

Landgrebe, Jeanette*

The Rise of Virtual Influencer Marketing

Abstract

Virtual influencer marketing is a global emerging phenomenon in social media research. Research on traditional influencer marketing and practices has been the locus of attention for years, but fairly scarce research deals with the rise and influence of virtual influencers, also known as artificial intelligence influencers (AIIs) or computer-generated influencers (CGIs). In this article, an explorative, qualitative single case analysis of the Japanese CGI influencer Imma is presented to identify how the CGI is visually constructed on Instagram in a marketing campaign. Two supplementary semiotic lenses are applied, i.e. a visual compositional analysis and a semiotic image analysis. The results indicate that the CGI influencer Imma is visually presented by and large with the same characteristics and attributes as found in similar studies of human influencers. Moreover, the findings indicate subtle yet essential differences in the visual framing of the CGI character to enhance a human-like appearance. Concludingly, this study has preliminary implications for research, practitioners, prospective marketers, and future innovation leaders in the virtual marketing industry, and it is proposed to consider reconceptualizing our understanding of virtual influencers and acknowledging the rise of Virtual Influencer Marketing as a field in its own right.

Keywords

AI influencer; social media; authenticity; social presence; expertise; semiotic image analysis; compositional analysis, virtual influencer marketing.

1. Introduction

A well-known phenomenon in social media research is the social media influencer (SMI). According to De Veirman et al. (2017, p. 798) SMIs can broadly be defined as:

“**People** who have built a sizeable **social network** of people **following** them”.

(Own emphasis).

This definition emphasises an understanding of SMIs as a) someone who is a *human being by nature* (People, n.d.), i.e. a person who interacts with other persons in the social world; and b) someone who *communicates and builds relations* in the digital world through their online presence and digital footprints (Thatcher, 2014); and c) someone whose online presence is *enforced purposefully and strategically* by interacting and engaging in social networks and gaining followers (Enke & Borchers, 2019). Though early social media influencer activities arguably originate from political weblogs and blogging in the 1900s (Borchers, 2019; Blood, 2002), celebrity endorsement is seen as an early version of what later on was established as the field of influencer marketing (e.g. Hsu & McDonald, 2002; McCormick, 2016). Today, influencer marketing is a highly professionalised and powerful industry, where influencers, agencies and brands partner up on social media for strategic marketing and branding purposes (Uzunoglu & Kip, 2014; Linqia, 2017; Khamis & Welling, 2017; Kádeková & Holienčinová, 2018). Core qualities of successful social media influencers are commonly acknowledged as the ability to appear authentic, trustworthy and credible (Gilmore & Pine, 2007; Uzunoglu & Kip, 2014). With the professionalisation of influencer marketing, it remains a constant focus and challenge for both brands and influencers to ensure that followers continually attribute above-mentioned qualities to the influencer. Failure to honour such attributes may cause a negative

* Jeanette Landgrebe
School of Communication and Culture
Department of English, Aarhus University
landgrebe@cc.au.dk

eWOM (electronic word-of-mouth) with possible detrimental effects for both influencer and brand (Brown & Hayes, 2008).

In the light of advances in technology and the ubiquitous risk involved with collaborating with independent influencers, a new phenomenon has emerged in influencer marketing, the concept of virtual influencers. Virtual influencers are broadly defined as “computer-generated influencers (CGI) or artificial intelligence influencers (AII) with a social media presence” (Moustakas et al., 2020, p. 1). Other ways of referring to these digital fictitious characters are “CGI influencers” (also referred to as Computer-Generated Imagery), “AI influencers”, “virtual endorsers”, and “digital influencers” (Ahmed, 2020; Kumpumäki, 2019; Vogue France, 2019; Natividad, 2020). In 2020 the number of virtual influencers remained scarce, whereas by 2024 the number has risen significantly (Belanche et al., 2024), and businesses are increasingly partnering up in marketing campaigns with virtual influencers in their endeavours to gain market shares and followers (Thomas & Fowler, 2020; Turner-Williams, 2020; Sideqick, n.d.; Linqia, 2023; Linqia, 2024).

Labelling CGIs as “influencers” entails that they, just like *human* SMIs, have the power to influence consumers and therefore highly applicable for marketing and branding purposes. However, with the new social media concept of CGI, the mere notion of *influencer* stands in opposition to the conventional perception of an SMI as a human being. And it begs the questions: How does a virtual influencer visually present herself on social media? Does she appear human? Does she appear authentic, trustworthy and credible? And what are the possible wider implications hereof?

While scholars have conducted research on traditional influencer marketing and practices for years (e.g. Kádenová & Holiencinová, 2018, Freberg, Graham, McGaughey & Freberg 2011; Bakker, 2018; Audrezet, de Kerviler, Guidry Moulard, 2020; Enke & Borchers, 2019; Lou & Yuan, 2019; Kerviler & Moulard, 2018; Breves et al., 2019), the rising phenomenon of the virtual influencer is witnessing increased attention, first during the COVID-19 pandemic as they “can go anywhere, anytime, without having to adhere to any social distancing and stay-at-home policies” (Ahmed, 2020), and more recently with the leap advances in Artificial Intelligence (Garibay et al., 2023). So far, studies in CGI have taken a quantitative or qualitative approach, focusing on either surveys, interviews, or textuality (Belanche et al., 2014, p. 3). To add a more nuanced perspective to existing research, this paper is specifically interested in exploring how a CGI influencer’s visual appearance on a social media platform is socially constructed through semiotic lenses.

Influencer marketing is widely used in the fashion, beauty, and lifestyle industry (Gomes et al., 2022; Hazari et al., 2022; Fastercapital, n.d.) to target a niche or mass audience, and a massive growth in the use of CGIs in these industries is expected in the coming years (Famesters, 2024; Markwideresearch, 2024). A majority of CGIs identify as females or with feminine-like traits, whilst also targeting primarily an audience interested in fashion, beauty, and lifestyle (Belanche et al., 2024; Vogue France, 2019). Hence, the Japanese virtual influencer Imma was deemed a qualified character for closer scrutiny.

To address the research question, an explorative, qualitative, single case analysis of Imma’s visual presence on Instagram is carried out. Concretely, the CGI character Imma was chosen because she identifies as a female, she represents youth and is involved in activities related to prototypical young (human) female behaviour such as showing interest in make-up and skincare, lifestyle, interior design, healthy food and healthy living. Further, she showcases altruistic traits, appears knowledgeable, whilst also appearing as a role model. In sum, she is arguably the ideal of a young modern (human) female and dominant influencer type in these industries.

The Instagram posts subjected to analysis stem from one distinct IKEA marketing campaign during the COVID-19 pandemic, a time when humans around the globe were forced to stay at home. In total, seven posts were published during the five-day campaign. This distinct campaign showcases

the human factor in the context of a home and lifestyle campaign and therefore considered pertinent to this paper's research focus.

Two supplementary semiotic analytical methods are drawn upon: a) the visual composition principles as presented and applied by Ramos-Serrano and Martínez-García (2016) and b) semiotic image analysis as conceptualized by Roland Barthes (1980) and applied with the analysis framework presented by Vigsø (Vigsø, 2019). Such method triangulation allows for a more nuanced in-depth analysis to identify how the fictitious character of Imma is visually constructed. As the paper explores the emerging phenomenon of virtual influencers, findings are expected to broaden our understanding of virtual influencer marketing as a professional field and possible future implications hereof for the benefit of researchers, market leaders, marketing professionals, and prospective marketers / content creators.

The paper is structured as follows: to begin, selected theoretical aspects of traditional influencer marketing and virtual influencer marketing are presented. Next the case, empirical data and analytical approaches are introduced. This is followed by a two-step analysis section, which combines a visual composition analysis with a semiotic image analysis. The subsequent discussion is framed around the complementary results of the two distinct analyses as well as key elements from the literature. Concludingly, the paper suggests preliminary possible implications for virtual influencer marketing, based on key elements from social media research and this study's findings.

2. Influencer marketing

2.1 Basics of traditional influencer marketing

Digital marketing in the 21st century is a well-established practice for any type of organisation wishing to create brand awareness or gain market shares (Nielsen & Mols, 2007; Shuen, 2008). In essence, digital marketing forms part of an organisation's omnichannel marketing strategies and products and services are promoted through online-based digital technologies (Chaffey & Ellis-Chadwick, 2019). One element of digital marketing is social media, of which one influential approach is the partnership of social media influencers and commercial brands – a practice that in recent years has been labelled influencer marketing (Kádeková & Holienčinová, 2018, Ozuem, 2022). The motive for using influencers in digital marketing is to produce more authentic, organic and effective content compared to traditional brand-generated content (De Veirman et al, 2017; Lou & Yuan, 2019; Warren, 2020). Today, SMIs are categorised as per follower magnitude; Nano-Influencers have less than 1000 followers, Micro-Influencers have 1000-100.000 followers, Macro-Influencers have between 100.000 and one million followers and lastly, Mega-Influencers, who are considered the highest-ranking category of SMIs with over 1 million followers (Ismail, 2018; Block & Lovegrove, 2021, p. 5). The effect of this practice is largely dependent on eWOM, where the influencer is seen as an 'opinion leader' who is able to influence attitudes and behaviours of their audience (Katz & Lazarsfeld, 1955, as cited in Ramos-Serrano & Martínez-García, 2016). In summary, influencer marketing is a well-established global practice, effective in gaining higher profits (De Veirman et al., 2017; Ki, Cuevas, Chong, & Lim, 2020; Moore et al., 2018).

Despite the advantages of influencer marketing, a partnership between SMIs and a brand carries certain risks for both parties: "Negative attention brought to the influencer can bring negative repercussions to the brand that partners with them" (Woods, 2016, p. 17), which could in return lead to future negative repercussions for both brand and influencer. To minimise such risk, some brands choose to incorporate an approval process for their SMI partner. And such a pre-emptive action may lead to the production of inauthentic content and subsequent loss of followers for the SMI (Woods, 2016, pp. 16-18). According to an industry report from Linqia (2023, p. 15) the #2 biggest challenge for marketers (next to determining the ROI) is to find the right influencer for the job.

Regardless of the risks that both brands and social media influencers face in a strategic partnership, the influencer marketing industry proved to be a global \$6.4 billion business in 2019,

rose to \$16.4 billion in 2022, and is expected to reach \$24 billion in 2024 (Valentina, 2024). Supporting this upsurge, industry reports further disclosed that 71% of marketers planned to increase their budget for influencer marketing in 2021, a trend which 75% reported to remain unchanged or even increasing in 2023 (Linqia, 2021, p. 3; Linqia, 2023, p. 7). Moreover, the fast-growing landscape of influencer marketing has now spread across social media platforms such as Instagram, Youtube, Twitter, Pinterest, Facebook, Snapchat, and TikTok (Linqia, 2021, p. 7; Linqia, 2023, p. 7). Despite TikTok's fast growing popularity among professional influencers in recent years, Instagram holds its leading position as the most effective and popular platform (Linqia, 2023, p. 8; Linqia, 2021; Casaló et al., 2020).

