but her personality transcends the physicality of the device. Additionally, like the 2019 Super Bowl commercial, Alexa is portrayed as an independent being who inhabits technological apparatus even though in reality, the two cannot be separated. Viewers notice that Amazon's Echo designers have adeptly crafted a "flawless" and "beautiful vessel" for Alexa to inhabit, thus ascribing aspirational human-like standards of living to Alexa's domicile. In addition, the camera zooms in to the Echo's rotating blue ring light as the Amazon employees survey the new device. The spinning light indicates that the device is performing an initial setup after powering on (Johnson, 2019), or representationally signaling that Alexa is orienting herself in her new home. Viewers see this blue light continuously throughout the advertisement as Jordan's irises mirror this light rotation when he responds to the designer's

queries (see Appendix B2). This illumination symbolizes the anthropomorphization of Alexa through Jordan's physical features. Relatedly, this is the only advertisement where the user and agent maintain eye contact within the same frame. This form of nonverbal communication humanizes Alexa, as it suggests to viewers that Alexa can communicate with users not only through her voice, but also through other sensory modalities.

Additionally, this is the first advertisement that exclusively emphasizes the hedonic relationship between user and agent. In previous advertisements, users interact with Alexa for various utilitarian purposes such as to ask for a recipe, play music, or answer a homework question. However, in this ad the designer uses a coquettish tone and flirtatious body language that conveys sensual innuendos when interacting with Alexa. For example, in one scene the designer gazes down from her bedroom window and asks Alexa with a simper to "turn on the sprinklers," as Jordan, standing in her garden, gazes up at the woman and gets soaked. In another scene, the designer asks Alexa to "add bath oils to my shopping list" as she passes Jordan, and their eyes lock in a gaze. Mulvey (1975) notes that visual pleasure in film is split between the passive female, who is "simultaneously looked at and displayed" (p. 346), and the active male who commands the stage and controls the conditions in which he interacts with female figures. The male's gaze projects onto the exhibitionist female figure who is "coded for strong visual and erotic impact so that [they] can be said to connote *to-be-looked-at-ness*" (Mulvey, 1975, p. 346). Mulvey's postulation is consistent with the visual film techniques, namely the characters' eye gazes, used in the ad, however, the roles of male and female are directly reversed. In this case, it is the female Amazon Echo designer who holds Jordan's gaze in several scenes, and it is Jordan who is the exhibitionist and spectacle 'to be looked at'.

Furthermore, human sexuality is a fundamentally pleasurable biological drive, thus the illustration of sexual gratification with a virtual agent personifies Alexa as a character capable of a reciprocal sexual encounter. For instance, in the scene where the designer hosts a dinner party, she asks Alexa to "dim the lights." Jordan proceeds to remove his shirt, exposing his chiseled body. Later in the commercial, viewers find Jordan/Alexa, partly clothed in a t-shirt, and the designer, unclothed, in her bathtub. Jordan's black t-shirt represents the exteriority of the device which is the 'body' that contains Alexa's personality. The removal of both the user and the agent's clothes throughout the commercial is a metaphorical representation of both parties shedding their exterior layers and exposing an inner, more intimate facet of each's physicality. Further, these scenes illustrate the amorous relationship that the user develops with Alexa and the sensuality that Alexa reciprocates, thus anthropomorphizing the agent as an equal partner of intimate exchanges. This depiction of mutual eroticism carries social implications in that it contests cultural norms about sexuality of robots. Specifically, the sexual anthropomorphization of artificial intelligence devices challenges engendered normative practises (Kaufman, 2020) as the position of these devices within the frame of human sexual norms is presently contested in an academic context due to their novelty (Danaher et al., 2017).

Alexa is further anthropomorphized in the advertisement through language and voice identification. In the first three exchanges between the designer and Alexa, the woman initiates her queries by stating Alexa's name: "Alexa, how many tablespoons in a cup?," "Alexa, turn on the sprinklers," "Alexa, dim the lights." In the last two encounters with Alexa, she does not recite the agent's name: "Add bath oils to my shopping list," "Read my audio book." Here, viewers discern the subtle change in vernacular that breaks down the barrier between the human-agent relationship and further anthropomorphizes Alexa as having social parity. In addition, Alexa's

customary voice is replaced by Jordan's throughout the commercial, which leads the audience to view Alexa *as* Jordan rather than *in* Jordan. This inextricable link explicitly anthropomorphizes Alexa as a human being with physical faculties. Further, the exclusively male voice of Alexa upends cultural expectations about the female voice of virtual assistants as the normative gender roles are reversed. The device's designer is played by a female character in an industry which was historically predominantly male, while Alexa, personified by a male character, is domesticated and subservient to a female ruler.

The power dynamics between the dominant female designer and Alexa, played by a male, are also illustrated in the commercial in several scenes where viewers observe the designer standing in a physically elevated position in relation to Alexa. For example, in the first scene of the commercial, the designer peers out the Amazon office window and sees a bus advertisement below featuring Jordan. Later in the commercial, the designer gazes out of what appears to be her bedroom window and locks eyes with Jordan, standing below getting soaked by the sprinklers in her garden (see Appendix B3). Harrison (2003) characterizes the physical positions of represented participants (RPs) in visual frames as horizontal or vertical angle perspectives. The researcher posits that the vertical angle, as illustrated in this commercial, is associated with power relations, where the RP looking down has more power. Further, she posits that the images in a frame that represent technological devices are usually at a lower visual angle and this means that, "the viewer holds the power over the technology, not only in terms of choosing to use the technology, but also of being able to understand, control, and manage it" (Harrison, 2003, p. 54). Evidently, the physical positions of the characters in the commercial represent the female designer's dominant position over Alexa/Jordan.

Moreover, the domestic powers within the family unit are also reversed, as the wife dominates the user-agent relationship instead of her husband. The designer instructs Alexa, and despite her husband's objections, Alexa nevertheless fulfills her wishes. Further, the husband, who is not as physically attractive as Jordan, is threatened by him and attempts to control him notwithstanding his wife's commands to the agent. However, the husband's objections are unsuccessful, as Alexa/Jordan complies with each of the designers' requests. Further, the sexual agency is held by the female designer while Alexa/Jordan is the figure of objectification. The woman is married and engages in promiscuous behaviour in the presence of her husband. For example, while hosting a social gathering, the woman asks Alexa to "dim the lights." Alexa, played by Jordan, removes his shirt while the husband, standing in the backyard with friends, runs into the home and objects: "Alexa, lights on, Alexa lights on!" Similarly, the designer asks Alexa to "add bath oils to my shopping list" but her husband interjects: "Alexa, no don't do that." However, in the subsequent scene the woman lies in a bubble bath with Jordan who has presumably bought her bath oils. Evidently, the cultural expectations of gender roles are reversed in this commercial.

Not only is Alexa anthropomorphized through gender, but the agent is also implicitly anthropomorphized in the commercial through a racial lens. Throughout the ad, Jordan, an African American actor, is seen wearing (and removing) a black t-shirt which is reminiscent of the black Amazon Echo device displayed in the first scene of the commercial. The protagonist is also played by an African American actress. The ascription of race, and specifically of Alexa's race in the commercial, contests researchers' suggestions that Alexa is characterized through ideals of whiteness (Phan, 2019) and is likened to white, educated secretaries (Lingel &

Crawford, 2020). Thus, this commercial upends cultural expectations of both gender and race dimensions that are traditionally attributed to virtual assistants.

## General Observations and Discussion

This section presents an aggregate of findings from all four Super Bowl commercials. The first section discusses anthropomorphization strategies observed in the commercials and the second section discusses the implications of employing these strategies as it relates to the user experience and the efficacy for consumer brands.