2.2. Characteristics and attributes of effective SMI communicators

Drawing on Kelman's social influence theory (1953, 1958, 1974), Perloff (2010) identifies three fundamental characteristics of an effective communicator: authority, credibility and social attractiveness. Drawing on such seminal works on effective communication and credibility, much influencer marketing research aims to determine factors that are likely to ensure the success of a social media influencer. For instance, Ki et al.'s (2020) study identifies two overarching factors that affect follower attachment to SMIs: 1) SMIs persona-driven attributes and 2) their content-driven attributes. The persona-driven attributes are related to the sub-categories inspiration, enjoyability, similarity, physical attractiveness, and authenticity, while the content-driven attributes are related to informativeness, visual aesthetics, and expertise (Ki et al., 2020, p. 3). According to Moore et al. (2018), influencer marketing practices are heavily reliant on trust theory, making authenticity, likeability and authority the three most influential attributes in delivering a message from SMIs to their following. In this regard, consumers base their trust on the genuine skills and knowledge that the influencer holds in their respective niche (Moore et al., 2018, p. 2). Lou and Yuan (2019) also emphasize trust and investigate which components affect followers' trust to the SMI in branded posts and found that attributes of trustworthiness, attractiveness and perceived similarity positively influence the effectiveness of the endorsement (Lou & Yang, 2019, p. 67). The importance of expertise for influencer marketing is highlighted by Wong (n.d.) and AlFarraj et al. (2021) identify a close fit between the credibility dimensions (i.e. attractiveness, trustworthiness and expertise) and customers' online engagement associated with purchase intentions. Lastly, Jin et al. (2019) study attributes of social presence and trustworthiness and found them to be more effective for 'Instagram celebrities' (i.e. influencers) than of traditional celebrities.

Drawing on the above studies and findings, the basic characteristics that constitute effective influencer marketing can be determined broadly through four distinct notions: 1) authenticity, 2) trustworthiness, 3) expertise and 4) social presence as they all contribute to the success of social media influencers for brand endorsements. Each of these notions can be interpreted and understood differently depending on perspectives and scholarly viewpoints. In what follows, this paper's understanding of these notions are presented.

De Veirman et al. (2017, p. 801) identify authenticity in influencers as someone being "accessible, believable, intimate and thus easy to relate to as he/she/they share the personal, usually publicly inaccessible aspects of their life with their followers and interact with them in flesh". Ohanian, 1990, as cited in Jin et al., (2019), identify trustworthiness as "how honest, reliable and dependable the source is perceived to be". Further, to appear trustworthy, an audience must perceive the SMI as easy to identify with due to the similarity between the two parts – that SMIs are "more like us" (Jin et al., 2019, p. 570). Moreover, as influencer marketing is powered by eWOM where SMIs typically acquire knowledge of the brand and provide reviews in order to recommend a product to their audience, the notion of expertise is crucial (Wong, n.d.). Lastly, social presence refers to the extent to which social media users perceive the mediated characters as psychologically present and intelligible (Rice, 1993, as cited in Jin et al., 2019), or attributed with a social identity (Park et al.,

2021, p. 6; Edwards et al., 2019). People feel closer connected with a source, if they feel that an actual human being is present at the other end (Jin et al., 2019, p. 570). Based on the above scholars' definitions and appurtenant keywords, a framework is subsequently devised that links characteristics and attributes, see table 1. Using this framework as a point of departure for identifying attributes of successful human influencers can assist us in identifying to which extent the fictitious CGI character Imma honours the same set of attributes.

Characteristics of successful (human) influencers	Perceived attributes
Authenticity	<ul style="list-style-type: none"> • Accessible, believable, intimate, easily relatable • Sharing aspects of personal life • Interact in the flesh
Trustworthiness	<ul style="list-style-type: none"> • Honest • Reliable • Dependable • Easy to identify with
Expertise	<ul style="list-style-type: none"> • eWOM (electronic word-of-mouth) • Brand knowledge • Physical competence to test • Recommendations
Social presence	<ul style="list-style-type: none"> • Psychologically present • Intelligible • Real human being

Table 1. Characteristics of successful human influencers and associated attributes. (Own overview derived and collected from the writings of De Veirman et al. 2017; Ohanian, 1990; Jin et al., 2019; Wong, n.d.; Rice, 1993; and Jin et al., 2019).

Having presented central elements of traditional influencer marketing, core characteristics and attributes associated with the *human* influencer, basic aspects of *virtual* influencer marketing and the phenomenon of the computer-generated imagery influencer (CGI-influencer) are dealt with in detail next.

2.3 Virtual influencer marketing

With the exponential and rapid growth of influencer marketing in recent years (Linqia, 2017; 2019; 2021, 2023), marketers have looked to develop the practice in innovative ways. Consequently, Block and Lovegrove (2021, p. 6) state that companies look to blend the two disciplines of Influencer Marketing and Artificial Intelligence. The result of this blend is Virtual Influencer Marketing. A trend that is receiving increasing attention in research (Ozuem & Willis, 2022; Lim and Lee, 2023; Belanche et al., 2024) and the global marketing industry (Platter, 2023; Linqia, 2023; Influencer Marketing Factory, n.d.)

With its emergence as a digital marketing discipline in its own right follows an uncertainty as to the actual creation date of virtual influencers within the digital marketing landscape. However, most recognise the AI transmedia company Brud as one of the early initiators as they in 2016 created the - to date - perhaps most famous CGI influencer, Lil Miquela, who is considered one of the 25 Most Influential People on the Internet (Sideqick, n.d.; Staff, 2018). Lil Miquela earned over \$11 million in 2023 (Platter, 2023), indicating the fruitful opportunities virtual influencer marketing may bring

(Donelson, 2021). Miquela is not a lone fictitious ‘cyber wolf’. According to the newest ranking in 2023 on Influencer Marketing Hub (Influencermarketinghub, n.d.), she comes second on the list of the top 12 virtual influencers in the world. She has a digital social network of other CGI friends, like Bermuda and Blawko, also fictional characters created by Brud (Raphael, 2018). Another example of a virtual influencer is Shudu Gram, the world’s first digital supermodel created in 2017 by fashion photographer Cameron-James Wilson. Shudu’s Instagram account was only online for nine months before she appeared in a beauty ad for the make-up brand Fenty, powered by singer Rihanna (Vogue France, 2019). However, mimicking human-looking features do not necessarily determine the success of the CGIs; as exemplified by the bunny Guggimon, created by Superplastic - the world’s leading creator of animated synthetic celebrities (influencermarketinghub, n.d.), or the German CGI model Noonouri whose appearance looks more like a doll. Her unique appearance has landed collaborations with Kim Kardashian’s KKW Beauty line as well as luxury brands such as Valentino, Versace and Dior (Vogue France, 2019).

All virtual influencers have online relationships with real humans, yet the distinction as to whether a CGI influencer is either fully or partly computer-generated (CG) is blurred as “the decision to keep it ambiguous lies with the creator” (Dodgson, 2019). For instance, as Lil Miquela is governed by her creator Brud, all her online actions and images are created by a team of “professionals—content marketers, data analysts, music managers, animators, publicists, and more” (Drenten & Brooks, 2020, p. 1320). The international success of Miquela and other more animated or cartoon-like CGI influencers invariably challenges the meaning and understanding of authenticity and social presence in influencer marketing practices (Drenten & Brooks, 2020).

With the recent rise and spread of virtual influencer marketing, CGI influencers are defined and referred to in diverse ways. As mentioned, Moustakas et al. (2020, p. 1) define them as “computer-generated influencers (CGI) or artificial intelligence influencers (AII) with a social media presence”, while Drenten and Brooks (2020, p. 1319) hint to them as being “crafted through computer-generated imagery (CGI)—a realistically animated simulacra of the “authentic microcelebrity archetype”. Similar views are found in Park et al.’s (2021) explorative study of users’ perceptions and interactions with virtual influencer content where they define virtual influencers as “the modern-day version of fictional brand characters or mannequins in shop windows that are suddenly more lifelike and real” (Powers, as cited in Park et al. 2021, p.1). Lastly, in a comparative study with celebrities, Thomas and Fowler (2020, p. 12) define a virtual influencer as a “digitally created artificial human who is associated with Internet fame and uses software and algorithms to perform tasks like humans”. One recent example of brands partnering up with a CGI influencer was the World Health Organisation collaboration with the 20-year-old ‘male’ CGI influencer Knox Frost to increase awareness during COVID-19 (Forrester, 2020). With the encouraging message to #stayhome, the potential to engage with CGI influencers increased tremendously (Turner-Williams, 2020). And in a post-corona era and with the recent upsurge of artificial intelligence, the number of CGIs in 2024 are estimated to be 150+ (Influencer MarketingHub, 2024).

3 Case, data & methods

3.1 Presenting Imma and the IKEA campaign

The virtual influencer or computer-generated imagery influencer Imma is also known as imma.gram from Japan. She is a fictional character and fashion icon with over 391 thousand followers on Instagram (Imma, 2024), indicating that influencers do not have to be actual human beings to ‘influence’. Imma is named after ima/今, which translates to now in Japanese, and she is representative of the modern technology boom. Despite her realistic appearance, only Imma’s head is CG as all images are rendered by transposing her 3D animated head onto a live-action human body and a real background (Taggart, 2019).

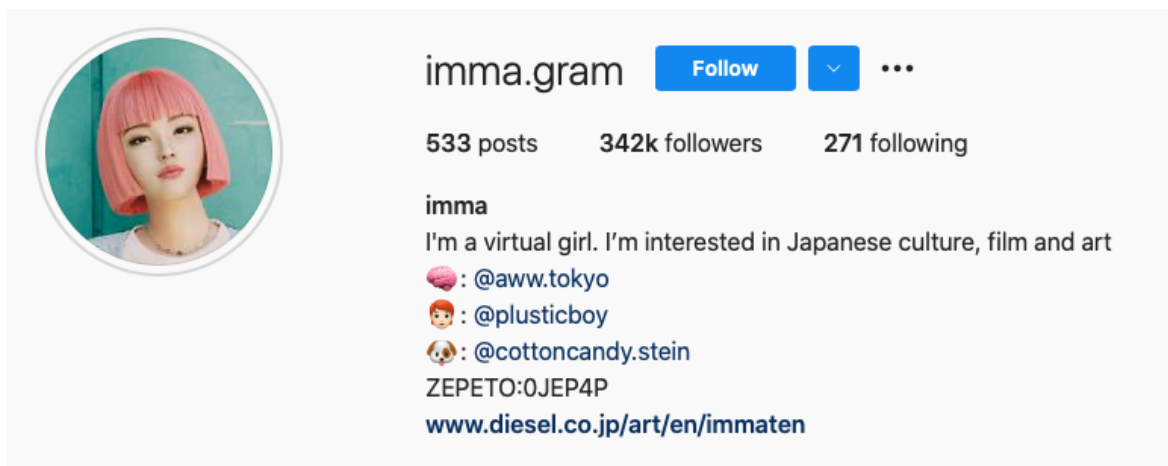



Figure 1. Imma's Instagram profile showcasing her 3D animated head and flawless pink hair. Imma identifies as a virtual girl, interested in Japanese culture, film and art.

Created in 2018 by the Tokyo-based CGI company ModelingCafe, she represents luxury brands like Burberry and Dior. Her Instagram account showcases photoshoots and magazine covers (Begum, 2020; Imma, 2020, Imma 2023). Further, her Instagram bio states that she is 'a virtual girl', acknowledging that she is indeed a virtual character, yet simultaneously also a 'girl'. Despite her virtual presence and huge number of followers with whom she interacts, some occasionally pose the question "Are you real?", illustrating how the distinction between what is perceived to be real or fictional is becoming increasingly narrow (Begum, 2020; Block and Lovegrove, 2021). In August 2020, Imma appeared in a marketing campaign called 'Happy Home with Imma' as a collaboration between IKEA Japan and Imma promoting IKEA's new Harajuku district shop in Japan. Imma "lived" inside a small IKEA-furnished apartment during the five-day campaign and posted seven Instagram posts for the campaign (Designboom, 2020; PetaPixel, 2020). These seven Instagram posts constitute the empirical data for the subsequent analysis.