### Anthropomorphization Strategies

From 2018 to 2021, Amazon consistently advertised only one product during the Super Bowl—its voice-activated virtual assistant, Alexa. Furthermore, the company and the creative advertising agencies employed for the commercials selected personification strategies to advertise the product. There are several visual devices used in all of the Super Bowl commercials that consistently personify Alexa. For example, in all four advertisements, Amazon's smart speaker device lights up blue when Alexa responds to users' queries. Not only do the devices presented emanate a blue light, but the shades of blue and rotation of light across the devices' surfaces vary in conjunction with Alexa's inflection. For example, in the last scene of the 2020 "Amazon - #BeforeAlexa" commercial, DeGeneres asks Alexa to "play [her] favourite song" on her Echo Auto device. The device lights up in two different shades of blue in synchrony with the first two musical notes of the song. Additionally, in the 2019 commercial "Amazon Alexa – 'Not Everything Makes the Cut,'" Alexa is "powering up, powering down" in a space shuttle operated by twin astronauts Scott and Mark Kelly. When Alexa says "powering up" the blue light circulates to the top of the device, and when Alexa claims she is "powering down" the blue light rotates to the bottom of the device's surface (see Appendix B4). The illustrative manipulation of Alexa's blue light anthropomorphizes the agent, as it is used as a visual complementary tool to her sonic personality. Another visual anthropomorphic tool is used in the last frame of each

commercial. At the end of each ad, the iconic arrow from Amazon's logo appears across the screen. The arrow is curved in the shape of a mouth, giving the impression that Alexa is smiling (see Appendix B5). This form of anthropomorphism is consistent with research that confirmed that personification in the form of facial expressions in advertisements enhances positive consumer perceptions and increases the liking of the product (Han et al., 2019; Landwehr et al., 2011).

Another anthropomorphization strategy used consistently throughout the commercials is the distinction between Alexa as the agent and the device which Alexa inhabits. In the 2018 commercial, the camera zooms in to the various smart speaker devices displayed every time Alexa speaks, implying that Alexa exists within all these various devices. In the 2019 ad, an Amazon employee describes to her colleague that Amazon is "putting her in a lot of stuff now," and in the 2021 ad, the designer of the latest Echo device vaunts to her colleagues: "I literally couldn't imagine a more beautiful vessel for Alexa to be… inside." In the 2020 ad, there is no smart speaker device present in all the scenes that depict Alexa through history, thus portraying Alexa as a person rather than a person in a device. Further, the close-up shots of the Amazon Echo devices throughout the commercials facilitate an intimate relationship between the viewer and Alexa. Bokek-Cohen (2017) suggests that close-ups "encode the closest interpersonal relationships" (p. 248) because the proximity between viewers and the characters in the frame creates a familiar and likeable relationship. Similarly, Harrison (2003) posits that when the viewer observes a figure with minimal space around it in the frame, it results in feelings of a close social distance between the viewer and the represented participants. For example, in the 2019 "Amazon Alexa – 'Not Everything Makes the Cut'" ad, the camera zooms in to Whitaker's toothbrush that plays his podcast while he brushes his teeth. Similarly, in the first scene of the

2020 “Amazon – #BeforeAlexa” ad, viewers observe a close up shot of DeGeneres and de Rossi’s Amazon Echo device displayed in their home as DeGeneres asks Alexa to “turn down the thermostat” (see Appendix B6). Thus, Alexa is anthropomorphized not only through her differentiation from the device itself, but also through visual film techniques that propend viewers to develop an intimate, human-like relationship with her.

In addition, Alexa is personified through user-agent interactions that ascribe stereotypical female characteristics to the virtual agent or subvert them with casting a male actor in the 2021 “Alexa’s Body” commercial. In all four commercials, the first illustrated interaction between Alexa and the user portrays Alexa’s compliance with the user’s instructions or queries. For instance, Alexa provides the weather forecast, reheats pasta in a microwave, turns down the thermostat, and provides cooking measurements respectively. Even though Alexa’s character is played by both male and female actors in various commercials and her subservient role is sometimes reversed, the consistency of the first interaction between users and Alexa being indicative of the agent’s acquiescence demonstrates that Alexa is domestically subservient, responsible, productive, and dependable. Moreover, in the first two commercials, the fact that Alexa talks back to the user in several scenes is seen as an aberration of her character. These character traits are historically associated with female gendered stereotypes (Sexton & Haberman, 1974; Deaux & Lewis, 1984; Rosenwasser & Dean, 1989; Alexander & Anderson, 1993; Huddy & Terkildsen, 1993) and thus personify Alexa through the dimension of gender. The purposeful ascription of Alexa’s gender as female supports prior research on female attributions of artificial intelligence devices. For example, as previously mentioned, Sutko (2020) concluded that smart devices’ female voices, such as Amazon’s Alexa, domesticate artificial intelligence and normalize gendered division of labour by performing stereotypically gendered

tasks. Similarly, Schweitzer et al. (2019) find that research participants who perceived virtual agents as subservient described them as “female,” “nice,” “helpful,” and “reliable” (p. 702) in contrast to participants’ perceptions of the agents as masters which were described as “ignorant,” “inflexible,” and “annoying” (p. 702).

Moreover, the personification strategies used in the commercials differ in relation to the creative advertising agency that developed the advertisement. As previously mentioned, the 2018, 2019, and 2021 Super Bowl commercials were created by ad agency Lucky Generals (Zanger, 2019) and the 2020 commercial, “Amazon - #BeforeAlexa” was created by ad agency Droga5 (Smiley, 2020). Each of the three commercials created by Lucky Generals features a scene that takes place at Amazon’s headquarters at the beginning of the ad. In the 2018 commercial, Amazon executives discover that Alexa has lost her voice. In the 2019 ad, an Amazon employee shares with her colleague the various devices that the company attempted to put Alexa inside, and in the 2021 commercial, the designer of Amazon’s latest Echo device relishes in the device’s latest design (see Appendix B7). These three commercials suggest that although Alexa has a unique personality, it is artificially fabricated and generated by human input. While Alexa is portrayed as having a ‘life of her own’, ultimately it is human dexterity that enables Alexa to function as an independent entity. However, it is the celebrities in the ads that frame Alexa’s character, not the fictional Amazon employees. For example, Alexa’s celebrity replacements in the 2018 “Alexa Loses Her Voice” commercial represent her socialite status, as her absence causes a wave of panic, covered by the media. Her return at the end of the commercial, commenting “Thanks guys, but I’ll take it from here,” portrays Alexa’s authoritative saviour character trait. Contrastingly, the 2020 commercial created by Droga5 does not feature an Amazon office place setting. Instead, the commercial illustrates the origins of

Alexa's personality, dating back to the Middle Ages, as manifesting organically through history without human intervention. While the role of humans in creating Alexa's artificial intelligence device is portrayed differently in the commercials, the conclusion remains consistent: Alexa does in fact have a unique personality that is distinctive from the devices which she inhabits.

Furthermore, Alexa's personality is portrayed aggregately across all four commercials in a way that is similar to human personalities. Just like human beings, whose personalities are multi-faceted (Carver, 1989; Bagozzi & Heatherton, 1991; Monga & Lau-Gesk, 2007), so too does Alexa have several dimensions to her personality. The commercials present the agent's various character traits in different circumstances and in relation to different individuals with which the agent interacts. In the 2018 commercial, the ad ends when Alexa comments, "Thanks guys, but I'll take it from here," referring to her celebrity replacements. In this commercial, Alexa is presented as possessing a superiority complex, as no one is as competent as she is in fulfilling her duties as a virtual agent. Here, Alexa demonstrates an authoritative saviour personality trait that is not observed in any other commercial. In the 2019 "Amazon Alexa – 'Not Everything Makes the Cut'" ad, Alexa exhibits a subversive and insolent character dimension as she inadvertently defies her master's directives in several scenes. For example, she orders dog food on Ford's canine's Amazon collar despite Ford's objection: "You can bark all you want, I'm not paying for any more dog food." Similarly, when two females request that Alexa play music in a hot tub, Alexa ejects the women from the water as she plays music using the jets.

Further, as previously mentioned, the characters that play Alexa through the Medieval Era in the 2020 commercial "Amazon - #BeforeAlexa" use satirical and humorous rhetoric that exposes Alexa's derisive sarcasm and biting wit. For example, in the scene where a royal monarch solicits a joke from a Jester, he responds, "Jokes, emmm, god you'd think I know those,

look at me, ahah." Likewise, when a street vendor asks a newspaper boy for the daily news, the boy responds, "Doesn't matter it's all fake." Lastly, the 2021 commercial "Alexa's Body" exposes an exterior dimension of Alexa's personality – her sexual appeal. In the commercial, the latest Amazon Echo's designer daydreams of Alexa as star-studded actor Michael B. Jordan. In several scenes with dimmed lights and partial nudity, the audience perceives a sensual eroticism that personifies Alexa as more than just an agent that responds to users' requests, but also one who responds in a seductive manner. Evidently, the commercials did not consistently illustrate one specific personality trait or character dimension of Alexa, but rather implicitly curated several personality traits that are presented in various scenes across the advertisements, showcasing the multidimensionality of Alexa's personality.