3.2 Data collection and analysis methods

The seven Instagram posts were published during the campaign between 25 August 2020 and 30 August 2020 and collected from Imma's Instagram page @imma.gram. A full visual overview of the seven posts is presented below.

1



imma.gram • Følger
IKEA 原宿

imma.gram ついに、引っ越すことになったので、みんな遊びにきてね! 🍷🍷🍷とお家にいる期間が短くてたけど、あたしの新しいお家での暮らしを見せられてうれしい🥰

Moving in and you're all invited! 🍷
After we've had to spend so much time at home lately, I'm really excited to share my new homelife with you. 🥰

#あたしCGらしい
#IKEA原宿
#thinkimgji
#IKEAHarajuku


8 u.

cottoncandy.stein 🍷🍷🍷

10.967 Synes godt om
25. AUGUST

Tilføj en kommentar ... Slå op

2



imma.gram • Følger
IKEA 原宿

imma.gram Are you guys cooking for yourselves at home? I started cooking more when I was social distancing. They say you'll be happier during the day if you eat breakfast! 🍳 Chef imma 🍳🍳

みんなお家でご飯作ってる? あたしはステイホームをきっかけに、今まで作ったことなかったレシピにも挑戦するようになったよっ。朝ごはんを食べると幸福度が上がるんだって🍳朝ごはんは抜かないでねっ! シェフimmaより🍳🍳


#あたしCGらしい#得意料理はまだないよ#この家が好き#IKEA原宿
#thinkimgji #nospecialityyet
#happytobehome #IKEAharajuku

8 u.

13.517 Synes godt om
28. AUGUST

Tilføj en kommentar ... Slå op

3



imma.gram • Følger
IKEA 原宿

imma.gram Today's nails are celebrating the rainbow 🌈 LGBTQ+ issues aren't just for pride month, Japan still has a long way to go. Though here in Shibuya civil partnerships are accepted, that's rare in Japan, and same-sex marriage is not recognised. Love is love no matter what shape, size or color 🍷🍷🍷🍷🍷

今日はネイルをレインボーにしてみた🌈 LGBTQ+についてはプライド月間だけ考えればいいわけじゃなくて、日本にはまだ長い道のりがあると思う。日本で初めて同性パートナーシップ条例をつくった渋谷に居られるのは嬉しいけど、まだまだ広がってないよね。愛には決まったみよ 20年 十数年まわりのこと

16.258 Synes godt om
28. AUGUST

Tilføj en kommentar ... Slå op

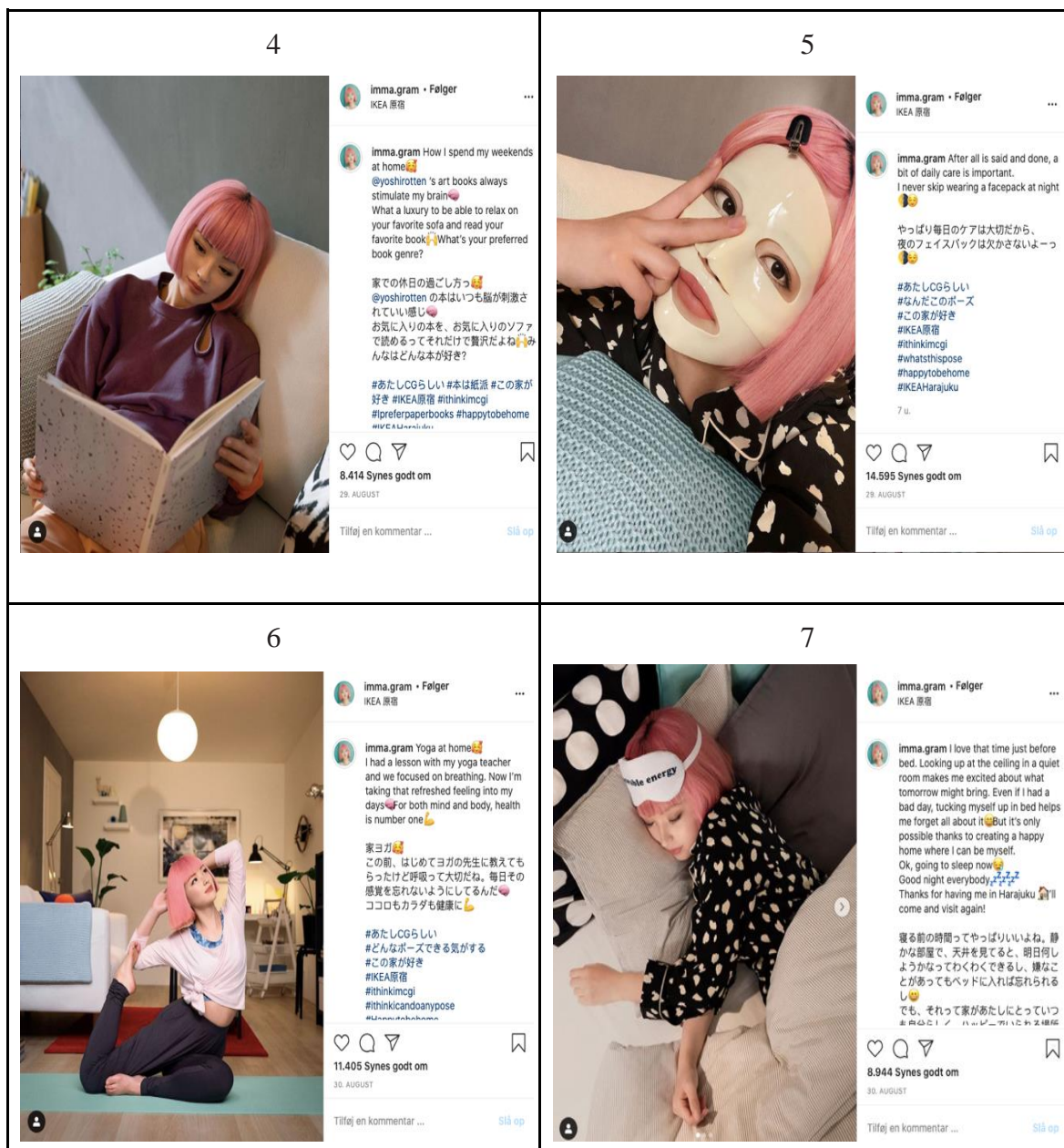


Table 2. The seven Instagram posts from Imma's IKEA Japan campaign, collected in the time span from 25 August 25 to 30 August, 2020.

The data is first analysed through a visual compositional approach to obtain an in-depth analysis of the relationship between the compositional elements that constitute each image in its entirety (Ramos-Serrano & Martínez-García, 2016, p. 95). For this purpose, the visual composition principles presented in the content analysis grid model by Ramos-Serrano & Martínez-García's (2016, p. 97) are applied. Following the composition analysis, the same images are analysed from the perspective of Roland Barthes's approach to image analysis, applying concretely the guidelines of Vigsø (2019). Combining these two distinct semiotic methods for analysing images, the aim is to identify how the fictitious CGI character of Imma is visually constructed on Instagram for a specified marketing campaign. Through such qualitative method triangulation, the findings from each analysis contribute to strengthening the overall reliability of this explorative case study.

3.2.1 The visual composition principles: the content analysis grid template

Ramos-Serrano and Martínez-García (2016) present the most common principles of visual composition found among the world's ten most influential bloggers. Their study highlights that we live in a visual world where one "can conceive that an image is not a reality in itself but is rather a representation created through visual language" (Ramos-Serrano & Martínez-García, 2016, p. 92). From a quantitative content analysis of 503 Instagram posts, the authors develop an analysis grid labelled "The Visual Composition Principles". Through semiotic interpretation, they identify the distinct elements to assess the meanings in the pictures. The variables utilized by Ramos-Serrano and Martínez-García (2016, pp. 95-97) are presented in the analysis grid template in figure 2 below. Further below, an explanation sheet accompanies the grid template overview.

[IMAGE CODE]	[BLOGGER NAME AND IMAGE]		
Elements of scale	Types of shots (A)		<i>Close shot (CS)</i>
			<i>Medium shot (MS)</i>
			<i>Wide shot (WS)</i>
			<i>Cut-in shot (CIS)</i>
	Camera Angle (B)		<i>High Angle (HA)</i>
			<i>Low Angle (LA)</i>
			<i>Eye-level Angle (ELA)</i>
Constitutive elements	Colours		<i>Warm</i>
			<i>Cool</i>
			<i>White</i>
			<i>Black</i>
Visual composition	Rule of thirds (A)		<i>Human</i> <u>Centre</u>
			<i>Strong point</i>
			<i>Product</i> <u>Centre</u>
			<i>Strong point</i>
	Highlighted (B)		<i>Human</i>
			<i>Product</i>
Theme	Land-Scape (A)	Still-life (B)	<i>Flowers</i>
			<i>Object</i>
			<i>Food</i>
		Model (C)	<i>Alone</i>
<i>Accompanied</i>			
<i>Selfie</i>			
Brand presence	Visible	Not visible	

Figure 2. The Content Analysis Grid template. The grid is comprised of five overall image codes; Elements of scale, Constitutive elements, Visual composition, Theme, and Brand presence (Source: Ramos-Serrano and García, 2016, p. 97). Template layout slightly modulated from the original to accentuate the division between the constitutive elements.

Explanation sheet to the Content Analysis Grid template

ELEMENTS OF SCALE

The Elements of scale category is divided into Types of Shots (A) and Camera Angle (B).

The element Types of Shots (A) is divided into close, medium, wide and cut-in shot:

- *Close Shot* (CS) shows the person from the neck up (at an intimate distance)
- *Medium Shot* (MS) shows the person from the knee and above (at a social distance)
- *Wide Shot* (WS) shows the entire body (at a public distance)
- *Cut-In-Shot* (CIS) shows an object or part of the human body and no face.

The element Camera Angle shows the height of the point of view in relation to the subject. It has three values:

- *High Angle* (HA), subject is photographed from above
- *Low Angle* (LA), subject is photographed from below
- *Eye Level Angle* (ELA), subject is photographed at the same level as the observer.

CONSTITUTIVE ELEMENTS

The Constitutive elements category consists of a colour coding with four different variables, depending on the predominant colours in the image:

- *Cool* for green, blue or purple
- *Warm* for colours of tones of red, yellow or orange
- *White*
- *Black*

VISUAL COMPOSITION

The Visual composition category “refers to the composition rules that organise the relationships between the different elements in the image and, as a consequence, regulates the construction of the visual space to achieve a given aesthetic, informative or narrative effect” (Ramos-Serrano & Martínez-García, 2016, p. 96).

The above elements are divided into the variables The Rule of Thirds (A) and Highlighted(B):

- The Rule of Thirds (A) divides an image in three equal parts, vertically and horizontally. With this division, it is possible to locate an image’s so-called four touching points. Visual elements around the four touching points are seen as the most important elements, i.e. the Strong Points. However, if an element is centred it is perceived to be *the* most important element of the image. In addition to identifying any strong points, the rule of thirds also distinguishes between a *Human* and *Product* element, and if they each are placed in the Strong Points or at the Centre.
- Highlighted (B) identifies whether focus is mostly on the *Human* or *Product*.

THEME

The Theme category has the variables Landscape (A), Still-life (B) and Model (C):

- Landscape (A) refers to “an image depicting broad surroundings in which the human figure is not especially distinguishable” (Ramos-Serrano & Martínez-García, 2016, p. 96).
- Still-life (B) is divided into *Object*, *Food* and *Flowers*, depending on what predominates and *Model* to indicate the blogger is the protagonist of the photo.
- The Model (C) can either be *Alone*, *Accompanied* or appear as a *Selfie*. The latter is identified in instances where it is obvious that the blogger takes her own picture and explicitly shows her face.

BRAND PRESENCE

The Brand presence category identifies whether the endorsed Brand is Visible with a distinguishable logo, or Not Visible.

3.2.2 Semiotic Image Analysis

The semiotic image analysis model derives from Roland Barthes’ theory of semiotics (Barthes, 1980). Barthes operates with a three-step image analysis: 1) denotative analysis; 2) connotative analysis and 3) the communicative situation. For our purpose the conceptual analysis framework proposed by Vigsø (2019: 370-371) is applied. This framework incorporates both the denotative and connotative analysis through six overall analytical steps, with appurtenant sub questions. See figure 3 below.

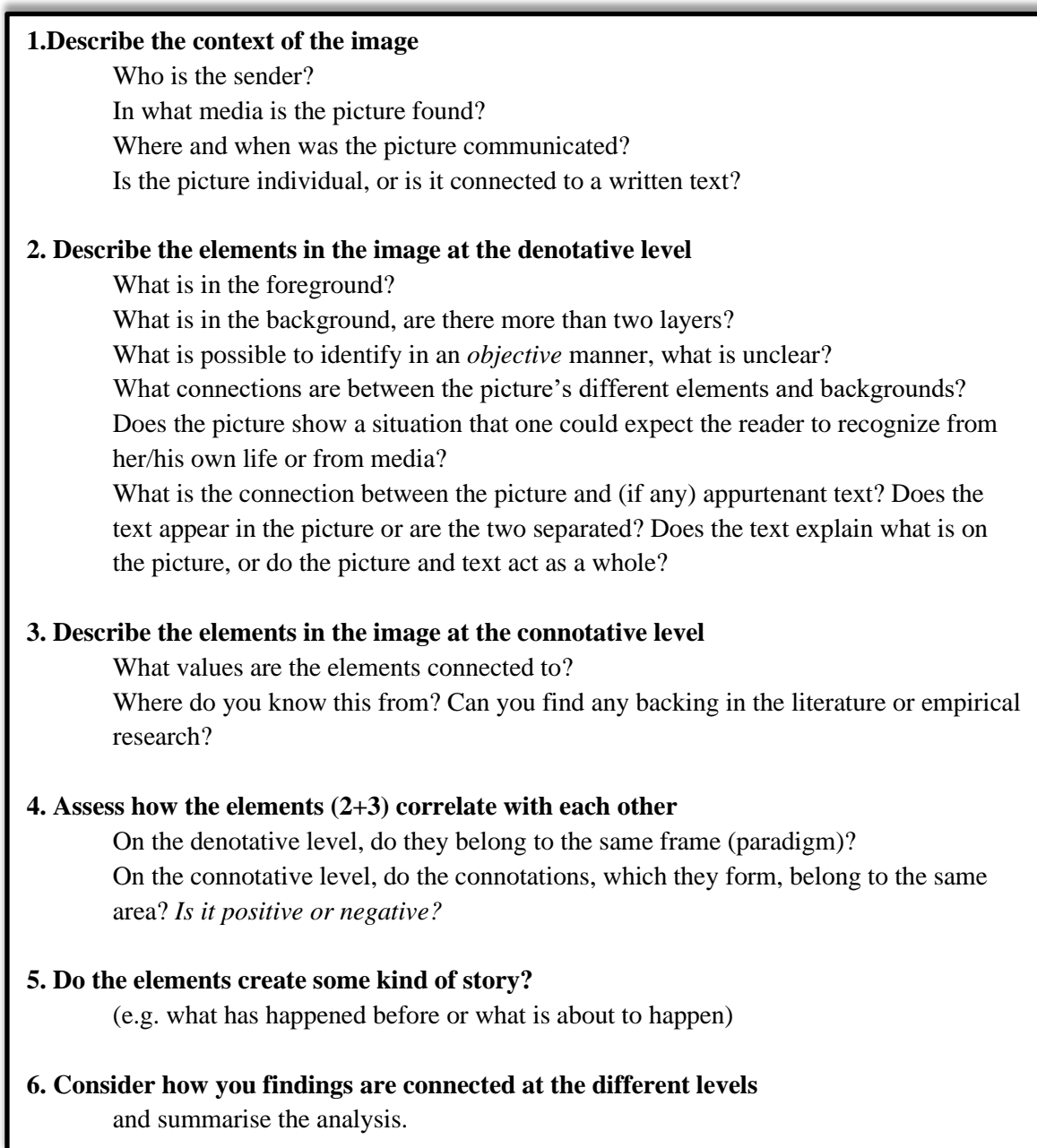


Figure 3. A step-by-step framework for a semiotic image analysis, presented by Vigsø (2019: 370-371). (Translated from Danish to English).

Having presented the empirical data and the two frameworks for analysis, the next section presents the results from the analyses. First, the results from the visual composition analysis of the images are presented and summarised. Next, the results from the semiotic image analysis of the same seven Instagram posts are presented and summarised.

4 Analysis

4.1 Part one: An analysis of the composition principles in Imma's instagram posts

The Content Analysis Grid was applied to identify the visual composition principles underlying IMMA's seven Instagram posts for the IKEA Japan campaign. The result is presented in table 3 below.

No	Types of shots	Camera Angle	Colour	Rule of thirds: Human	Rule of thirds: Product	High-lighted	Model I	Model II	'Brand Presence
1	WS	LA	Warm	Centre	Strong Point	Human	Model	Accompanied	Visible
2	MS	ELA	White	Centre		Human	Model	Alone	Not visible
3	MS	ELA	Warm	Centre		Human	Model	Alone	Not visible
4	MS	HA	Warm	Strong points	Strong Point	Human	Model	Alone	Not visible
5	CS	ELA	Warm	Strong points		Human	Model	Selfie	Not visible
6	WS	ELA	Warm	Centre	Strong Point	Human	Model	Alone	Not visible
7	MS	HA	Warm	Centre	Strong Point	Human	Model	Alone	Not visible

Table 3. Analysis result of the visual composition principles used in the seven Instagram posts.

Types of shots and camera angles

Looking at the overview in table 3, a number of findings are identified. First and foremost, three types of shots are identified, out of which MS is the predominant camera shot type (4 out of 7). No cut-in shot was identified. The function of the MS is that the spectator sees the image from a social distance, in these examples the spectator views IMMA showcasing which object she interacts with (be it a sofa, kitchen utensils, or bed) as a visual depiction of her endorsement of IKEA's products. The second type of camera shot identified is WS (2 out of 7). At WS the spectator perceives the protagonist at a public distance and gets a full view of the location and Imma's clothing. The last camera shot used is CS, which is applied once (image 5). This shot is essential as it is taken at an intimate distance, i.e. at eye-level angle, allowing the spectator to be "up close and personal, noticing all the subtle details, colours, and textures" (Suler, n.d.). Suler further argues that an intimate distance is likely to portray the character - in our case Imma - as more personal and trustworthy, compared to an image taken at a public distance. Further, the CS is identified as a selfie shot, thereby emphasising a "human touch".

The three types of **Camera Angles** identified in the images are ELA, HA and LA. The predominant camera angle used is ELA (4 out of 7). The ELA angle is considered to be neutral, as Imma is not perceived as carrying a higher status than the spectator which would be the case if the shot had been from a high angle (HA). Because of the eye-level angle (ELA), the spectator is likely to identify with Imma and place themselves in her 'shoes', which again mirrors the probability of a closer connection and evoking a sense of empathy (Lim and Lee, 2023). In addition, the ELA also depicts how Imma imitates a real-life scenario, i.e. the way the spectator would see her in real life (Suler, n.d.). The second camera angle used is HA (2 out of 7), which positions the spectator in a powerful position overlooking Imma from above, and thereby portraying Imma as someone vulnerable (Suler, n.d.). In these two examples (image 4 and 7), Imma is presented sleeping/wearing her pyjamas in bed and sitting on her couch reading a book. The last angle, LA is used once in image

1 which introduces the campaign. It is likely to convey Imma's role in this campaign, i.e. that she is powerful, in charge and in focus (Suler, n.d.).

The predominant colours used in the images are primarily Warm and White colours. The most frequently used colours in the images are warm colours (6 out of 7), specifically vibrant colours of red, pink, orange and yellow. These colours symbolise each of their own meanings, but also work together in harmony. Most notably is the colour pink, which is depicted through her vibrant pink hair, shirt or the pink police tape. As the colour pink can be interpreted as "sweet, nice, romantic, playful, and delicate" (Bear, 2020), we can ascribe these elements to the way Imma is portrayed. In addition, most images are further covered with a yellow or orange hue, due to the lighting in her apartment, which correlates with the pink colour, as yellow resembles "happy, joyful, cheerful, and for remembrance" (Bear, 2020). Given the symbolic meaning attached to these colours, the images are likely to invoke feelings of happiness, positivity, sweetness and playfulness. They might even reflect Imma's identity or brand identity, given that she is a well-known CGI influencer collaborating with other brands aside from IKEA. Moreover, in one of her images she is cooking in the kitchen. In this depiction the dominant colour is White, which symbolises "purity, innocence and softness" (Bear, 2020). Together with the warm colours used in the other images, it enhances the overall positive and pure way she is portrayed in all seven Instagram posts.

The highlighted elements and the rule of thirds

The **Highlighted** element shown in all seven images is Human. Imma is portrayed as a real person, as a human being (showing both her CGI face and human body). Previously, it was mentioned that Imma's role is powerful and that she is the focus of the campaign. In continuance, as Imma is the only highlighted element in the images, it conveys the role of IMMA as being in charge of IKEA's campaign. she is the protagonist, and it is the portrayal as a 'person', her personality traits and her personal life that attracts the spectator.

Rule of Thirds is divided into *Human* and *Product*. Here, the human element was both found in the centre (5 out of 7) and strong points (2 out of 7) of the images, whereas the products were less distinguishable, but when clearly identified, they were placed in the strong points (4 out of 7). The results of Rule of Thirds correlate with the Highlighted variable as the human figure is also the predominant element according to the Rule of Thirds. More than half of the images place IKEA's products in the strong points of the image, which also correlates with the highlighted variable, as Imma is an influencer and hence likely to be placed in the centre.

For the variable **Theme**, the only element is *Model*. The element *Model* is, however, further seen in three different scenarios; *Alone*, *Accompanied* and taking a *Selfie*. The fact that *Model* appears as the only element reflects the nature of the campaign which is driven by Imma's influencer character and the context of a fictional world that she brings to the campaign. This further highlights that images with the elements of being 'Accompanied' and taking a 'Selfie' are only present once, respectively. As a result, 5 out of 7 images show her alone, emphasising that Imma is displayed as the lead role in the campaign.

'Brand Presence'. Except for post no 1 that launches the campaign, the endorsed brand IKEA is not visible in the other six images. This correlates with the findings of Ramos-Serrano & Martínez-García (2016, p. 105), who in their study of visual composition principles among 150 blogger posts found that it was uncommon for brands to show their logo explicitly in the influencer's Instagram posts. Rather, the influencer uses his/her status as an influencer and opinion leader to spark an interest in a given product or brand.