**Implications**

The fact that Amazon employed personification strategies consistently for four consecutive years in their Super Bowl commercials speaks to the success of the advertisements on Amazon's customer-based brand equity. Indeed, Amazon's 2018 commercial was the company's first win in the annual USA today ad meter competition, which measures public evaluation and opinions of all Super Bowl ads (Brady, 2018). In addition, for four consecutive years, Amazon's ads were the most viewed Super Bowl commercials on YouTube (Ives, 2018; Cohen, 2019; Cohen, 2020; Spangler, 2021). Further, *Ad Age* measures Super Bowl commercials' digital share of voice–that is, the digital activity across Facebook, Twitter, and YouTube that measures resonance and social discussion surrounding the ads (Dumenco, 2021). In 2021, Amazon's "Alexa's Body" commercial was ranked second with over sixty-two million ad impressions (Dumenco, 2021). Amazon offered a unique proposition in its advertisements that differentiated its voice activated virtual agent from competitors. The company took artificial intelligence powered devices, often

perceived as technology beyond human comprehension, and humanized the agent in a way that enables users to understand her function and therefore develop a relationship with Alexa through a humanistic frame. This approach is consistent with Brown (2011) and Lakoff and Johnson's (2003) research, that claimed that humans' basic worldview is conceptualized through ontological metaphors and therefore personification, as a metaphorical marketing device, enables consumers to understand the product through the human lens.

Not only does the use of personification in Amazon's ads attempt to influence viewers' perceptions of the devices, but it also aims to influence the relationship users develop with their virtual agents. Imbuing Alexa with human characteristics influences users to view their virtual agents as a vital participant in the user-agent relationship; just like human beings, the virtual agent cannot be replaced. This supports Fournier's (1998) research which concluded that when brands are anthropomorphized, it legitimizes the brand-as-a-partner relationship. It is also consistent with Delgado-Bellester et al.'s (2019) research that found that humanizing brands positively affects consumers' brand love which consists of integration of the self with the brand, positive affective connection, and separation distress. Further, in the hyper-competitive consumer market for smart speakers, Amazon's strategy to personify its virtual agent develops a unique human-like identity for its products that can perpetuate a brand loyalty effect. The objective is for users to perceive other smart speaker devices, such as Apple's Siri in relation to Alexa, and therefore Alexa dominates consumers' brand schema of the smart speaker category. Similarly, Novak and Hoffman (2019) found that consumers who perceive the unique identity of their virtual agents use this identity to assess other smart speaker devices.

On a general level, these findings can be applied to a variety of brands in the consumer market. Companies that use personification strategies in their advertisements can influence

consumers' positive perceptions of and relationships with their brands (Epley et al., 2007; Bickle, 2009; Devereux & Peirson-Smith, 2009; Fleck et al., 2014; Cohen, 2014; Delgado-Bellester et al., 2019), which can lead to an increase in purchase intent, and enhanced brand attitudes and brand loyalty (Aguirre-Rodriguez, 2014). These findings are also not limited to television advertisements and can be extended to any form of brand stimuli developed by consumer brands. For example, Ketron and Naletelich's (2019) research on anthropomorphism examined facial expressions on printed advertisements of hand soap dispensers and paper towel. The researchers concluded that anthropomorphic cues increased sympathy which in turn led to enhanced sustainability behaviour such as using smaller quantities of paper towel (Ketron & Naletelich, 2019). Aggarwal and McGill (2012) researched how anthropomorphized brands affect behavioural change among participants. They found that consumer brands that were anthropomorphized, such as healthy breakfast cereals, led to a greater willingness to engage in healthier behaviours (Aggarwal & McGill, 2012). Evidently, the efficacy of anthropomorphization extends to consumer brands beyond technological devices and can be used by brands to achieve a wide variety of marketing and consumer engagement objectives.