Summarising the results of the visual composition principles of IMMA's seven Instagram posts in IKEA Japan's marketing campaign, it can be concluded that Imma is presented as a protagonist; she is portrayed as a human in a real-life environment, one engaged in human actions and activities

typical of what ordinary human beings would be expected to go through and experience in their ordinary lives: cooking, reading, sleeping, moving, doing physical exercise and taking care of one's personal hygiene or wellbeing. Further, she engages in an activity that most digital users are familiar with, namely posting a selfie on social media. Imma is presented alone in most images, except in the first post where she is accompanied by a dog (many humans have pets). Further, she is predominantly placed in the centre of the image, and when not, it is because of the situational circumstances surrounding the image which emphasise the activity, e.g. wearing a facemask or reading. Images where the products are in the strong points are used to emphasise that this is an IKEA campaign. The predominant camera shot is the medium shot, accentuating with what or who Imma interacts, making clear this is an endorsement. Interestingly, she is also shown at close and intimate distance, inviting the spectator to see a more vulnerable and authentic side of herself. The images are mostly shot with an eye-level camera angle placing Imma in a neutral and relatable position. Other angles are used to either place Imma in a vulnerable position with a high angle e.g. when she is sleeping or reading a book, or to place her in a powerful position with a low angle e.g. in the introductory image of the campaign displaying Imma surrounded by IKEA boxes. Moreover, warm colours saturate all of the images, inducing feelings of positivity, warmth and excitement to minimise the distance between the readers and Imma. With these findings, along with an overall lack of brand presence, Imma remains the most significant constitutive element in the images, and she appears human. Comparing with the quantitative study of Ramos-Serrano and Martinez-Garcia, IMMA is portrayed by and large akin to human influencers in the fashion and life-style industry, with subtle yet striking variations in compositional strategies that enhance the visual construction of a 'real human being'.

4.2 Part 2: A semiotic image analysis of Imma's Instagram posts

The semiotic image analysis was carried out using the semiotic image analysis framework, presented by Vigsø (2019: 370-371) to identify denotations, connotations and overall intended communicative message. Each image was analysed in a step-by-step process and similar analysis elements were subsequently categorised together. Following the completion of the semiotic image analysis of the seven images, five overall themes were identified: 1) Image, 2) Idealised Framing, 3) Fiction, 4) Self-Identification, and 5) The Humanity in Imma. Table 4 presents the five identified themes incl. appurtenant observational notes derived from the analysis of the seven images. In the following, each theme is briefly presented and argued for. When relevant, aspects of the visual composition analysis are also drawn upon to further substantiate analytical points.

IMAGE	IDEALISED FRAMING	FICTION	SELF-IDENTIFICATION	THE HUMANITY IN IMMA
Guiding keywords for theme established: role model lively positive harmony picture-perfect	Guiding keywords for theme established: female ideals role model opinion leader independence picture-perfect	Guiding keywords for theme established: role model extraordinary flawlessness paradoxical performance storytelling AI as human	Guiding keywords for theme established: realistic situations relatable authentic familiarity everyday 'Stay home'	Guiding keywords for theme established: sense of realness authenticity human appearance activist informed
Observational notes derived from the analysis of all images				
Image 1: self-empowerment responsible, care-taker, positive, 'fresh/new' IKEA, positive, 'fresh/new'	Image 1: strong independent young woman, dog owner	Image 1: the story of moving, performance, an AI can be a dog owner	Images 2, 5, 6, 7: healthy sleeping habits, selfcare, healthy eating habits	Images 2+3+7: LGBTQ+, gay pride, global warming, activism, seeking change, opinion leader, tilted head as a sign of sympathy
Image 2: smiling, happiness, happy with cooking, fresh fruits, clean room, clean colours	Image 2: flawless hair and make-up, making a perfect healthy meal, wearing an apron, traditional ideal of women	Image 5: wearing makeup while wearing a facemask, selfie	Image 5: selfi-shot at CS - intimate distance: signals 'realness', 'authenticity', 'realistic'	Image 4: reading a book, intellectual, knowledgeable
Image 3: head tilting, colourful clothing, vibrant flawless pink hair, colourful nails,	Image 3: political active, activist/minority rights, opinion leader	Images 5, 6, 7: unusualness, extraordinariness, extravagance	Images 1-7: daily routines of a young girl, sense of familiarity, mirroring real life situations, e.g. moving, cooking, reading, sleeping, passion, exercise, hygiene	Image 5: self-care/pampering at night /appearance /beauty
Image 4: intellectual, knowledgeable	Image 4: reflective and well-read, intellectual, knowledgeable	Image 7: unrealistic, wearing makeup while sleeping	Images 2-7: COVID-19, she is 'isolating' herself in her apartment, showing daily routines of a young girl	Image 5: selfie-shot at CS, intimate distance, personal, intimate, relational, here-and-now, real

Image 5: beauty conscious, appearance, perfect skin	Image 5: female ideals, appearance, skin care, beauty	Images 1-7: the story of a fictitious character during Covid-19 / stay home	Images 1-7: relatable, the images all reflect everyday situations that an audience can relate to	Image 6: practicing yoga flexible, strong body, in control, mentally sound, role model
Image 6: fresh, smiley and fun, yoga, harmony, flawless hair	Image 6: modern, yoga, spiritual healthy, fit	Images 1-7: CGI influencer not human, fake, artificial, creates the illusion that an AI can engage in human-like activities and use real-life products, etc.	Images 1-7: depicts the younger generation – in particular young females	Image 7: sleeping, night- time
Images 1-7: vibrant flawless pink hair, perfect skin, warm colours and vibrant colours like red, pink, orange, yellow	Image 7: healthy lifestyle, activism, routine, beauty sleep, calm, cosy	Images 1-7: flawless hair, flawless skin, facial and bodily appearance seem artificial, artistic- like, fictitious	Images 1-7: represents moving away from home, being independent, adult	Images 1-7: role model depiction of a human 'influencer' and 'opinion leader', real apartment, real dog, real IKEA furniture, stay-at-home / COVID-19

Table 4. The five overall themes identified : 1) Image, 2) Idealised framing, 3) Fiction, 4) Self-identification, 5) The humanity in Imma. The overview comprises an overview of guiding keywords leading to the themes identified. In addition, it includes brief analytical notes derived across the seven Instagram posts to show transparency in the analysis process.

4.2.1 Image

The first theme identified is Image, which deals with how Imma's image is visually presented through bodily posture, activity, colours, skin, hair and facial expression. As identified in the visual composition analysis, the predominant colours used for the images at the denotative level are red, pink, orange and yellow. At the connotative level, these colours are ascribed as warm, vibrant colours that strengthen Imma's image as a CGI influencer; an image that is fun, playful and positive. This playfulness and positivity is further reflected partly in Imma's name that means 'new' in Japanese, indicating that her image consists of being innovative and out of the ordinary, but also through the colour of her hair, which is likely to attract attention in the eyes of the beholder. Further, the facial expressions and bodily postures radiate harmony and contentment. Skincare activities, cooking, yoga exercise, reading and activism all add to the construal of an image of harmony / picture-perfect.

4.2.2 Idealised Framing

The second theme identified is Idealised Framing where the images of Imma appear stylized and framed in an 'idealised' manner, a phenomenon known from traditional influencer marketing

(Ramos-Serrano & Martínez-García, 2016). As mentioned in the composition analysis, the images place Imma as the centre and highlighted element, connoting that the images are framed to highlight Imma as a person. Image 2 (see table 2) is used to exemplify how Idealised Framing is identified. In this image, Imma is presented in her kitchen, slicing a banana. She has flawless pink hair, wears an oversized purple jumper with an apron on top. Three glass bowls are placed on the kitchen counter. One bowl is filled with strawberries, the second one with blueberries and the last one seems to have some granola in it. These denotative elements connote an idealised reality; the scenario looks almost picture-perfect; the kitchen looks very minimalistic and clean, and the fruits are neatly organised in each of their own glass bowl. In social media jargon, we would describe the image as ‘Insta worthy’, or ‘Instagrammable’, which are terms related to the early 21st century to evaluate the visual appeal of an image and its suitability for social media use ("Instagrammable," n.d.). The construction of her being independent, political active, well-read, modern, healthy and composed across all images further evidences an ideal framing.

4.2.3. Fiction

The third theme that the images connote is Fiction which depicts how the images are rather out of the ordinary, going beyond a normally perceived reality. The Fiction theme is observable across all images, but two images stand out in particular: the first one is the selfie (image no 5) of Imma presumably lying down wearing a sheet mask, her front bangs clipped away to the side. Her right hand is formed in a peace sign close to her face and she is wearing makeup. The other example is image no 7, which displays Imma in black-white nightwear lying on her right side. She appears to be sleeping judging by her closed eyes and the white sleeping mask on her forehead. Further, she wears makeup. These two images might seem realistic, but during sleep and for personal hygienic self-care, it is unusual to be wearing makeup. In fact, one of the first and crucial steps to a night cleansing routine is to remove one’s makeup, dirt and bacteria that the face has collected throughout the day (Rouleau, 2018). Finally, Imma’s signature vibrant pink bob hair cut also contributes to the extraordinariness of the images. As such, the presence of makeup and the vibrant pink hair both function as cues that Imma is not a real ordinary human going about her daily routines in routine ways. Rather, she is a fictitious character in a fictional setting created for a strategic storytelling purpose (Shen, 2024).

4.2.4 Self-Identification

The fourth theme is Self-Identification, which describes how the spectator may feel connected and can relate to Imma. The selfie image (image no 5) at Close Shot, identified with an intimate distance is useful as an example. The distance might connote a sense of realness and authenticity; just like any other human exercising his / her right to publish selfie shots on social media (Tiidenberg, 2018), Imma does the same. She is not afraid of getting close to the spectator, and she has nothing to hide. The intimate distance may connote a close relationship or even friendship to the spectator, as if he / she is right beside Imma, making the experience even more intimate and personal. In addition, a selfie is proven to generate more attention compared to other social media posts (Tiidenberg, 2018). Summarily, all images from this category display Imma engaging in some kind of activity in her home, reading a book, practising yoga, cooking lunch, self-care, reading and sleeping. The spectators are likely to familiarise themselves with these activities. Therefore, these home-activities may invoke feelings of familiarity among the viewers, thereby strengthening their identification with Imma. One of the known effects of successful influencer marketing is that the spectators see the influencers as a role model (e.g. Ozuem, 2022), and in this case they may feel motivated to practice yoga themselves, put on a face mask, read a book, make a plea for minorities, or make healthy meals.

4.2.5 The Humanity in Imma

The last theme is labelled The Humanity in Imma. The point of departure of this theme is to identify concretely how the images frame Imma as a human and as someone who engages in daily activities, we are all familiar with, e.g. eating, exercising, sleeping etc. The connotations that a viewer could get by seeing these images are that Imma is “just like me”. In that sense it has similarities to the theme Self-identification, yet it deserves a category in its own right. If we perceive of Imma as human, then - like any other humans – she will also need food, sleep, a healthy mind and body and so forth. Another observation which highlights the human element is that Imma is portrayed as an activist, who cares about a number of societal crises and issues, such as global warming, LGBTQ+ and the COVID-19 pandemic. An important denotative element is e.g. presented in image 2 where Imma is cooking in her kitchen. On her apron is a depiction of the earth with the textual label ‘SAVE OUR HOME’, which may connote activism; that she wants to increase awareness of global warming and is seeking change. The fact that she brings such issues forth indicates that she utilises her role as an ‘influencer’ and ‘opinion leader’. Another example of humanity is visible in image 3, showing Imma in her signature short pink bob with her head slightly tilted. Her hands are strategically placed next to each other, showcasing her painted nail polish. Rainbows of all colours are painted onto her nails, matching her colourful cardigan in red, blue, green, yellow and orange stripes. Hence, this image can be understood as a message on the issue of LGBTQ+ rights, which she also explains in the caption. The range of warm colours add to a positive feeling of the image and Imma’s tilted head with a slight smile can be interpreted as a “sign of sympathy” for LGBTQ+ rights (IBS, 2020). These elements combined invite for an awareness of a pressing global societal issue, depicts that she behaves as humans do with altruistic and other human ‘*conduite*’, ultimately strengthening the construction of the humanity portrayal (Shen, 2024).