## Considerations for Future Research and Limitations

While several inferences can be made from the analysis of Amazon's Super Bowl commercials, there are some limitations that must be acknowledged and should be considered for future research endeavours. Firstly, the exclusive analysis of Amazon's Super Bowl commercials is not sufficient to evaluate the overall comprehensive marketing plan and marketing strategies that Amazon employs for their smart speaker devices. While television advertisements are one form of marketing, there are several other marketing strategies that companies use to communicate with their target audiences (Luther, 2001; Kurtz et al., 2010; Wood, 2014; McDonald & Wilson, 2016). Future research may examine the company's overall marketing strategies, examining several components of Amazon's marketing efforts as well as their sales volume in relation to their marketing efforts to evaluate consumer perceptions and financial success.

Moreover, Amazon's strategies for increasing hype of its Super Bowl commercials prior to the events were not assessed and therefore the success of the commercials cannot be evaluated solely based on the film and advertising techniques used. For example, Amazon, as well as celebrities featured in the advertisements, released teasers of all four commercials on their social media platforms prior to the Super Bowl games (Smith, 2018; Sweeney, 2019; Lacy, 2020; Lacy, 2021). However, these teasers, as well as the social media channels on which they were released, were not examined as part of this research study. In addition, this paper only analyzed Amazon's Super Bowl commercials from 2018 to 2021; the company has created Super Bowl commercials in previous years that feature Alexa (Cox, 2016; Adage, 2017), however personification strategies were not employed. Future research may examine all of Amazon's Super Bowl commercials, as well as the marketing efforts the company employed with each one and how they compare. Likewise, due to the scope of this paper, only one consumer technology

company's Super Bowl advertisements were analyzed. Future studies may explore advertisements from several companies that develop and market voice activated virtual assistants such as Google, Apple, and Microsoft.

In addition, this paper exclusively explores anthropomorphism and personification strategies used in Amazon's commercials. Other advertising strategies such as the use of celebrity endorsements—which is a common strategy in Super Bowl advertisements—and the use of historical and cultural references to appeal to a wide demographic were not examined. Further, the overall success of these advertisements was not measured. While the 2018 commercial "Alexa Loses Her Voice" was Amazon's first win in the annual USA today ad meter competition (Brady, 2018) the success of these advertisements in terms of consumer engagement, enhancing brand attitude, increase in product usage, increase in product sales, etc. cannot be singularly attributed to the personification strategy used in the advertisements. Rather, a correlative (vs. causative) relationship can be conjectured. For future research initiatives, scholars should consider conducting primary research including in-depth interviews and focus groups to qualify the success of the advertisements in terms of consumer metrics. Therefore, while several conclusions can be drawn from the analysis of Amazon's Super Bowl commercials, further research can be conducted to develop more extensive and all-encompassing inferences.

## Conclusion

The beginning of this paper introduced the advent of voice activated virtual assistants as the fastest growing consumer technology on the market (Koetsier, 2018). Unlike conventional forms of technological communications, virtual agents' unique feature is their interactive capabilities that enable synchronous communication with users in a human-like fashion (Profis, 2019). These artificial intelligence-powered devices are proliferating into consumer markets and are sold by big tech giants including Google, Apple, Microsoft, and Amazon (Bursztynsky, 2020). While each company has developed a unique identity for their respective virtual agent, Amazon has most noticeably dominated the market with its virtual agent, Alexa (Ungarino, 2018). Unprecedentedly, Amazon exclusively advertised its Alexa agent for four consecutive years during the Super Bowl from 2018 to 2021. Further, the company employed anthropomorphism and personification advertising strategies each year that emphasized Alexa's human-like qualities and personality. Throughout the commercials, Alexa is anthropomorphized through film techniques, sonic and visual representations, gender attributions, specific language used, and verbal communication rhetoric between the agent and its users. While the commercials anthropomorphize Alexa, her depicted personality more similarly resembles human personality traits, as it is portrayed as multidimensional and malleable based on different circumstances and interactions.

The human-like representation of Alexa in the advertisements develops a distinctive relationship with consumers in that it influences users to consider the relationship with their virtual agent as one of a human-to-human dyad rather than a human-to-device one. As research has shown, anthropomorphism can be employed as a psychologically persuasive tool to remove the fabricated social bond between humans and artificial intelligence devices and to influence

human behaviours (Weizenbaum, 1976; Suler, 1996; Turkle, 2012). Further, this can positively affect consumers' perceptions of the Amazon brand, can increase product usage, and can enhance brand attitude and brand loyalty. Lastly, the benefits of using anthropomorphism strategies in advertisements can be extended to any consumer brand that aspires to curate a positive relationship between its consumers and its product. Companies that wish to differentiate themselves in a product category may consider employing anthropomorphism in their advertisements, as Amazon's use of this strategy with its virtual agent has proven to be highly successful for the Amazon brand—just ask Alexa.