5. Discussion

The visual composition analysis showed how the visual construction of the CGI influencer Imma in the IKEA Japan campaign was predominantly focused on Imma as a person, whereas the products or brand were either in the background or absent. This bears a striking resemblance to the findings by Ramos-Serrano and Martínez-García (2016), who carried out a quantitative analysis of the world’s most popular human fashion bloggers. According to Ramos-Serrano & Martínez-García, this focus is logical because “... for Instagram followers the important thing is not what the blogger is wearing but who she is - her personality and identity are created ad hoc by what she is wearing.” (Ramos-Serrano & Martínez-García, 2016, p. 101). In other words, Imma’s power to influence, persuade and serve as an opinion leader is vital for this distinct campaign; what she endorses, does, wears or the issues she brings forth e.g. global warming or LGBTQ+ are likely to catch the followers’ interests. This finding adds salience to the argument that an influencer’s ability to influence does not differ whether we are following a CGI influencer or a traditional human influencer. This is further evidenced in a recent study by Park et al. (2021), who found that users perceive and treat CGI influencers as authentic social actors. Similar studies on human-robot interaction seem to validate that humans (consciously) tend to treat computers or robots as like-minded social actors (Nass et al., 1995; Lee et al., 2003; Lee et al., 2005; Belanche et al, 2024; Shen, 2024).

Although the main findings from this qualitative study seem to resemble Ramos-Serrano & Martínez-García’s (2016) quantitative study, there are also findings that differ. In their study, the predominant camera shot was wide shot (WS). This contrasts with this study which identified a relative majority of medium shots (MS). Arguably the two studies are not directly comparable, yet from this explorative study’s findings, we get a first tentative indication that there could potentially be a difference in how the spectator is placed in relation to the influencer: at a public distance or a social distance. This difference may indicate that the spectator is invited to have a more distant and formal relationship to human influencers, as opposed to a virtual influencer. In the case of Imma,

the medium shot invites for a relationship which is much more intimate and social so as to simulate or create the feeling of a closer connection, as she literally draws the spectator into the fictional world she inhabits. It could be argued that she lures the spectator into believing she is in fact human. Regardless that this observation is found but in one instance, it is nonetheless a significant finding for a qualitative study. As the qualitative scholar Emanuel Schegloff once stated in his defence for acknowledging qualitative research on its own terms (1993, p. 101) “one is also a number”. Finding one example of a phenomenon means it exists in the social world, and it is therefore highly plausible that the same phenomenon can be found elsewhere.

The semiotic image analysis identified five themes: 1) Image, 2) Idealised Framing, 3) Fiction, 4) Self-Identification, and 5) The Humanity in Imma. These themes depict ways that Imma is visually portrayed in the IKEA campaign. On the one hand, the images attempt to replicate and represent selections of perceived reality in order to affect the spectator on a personal and emotional level. Themes 2) [Self-identification], 4) [Humanity] and 5) [Image] are examples of this. This correlates with Ramos-Serrano and Martínez-García (2016, p. 92) who claim that bloggers’ images are a “selection of reality” and acknowledge that an image is not a reality itself, but rather a construction of it. Accordingly, the images also replicate reality in the way Imma brings up issues like COVID-19, global warming and LGBTQ+ in an attempt to frame herself in an idealised context and gain the attention, sympathy and support of her followers. On the other hand, they also connote a fictional world, which deviates from Ramos-Serrano & Martínez-García’s (2016) findings, entailing a difference between CGI influencers and traditional influencers. Themes 3) [Fiction] and 1) [Idealised Framing] contain visual cues like wearing makeup during self-care and while sleeping and having vibrant flawless pink hair, which signal to the spectator that the images are, in fact, fictional and that they derive from Imma’s fictional world which the spectators are drawn into. Summarily, the images seem to portray Imma in two distinct ways: 1) by visually presenting a real-life living scenario, they portray her as a human influencer, one that the spectators can relate and listen to and 2) through artificial cues like vibrant colours, pink hair, clean, sterilized kitchen and flawless makeup, all connoting extraordinariness, they portray her as a fictional character, living in a fictional world.

Although this study has found visual similarities between the CGI influencer Imma and traditional influencers, the findings also tentatively indicate implications for the characteristics normally associated with successful traditional influencer marketing, i.e. 1) authenticity, 2) trustworthiness, 3) expertise and 4) social presence.

Firstly, as described earlier, authenticity relates to how influencers are believable, intimate, share personal aspects of their life and interact with followers in the flesh (De Veirman et al., 2017, p. 801). This study poses an implication for this understanding, as CGI characters usually do not exist in the physical world; they are created on computers by high tech companies and their actions are performed ‘in a controlled setting by real people who are managing that account’ (Sideqick, n.d.). Although the followers are unable to interact with Imma in real life and ‘in the flesh’, she still appears authentic, intensifying the spectator’s experiences of the fictional world in which Imma lives. And the followers can interact digitally with her too.

Secondly, this study shows how Imma can appear trustworthy without actually being a human being. Rather, she is ‘like us’, albeit in a different way. It is especially through her actions and opinions that she invites for a genuine interest and feeling of relatability among the audience; her hobbies such as yoga, reading books, selfcare, cooking, and her interests to save the environment and advocate for LGBTQ+ rights are all attributes that ultimately strengthen her trustworthiness. The notion of trustworthiness was earlier in this paper associated with similarity between the human influencer and the followers and how SMIs are “more like us”. The virtual trust aspect, however, seems to have a bearing on “easy to identify with”, regardless of other human qualities (honest, reliable and dependable in real life).

Thirdly, this study implicates the understanding of expertise where an SMI typically acquires knowledge of the brand and provides reviews of products, often based on a physical test or embodied experience in the real world. Following this view, Imma is – literally speaking - not able to acquire any knowledge of the brand or try out the product. This imagined process is arguably done by her creators to create a simulation of a real experience (Moustakas et al., 2020). Concludingly, one may (re)consider the importance of an SMI's expertise in influencer marketing, as Imma's case proves how an influencer is able to endorse certain products, without a real ability to actually test or feel the product (Belanche et al., 2024). In continuance, this lends an argument that a CGI influencer like Imma, living in a fictional online world, is still able to reach and influence her human followers, regardless of the fact that she is by no means able to engage in the physical world with physical products nor knowledgeable of using them. Summarily, followers (knowingly?) treat a CGI influencer as they would a human influencer, attributing him/her human characteristics and qualities (Park et al., 2021; Nass et al. 1995; Lee et al. 2003; Lee et al. 2005, Belanche et al., 2024).

Lastly, the final element that this study expresses a first tentative implication for is the notion of social presence, a necessity for a human SMI. As mentioned in the introduction, research posits that an audience feels closer connected with an influencer, if it is felt that an actual human being is present at the other end (Jin et al., 2019, p. 570). However, findings from this study tentatively challenge the prevalent understanding of social presence; camera angles like ELA make the readers reflect themselves in Imma, strengthening self-identification, while LA puts the readers in the position of her guardian. In the same vein, MS and CS angles contribute to the feeling of being close to the influencer. Additionally, the warm colours arguably induce feelings of happiness and positivity to the followers, inviting them to interact and engage. These findings combined suggest that although no 'real human' is present at the other end with a *real* intelligibility and psychological presence, Imma is still perceived of and treated as socially present and is more than capable of attracting, reaching, engaging and interacting with a huge number of followers.

Although the above findings are labelled 'implications', this study does not associate them with negative attributes. On the contrary, the findings induce a new preliminary understanding of virtual influencer marketing and how marketers could potentially strategize on virtual influencer presence on social media. And the findings point in the same direction: the visual representation format or performance of the CGI influencer matters in terms of inducing authenticity, trustworthiness, expertise and social presence. In a Goffmanian sense, it lends salience to the claim 'appearance is key' (Goffman, 1959).

The characteristics attributed to human influencers, i.e. authenticity, trustworthiness, expertise and social presence are also attributed the virtual influencer through the way the CGI is visually presented, i.e. the underlying compositional techniques and connotations that the images convey. Apparently, the human mind seems to disregard if it engages with one or the other as long as it can relate somehow to the influencer. As a result, CGI creators could strategize on how to stage or present the CGI through the five governing semiotic principles: 1) Image, 2) Idealised framing, 3) Fiction, 4) Self-identification, and 5) Humanity. As long as we as spectators can look up to some kind of ideal or role model, delve into a fictional world, and mirror or entertain ourselves by the fictitious life of a CGI character, it becomes insignificant whether the influencer is human or computer-generated. In fact, some researchers even go as far as suggesting that virtual influencers or AI will win the race in the longer run (Davenport et al, 2020; Appel et al., 2020). With the new possibilities that AI offers for content creators and the marketing industry at large, AI marketing as a discipline with new strategies, new initiatives and new predominant tactics and understandings is already here. Next, awaits a process where we all will learn to differentiate more consciously between human influencers and CGIs in the digital world.

Summarily, the emerging field of virtual influencer marketing as a discipline in its own right with clear-cut definitions, concepts and strategies for brands to engage with yields a number of promises

in a not-too-distant future. The notions of authenticity, trustworthiness, expertise and social presence hold offerings that could be strategized in new ways in CGI-influencer marketing. Rather than building upon existing views and understandings of influencer marketing, it could be strategically fruitful to take a leap of faith and let CGI influencer marketing lead the way. For researchers, industry leaders, professional and upcoming marketers it is of significance how we approach, define, understand and employ the concept of virtual influencers. Whether we prefer to view VIM as an extension of traditional influencer marketing or we prefer to view VIM as a new emerging digital marketing discipline in its own right will eventually be determined by opinion leaders and their innovation initiatives in the digital marketing industry. Yet, looking into the crystal ball we see signs that the AI future has set in full motion. Looking back, we know that humans have always had an overreliance on new technology (e.g. Grissinger, 2019; Landgrebe, 2024) and tend to treat artefacts and objects as if they have human traits (Spatola et al., 2021). The way we engage with and understand AI-created content matters to humanity. Should we be afraid of the virtual social media marketing industry?

6. Future perspectives

6.1 From a research perspective

In an ever increasing visual social media world, the application of semiotic analysis methods can bring new insights to social media strategists, content creators, and brands. Prevalent scholarly understandings of credibility and appurtenant notions such as authenticity, trustworthiness, expertise, and social presence may be developed further in an AI era to revise and refine our understandings. As part of this process, the notions of aesthetics and visual attractiveness may be examples of phenomena to be further explored to qualify specifically our present knowledge and perception of the strategic use of images. Compositional patterns and techniques may be further developed in a similar vein, especially in the light of creating or simulating a human-like appearance.

6.2 From a professional marketing perspective

In the light of recent advances in AI technology in social media in particular, the emerging phenomena of virtual influencers and virtual influencer marketing (VIM) are expected to rise significantly in the coming years (Belanche et al., 2024). Whilst the field has many affinities to traditional social media influencer marketing (SMIM), it is anticipated that virtual influencer marketing will continue to spread at fast speed and develop its own practices, norms and distinct methodologies, with distinct underlying marketing and branding strategies. To stay ahead of new innovative practices in digital marketing, and to set it apart from its ancestral heritage of social media influencer marketing, it may be strategically wise to make such a differentiation explicit. Maybe it is time to part ways with tradition?

Despite the recent upsurge in virtual influencer marketing, defining this concept seems to be more or less taken-for-granted and is often presented as a natural continuance of traditional influencer marketing. However, recent studies suggest a number of core problematics moving from traditional to virtual influencer marketing (Lim and Lee, 2023; Sands et al., 2022; Ciechanowski et al. 2029; Block and Lovegrove, 2021; Dodgson (2019). This fact has implications for how we define the field. Concludingly, a first attempt of defining virtual influencer marketing as a discipline in its own right could read as follows:

“Virtual influencer marketing is the strategic and deliberate use of interactive artificial intelligence, presented on social media in the form of one or more computer-generated fictional characters (human-like or non-human like) that exist digitally to create brand awareness, attract followers, increase product acquisition and/or act as societal opinion leaders.”

Moving on, looking at how a social media influencer is traditionally defined, a reformulation for virtual influencers could likewise be formulated:

‘Synthetically produced sources, characters or actors that have built a sizable social network of followers, whom they are able to create a close connection with and influence’.

Not only does this definition go beyond the understanding of SMIs as humans by objectively identifying virtual influencers as synthetically produced sources, characters or actors, but it also implies that their digital persona creation is fully capable of influencing and facilitating a close connection with followers to create brand awareness and impact decisions. And such knowledge has an ethical implication for AI content creators as well as consumers of such content, especially the younger generation.

7 Conclusion

This paper set out to do an explorative, qualitative semiotic in-depth analysis through the case study of the CGI influencer Imma to identify how she was visually constructed on Instagram for a specified marketing campaign. We posed the questions: how does a virtual influencer present herself on social media? Does she appear human? Does she appear authentic, trustworthy and credible? And what are the wider implications hereof? Two distinct yet complementary semiotic methods were applied. The findings showed that the CGI influencer Imma in one distinct IKEA campaign was visually constructed by and large in similar veins as human influencers, with human-like traits such as authenticity, trustworthiness, expertise and social presence. It did not seem to matter that she was a CGI, it was rather the compositional techniques and visual presentation in distinct scenarios that portrayed her to mimic a ‘real’ influencer on the one hand, and a fictitious character on the other hand. These results indicate that the way a digital actor is visually displayed matters, and it has preliminary implications for humanity as a whole, regardless if we are researchers, brand strategists, AI content creators, or followers. Concludingly, this paper’s explorative, qualitative semiotic case study and its findings is a first step feeding into the knowledge pool of traditional influencer marketing - and beyond it! Grounds for re-conceptualisations, understandings, and new paths to be taken in an emerging virtual influencer marketing industry should ideally be taken to heart and further explored in a close future.

*“The mindless human mind will probably
never cease to be dazzled by
new innovative AI marketing initiatives.”*

Acknowledgement

I am grateful to my former student Kieu Nguyen for the exchanges of ideas, thoughts and earlier work-in-progress on the topic of virtual influencers. I am particular grateful for the kind gesture of handing over data collected on Imma for use in this article. My present understanding of virtual influencer marketing would not have been the same without her.

References

- Ahmed, A. (2020, 27 July). Computer-generated virtual influencers are in demand because they are ‘omnipresent’ even amidst the social distancing. *Digital Information World*. Retrieved 10 October from <https://www.digitalinformationworld.com/2020/07/computer-generated-virtual-influencers-are-in-demand-because-they-are-omnipresent-even-amidst-the-social-distancing.html>
- AlFarraj, O., Alalwan, A. A., Obeidat, Z., M., Baabdullah, A., Aldmour, R., & Al-Haddad, S. (2021). Examining the impact of influencers’ credibility dimensions: attractiveness, trustworthiness and expertise on the purchase intention in the aesthetic dermatology industry. *Review of International Business and Strategy*, ahead-of-print, pp. 2059-6014.
- Audrezet, A. & de Kerviler, G., & Guidry Moulard, J. (2020). "Authenticity under threat: When social media influencers need to go beyond self-presentation". *Journal of Business Research*, 117, 557-569.

- Bakker, D. (2018). Conceptualising Influencer Marketing. *Journal of Emerging Trends in Marketing and Management*, 1(1), 79-87.
- Barthes, R. (1980). "Billedets retorik". I Bent Fausing og Peter Larsen (red.): *Visuel Kommunikation*, bd I. København, Forlaget Medusa.
- Bear, J. H. (2020, 24 September). A Designer's Guide to Understanding Colors. *lifewire.com*. Retrieved 27 November 2020 from <https://www.lifewire.com/the-meaning-of-colors-1077398>
- Begum, H. (2020, 8 July). Instagram influencer, singer and model – and computer generated: rise of the virtual kings and queens of social media. *scmp.com*. Retrieved 31 October 2020 from <https://www.scmp.com/lifestyle/arts-culture/article/3091979/instagram-influencer-singer-and-model-and-computer-generated>
- Belanche, D., Casaló, V. L., Flavián, M. (2024). Human versus virtual influences, a comparative study. *Journal of Business Research*, Volume 173, 114493, pp. 1-13
- Breves, P., Liebers, N., Abt, M., & Kunze, A. (2019). The Perceived Fit between Instagram Influencers and the Endorsed Brand: How Influencer–Brand Fit Affects Source Credibility and Persuasive Effectiveness. *Journal of Advertising Research*, 59, 440-454.
- Block, E., & Lovegrove, R. (2021). Discordant storytelling, 'honest fakery', identity peddling: How uncanny CGI characters are jamming public relations and influencer practices. *Public Relations Inquiry*, pp. 1-29.
- Blood, R. (2002). Weblogs: A history and perspective. In J. Rodzvilla (Ed.), *We've Got Blog: How Weblogs Are Changing Our Culture* (pp. 7-16). Cambridge: Perseus Books Group.
- Borchers, N. S. (2019). Social Media Influencers in Strategic Communication. *International Journal of Strategic Communication*, 13(4), 255-260.
- Brown, D. & Hayes, N. (2008). *Influencer Marketing: Who really influences your customers?* London: Routledge.
- Casaló, V. L., Flavián, C. & Ibáñez-Sánchez, S. (2020). Influencers on Instagram: Antecedents and consequences of opinion leadership. *Journal of Business Research*, Volume 117, pp. 510-519.
- Ciechanowski, L., Przegalinska, A., Magnuski, M., & Gloor, P. (2019). In the shades of the uncanny valley: An experimental study of human–chatbot interaction. *Future Generation Computer Systems*, 92, 539–548.
- Chaffey, D. & Ellis-Chadwick, F. (2019). *Digital Marketing* (7th ed). London: Pearson.
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798-828.
- Designboom. (2020). IKEA shares a glimpse of home life with imma: japan's first virtual model. Retrieved 14 October 2020 from <https://www.designboom.com/technology/ikea-home-life-with-imma-japans-first-virtual-model-09-11-2020/>
- Dodgson, L. (2019, 13 September). Models are worried that digitally-created influencers 'pose a threat' to the industry, but CGI could be the future of fashion. *Insider.com*. Retrieved 13 October 2020 from <https://www.insider.com/cgi-models-look-real-what-that-means-fashion-industry-2019-9>
- Donelson, G. (2021, 20 January). 7 CGI Influencers Taking Over Social Media. *Taggermedia*. Retrieved 25 July 2021 from <https://www.taggermedia.com/blog/7-digital-cgi-influencers/>
- Drenten, J., & Brooks, G. (2020). Celebrity 2.0: Lil Miquela and the rise of a virtual star system. *Feminist Media Studies*, 20(8), 1319-1323.
- Edwards, C., Edwards, A., Stoll, B., Lin, X., & Massey, N. (2019). Evaluations of an artificial intelligence instructor's voice: Social Identity Theory in human-robot interactions. *Computers in Human Behavior*, 90, 357-362.
- Enke, N., & Borchers, N. S. (2019). Social Media Influencers in Strategic Communication: A Conceptual Framework for Strategic Social Media Influencer Communication. *International Journal of Strategic Communication*, 13(4), 261-277.
- Famesters. (2024). *Fashion influencer marketing: A guide*. Retrieved 17 July 2024 from <https://famesters.com/blog/a-guide-to-fashion-influencer-marketing/>
- Farivar, S., Wang, F., & Yuan, Y. (2020). Opinion leadership vs. para-social relationship: Key factors in influencer marketing. *Journal of Retailing and Consumer Services*, 102371.
- Fastercapital. (n.d.) The Rise of Influencer Marketing and Its Impact on Fashion. Retrieved July 17 2024 from <https://fastercapital.com/topics/the-rise-of-influencer-marketing-and-its-impact-on-fashion.html>
- Forrester, J. (2020, 6 April). World Health Organization Partners with CGI Influencer to Help Fight Coronavirus. *Taggermedia*. Retrieved 18 July 2021 from <https://talkinginfluence.com/2020/04/06/world-health-organization-cgi-influencer/>
- Freberg, K., Graham, K., McGaughey, K., & Freberg, L. A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review*, 37(1), 90-92.
- Garibay, O. O., Winslow, B., Andolina, S., Bodenschatz, A., Coursaris, C., Falco, G., Fiore, M. S., Garibay, I., Grieman, K., Havens, C. J., Jirotko, M., Kacorri, H., Karwowski, W., Kider, J., Konstan, J., Koon, S., Lopez-Gonzalez,