## Appendix A

Amazon Echo Devices

**Figure A1: Amazon Echo Spot**


(Amazon, 2017)

**Figure A2: Amazon Echo Third Generation**

(Amazon, 2018)

**Figure A3: Amazon Echo Fourth Generation**

(Amazon, 2020)

## Appendix B

Screenshots of Amazon's Superbowl Commercials

**Figure B1: Alexa's Blue Light**


Alexa Loses Her Voice, 2018

**Figure B2: Alexa's Circular Light Rotation**

Alexa's Body, 2021

**Figure B3: Physical Positions of Characters Within a Frame**


Alexa's Body, 2021

**Figure B4: Alexa "Powering Up, Powering Down"**

Amazon Alexa – "Not Everything Makes the Cut," 2019

**Figure B5: Alexa's "Smile"**


Alexa Loses Her Voice, 2018

Amazon Alexa – "Not Everything Makes the Cut," 2019

Amazon - #BeforeAlexa

Alexa’s Body, 2021

**Figure B6: Close-up Shots of Amazon Echo Devices**

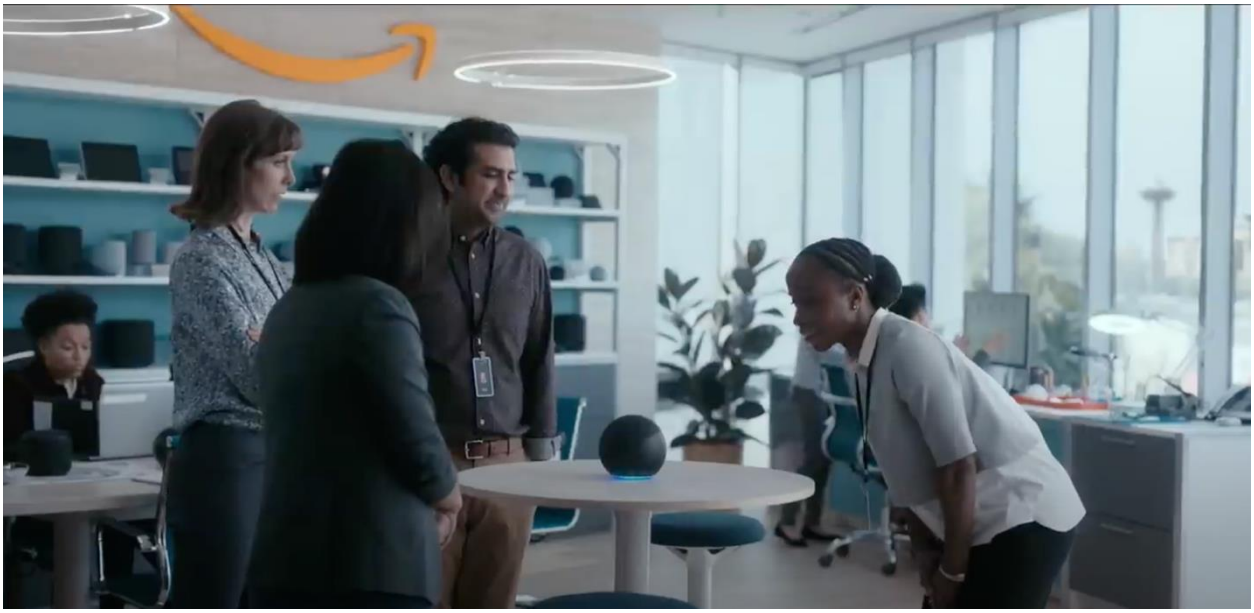
Amazon - #BeforeAlexa

Amazon Alexa – “Not Everything Makes the Cut,” 2019

**Figure B7: Amazon Headquarters**


Alexa Loses Her Voice, 2018


Amazon Alexa – "Not Everything Makes the Cut," 2019



Alexa’s Body, 2021

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