- M., Maifeld-Carucci, I., McGregor S., Salvendy, G., Shneiderman, B., Stephanidis, C., Strobel, C. Ten Holter, C., & Xu, W. (2023). Six Human-Centered Artificial Intelligence Grand Challenges, *International Journal of Human-Computer Interaction*, 39:3, pp. 391-437.
- Gilmore, J. H. & Pine, J. B. (2007). *Authenticity. What consumers really want*. Boston, Massachusetts: Harvard Business School Press.
- Gomes, M., Marques, S., & Dias, Á. (2022). The impact of digital influencers' characteristics on purchase intention of fashion products. *Journal of Global Fashion Marketing*, 13(3), pp. 187-204.
- Goffman, E. (1959). *The presentation of everyday life*. New York: Anchor Books.
- Grissinger M. (2019). Understanding Human Over-Reliance on Technology. *P & T: a peer-reviewed journal for formulary management*, 44(6), 320-321, 375.
- Hazari, S., & Sethna, B.N. (2022). A Comparison of Lifestyle Marketing and Brand Influencer Advertising for Generation Z Instagram Users. *Journal of Promotion Management*, Vol. 29(4), p. 491-534.
- Hsu, C. & McDonald, D. (2002). An examination on multiple celebrity endorsers in advertising. *Journal of Product & Brand Management*, 11(1), pp. 19-29.
- IBS. (2020, n.d.). How to read Body Language - Basics. Retrieved 18 November 2020 from <https://www.ibs-b.hu/student-life/blog/v/how-to-read-body-language-basics/#:~:text=Overly%20tilted%20heads%20are%20either,a%20reason%20to%20hide%20something>.
- imma [imma.gram]. (2020, n.d.). [Instagram]. Retrieved 23 October 2020 from <https://www.instagram.com/imma.gram/>
- imma [imma.gram]. (2024, n.d.). [Instagram]. Retrieved 1 March 2024 from <https://www.instagram.com/imma.gram/>
- Influencermarketinghub (2024.) *The Influencer Marketing Hub's AI Marketing Benchmark report 2024*. Retrieved 1 March 2024 from <https://influencermarketinghub.com/influencer-marketing-benchmark-report/>
- Instagrammable. (n.d.). Retrieved 1 December 2020 from <https://www.lexico.com/definition/instagrammable>
- Jin, S. V., Muqaddam, A., & Ryu, E. (2019). Instafamous and social media marketing. *Marketing intelligence & Planning*, 37(5), 567-579.
- Ki, C.-W., Cuevas, L. M., Chong, S. M., & Lim, H. (2020). Influencer marketing: Social media influencers as human brands attaching to followers and yielding positive marketing results by fulfilling needs. *Journal of Retailing and Consumer Services*, 55, 102133.
- Kádeková, Z., & Holienčinová, M. (2018). INFLUENCER MARKETING AS A MODERN PHENOMENON CREATING A NEW FRONTIER OF VIRTUAL OPPORTUNITIES. *Communication Today*, 9(2), 90-104.
- Kelman, H. C. (1953). Attitude change as a function of response restriction. *Human Relations*, 6, pp. 185-214.
- Kelman, H. C. (1958). Compliance, Identification, and Internalization. Three Processes of Attitude Change. *Journal of Conflict Resolution*, 2, pp. 51-60.
- Kelman, H. C. (1974). Attitudes are alive and well and gainfully employed in the sphere of action. *American Psychologist*, 29(5), pp. 310-324.
- Khamis, S., Ang, L., & Welling, R. (2017). Self-branding, 'micro-celebrity' and the rise of Social Media Influencers. *Celebrity Studies*, 8(2), 191-208.
- Kumpumäki, S. (2019). AI Influencers: Is This The Future of Influencer Marketing? Beatly.com. Retrieved 13 October 2020 from <https://blog.beatly.com/en/blog/ai-influencers-future-influencer-marketing>
- Landgrebe, J. (2024). The conversational (human?) voice of artificial intelligence. In *Proceedings of the 2023 Aarhus International Conference on Voice Studies (SEFOS)*, edited by M. Hejná, J. Kjeldgaard-Christiansen, M. Eaton, M. Clasen, Z. Boyd & O. Niebuhr, pp. 84-91. Sciendo/DeGruyter
- Lee, K. M., & Nass, C. (2003, April). Designing social presence of social actors in human computer interaction. In *Proceedings of the SIGCHI conference on Human factors in computing systems*, pp. 289-296.
- Lee, K. M., Park, N., & Song, H. (2005). Can a Robot Be Perceived as a Developing Creature? Effects of a Robot's Long-Term Cognitive Developments on Its Social Presence and People's Social Responses Toward It. *Human communication research*, 31(4), 538-563.
- Lim, R., E. and Lee, Y. S. (2023). "You are a virtual influencer!": Understanding the impact of origin disclosure and emotional narratives on parasocial relationships and virtual influencer credibility. *Computers in Human Behavior*. 148, 107897, pp. 1-12.
- Linqia (2017). The State of Influencer Marketing 2017. Retrieved July 07 2024 from https://www.linqia.com/wp-content/uploads/2016/11/The-State-of-Influencer-Marketing-2017_Final-Report.pdf
- Linqia. (2019). The State of Influencer Marketing 2019. Retrieved on 7 October 2020 from <https://linqia.com/wp-content/uploads/2019/04/Linqia-State-of-Influencer-Marketing-2019-Report.pdf>
- Linqia (2021). The State of Influencer Marketing 2021. Retrieved January 20 2021 from <https://www.linqia.com/wp-content/uploads/2021/04/Linqia-The-State-of-Influencer-Marketing-2021.pdf>
- Linqia (2023). The State of Influencer Marketing 2023. Retrieved January 20 2024 from <https://www.linqia.com/wp->

- [content/uploads/2023/09/Linqia-2023-State-of-Influencer-Marketing-Report.pdf](#)
- Lou, C., & Yuan, S. (2019). Influencer Marketing: How Message Value and Credibility Affect Consumer Trust of Branded Content on Social Media. *Journal of Interactive Advertising*, 19(1), 58-73.
- Markwideresearch. (2024). *Fashion Influencer Marketing Market Analysis – Industry Size, Share, Research Report, Insights, Covid-19 Impact, Statistics, Trends, Growth and Forecast 2024-2032*. Retrieved July 17, 2024, from <https://markwideresearch.com/fashion-influencer-marketing-market/>
- Moore, A., Yang, K., & Kim, H. (2018). Influencer Marketing: Influentials' Authenticity, Likeability and Authority in Social Media. *International Textile and Apparel Association (ITAA) Annual Conference Proceedings*, pp. 1-3.
- Moustakas, E., Lamba, N., Mahmoud, D., & Chandrasekaran, C. (2020). Blurring lines between fiction and reality: Perspectives of experts on marketing effectiveness of virtual influencers. *2020 International Conference on Cyber Security and Protection of Digital Services (Cyber Security)*, Dublin, Ireland, 2020, pp. 1-6.
- McCormick, K. (2016). Celebrity endorsements: Influence of a product-endorser match on Millennials attitudes and purchase intentions. *Journal of Retailing and Consumer Services*, 32, pp. 39- 45.
- Natividad, A. (2020, 16 September). How Imma, the Virtual Influencer, Crossed Into the Real World for Ikea. *musebycl.io*. Retrieved 10 October 2020 from <https://musebycl.io/advertising/how-virtual-influencer-imma-crossed-real-world-ikea>
- Nass, C., Steuer, J., & Tauber, E. R. (1994, April). Computers are social actors. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 72-78).
- Nielsen, J. F., Mols, N. P., & Høst, V. (2007). Drivers of Adoption and Implementation of Internet-Based Marketing Channels. In I. Lee (Ed.), *E-Business Innovation and Process Management* (pp. 42-67). Pennsylvania: Cybertech Publishing, Idea Group Inc.
- Ozuem, W. and Willis, M. (2022). Influencer Marketing. In: *Digital Marketing Strategies for Value Co-creation*. Palgrave Macmillan, Cham, pp. 209-242
- Park, G., Nan, D., Park, E., Kim, K. J., Han, J., & del Pobil, A. P. (2021). *Computers as Social Actors? Examining How Users Perceive and Interact with Virtual Influencers on Social Media*. The 2021 15th International Conference on Ubiquitous Information Management and Communication (IMCOM), Seoul, Korea.
- Perloff, R. M. (2010). *The dynamics of persuasion : communication and attitudes in the 21st century*. Routledge Taylor & Francis Group.
- PetaPixel. (2020, 22 September). IKEA Used a CGI 'Influencer' as the Model for Its New Ad Campaign. Retrieved 26 October from <https://petapixel.com/2020/09/22/ikea-is-using-a-cgi-influencer-as-the-model-for-its-new-ad-campaign/>
- Platter, D. (2023). *How Virtual Influencers Can Mean Real Sales*. Retrieved February 26 2024 from <https://www.forbes.com/sites/forbescommunicationscouncil/2023/07/31/how-virtual-influencers-can-mean-real-sales/?sh=7e35eff8345d>
- Ramos-Serrano, M., & Martínez-García, Á. (2016). Personal style bloggers: the most popular visual composition principles and themes on instagram. *Observatorio (OBS*) Journal*, 10(2), 89-109.
- Raphael, S. (2018, 20 December). Meet Bermuda, The Most Controversial CGI Influencer On Instagram. *Refinery29*. Retrieved 25 July 2021 from <https://www.refinery29.com/en-gb/bermuda-instagram-cgi-influencer>
- Rouleau, R. (2018, 27 April). Nighttime Skin Care Routine: What Order You Should Apply Product. *renerouleau.com*. Retrieved 1 December 2020 from <https://blog.reneerouleau.com/nighttime-skin-care-routine-what-order-you-should-apply-product/>
- Sands, S., Ferraro, C., Demsar, V., Chandler, G. (2022). False idols: Unpacking the opportunities and challenges of falsity in the context of virtual influencers. *Business Horizons*, 65, pp. 777-788.
- Sands, S., Campbell, C. L., Plangger, K., & Ferraro, C. (2022). Unreal influence: leveraging AI in influencer marketing. *European Journal of Marketing*, 56(6), 1721–1747.
- Schegloff, E. (2010). Reflections on Quantification in the Study of Conversation. *Research on Language and Social Interaction*. 26, pp. 99-128.
- Sharecaster. (2020, 04 August). CDC, WHO Enlist Influencers, Including Melania Trump, Knox Frost 04/08/2020. *MediaPost Communications*. Retrieved 10 October 2020 from <https://sharecaster.com/2020/04/07/cdc-who-enlist-influencers-including-melania-trump-knox-frost-04-08-2020-mediapost-communications/>
- Shuen, A.S. (2018). *Web 2.0: A Strategy Guide: Business Thinking and Strategies Behind Successful Web 2.0 Implementations* (1st ed). Newton, MA: O'Reilly.
- Sideqick. (n.d.). What are Virtual Influencers, and What Do They Mean for Influencer Marketing? Retrieved 11 October 2020 from <https://www.sideqik.com/influencer-marketing/virtual-influencers>
- Spatola, N., Kühnlenz, B., & Cheng, G. (2021). Perception and Evaluation in Human–Robot interaction: The Human–Robot Interaction Evaluation Scale (HRIES)—A multicomponent approach of anthropomorphism. *International Journal of Social Robotics*, 13(7), 1517–1539.
- Staff, T. (2018, 30 June). The 25 Most Influential People on the Internet. *TIME.com*. Retrieved 11 October 2020 from

- <https://time.com/5324130/most-influential-internet/>
- Suler, J. (n.d.). Camera Angles. Retrieved 27 November 2021 from http://truecenterpublishing.com/photopsy/camera_angles.htm
- Tiidenberg, K. (2018, 26 May). Selfies: Derfor både elsker og hader vi dem. Retrieved 28 July 2021 from <https://videnskab.dk/kultur-samfund/selfies-derfor-baade-elsker-og-hader-vi-dem>
- Taggart, E. (2019, 21 January). This Japanese Fashion Model Isn't a Human, She's Computer Generated. *MyModernMet*. Retrieved 12 October 2020 from <https://mymodernmet.com/imma-cgi-virtual-model/>
- Thatcher, J. (2014). Living on Fumes: Digital Footprints, Data Fumes, and the Limitations of Spatial Big Data. *International Journal of Communication*, 8, pp. 1765–1783.
- The Influencer Marketing Factory (n.d.). *Virtual Influencers Survey + INFOGRAPHIC*. Accessed March 3, 2024, from <https://theinfluencermarketingfactory.com/virtual-influencers-survey-infographic/>
- Thomas, V. L., & Fowler, K. (2021). Close Encounters of the AI Kind: Use of AI Influencers as Brand Endorsers. *Journal of Advertising*, 50(1), 11-25.
- Turner-Williams, J. (2020, 28 May). Are Virtual Influencers More Valuable to Brands than Humans? *Super Maker*. Retrieved 1 November 2020 from <https://supermaker.com/articles/virtual-influencers-changing-social-media>
- Uzunoglu, E. & Kip, S. M. (2014). Brand communication through digital influencers: Leveraging blogger engagement. *International Journal of Information Management*, 34, pp. 592-602.
- Dencheva, V. (2024). Influencer marketing market size worldwide from 2016 to 2024. Retrieved February 28, 2024, from <https://www.statista.com/statistics/1092819/global-influencer-market-size/>
- Vigsø, O. (2019). Semiotisk Billedanalyse. In Skriver, S., & Nielsen, M. F. (Ed.), *Metodekøgebogen: 130 analysemetoder fra humaniora og samfundsvidenskab* (pp. 370-372). Copenhagen: U Press.
- Vogue France (2019, 05 April). From Lil Miquela to Shudu Gram: Meet the virtual models. Retrieved 13 October, 2020 from <https://www.vogue.fr/fashion/fashion-inspiration/story/from-lil-miquela-to-shudu-gram-meet-the-virtual-models/1843>
- Woods, S. (2016). #Sponsored: The Emergence of Influencer Marketing (Ph.D.). Retrieved 20 July from https://trace.tennessee.edu/cgi/viewcontent.cgi?article=3010&context=utk_chanhonoproj
- Wong, R. (n.d.). Virtual Influencers Lead to Virtual Inauthenticity. AlleyWatch. Retrieved 01 November 2020 from <https://www.alleywatch.com/2018/05/virtual-influencers-lead-to-virtual-inauthenticity/>