

Revisiting Discursive Interface Analysis for the Study of Digital Advertising in Asia

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Abstract

This paper revisits discursive interface analysis to explore the possibility of having a universal method to scrutinize the power, creativity, and freedom of digital media through digital advertising. This is due to the facts that i) there is commercial success in and high potential of digital advertising; ii) digital advertising is a representation of digital media; and iii) digital advertising often embraces the latest technologies and the innovative use of digital media. It specially explores the suitability of discursive interface analysis for this study through ten digital advertising campaigns in Asia. The analyses show that there are insufficiencies in the sensory, cognitive, and functional affordances of discursive interface analysis for the study of digital advertising. The paper concludes with a revision of these three affordances to reveal the power, creativity, and freedom of digital media through digital advertising.

Introduction

In view of the success and potentiality of digital advertising (eMarketer, 2018; Truong et al., 2010) as well as its nature of reflection or representation of digital media (Kaul, 2017), this paper considers how we should study it so that businesses can have a better understanding of the power, creativity, and freedom of its counterpart – digital media,

and use them to meet their business objectives such as branding and sales. The power of digital media exists when digital media control or limit digital advertising. The creativity allows businesses to express their advertising ideas creatively, while freedom refers to the freedom of speech of customers in digital media. The power, creativity, and freedom of digital media in

this paper are derived from Lister's discussions on McLuhan's slogan "The medium is message" that digital advertising as a form of messages on digital media can extend and speed up human association and action and change our understandings of technologies and the relevant human organizations (Lister, 2009). In other words, digital advertising and its carriers must possess power to do so, allow creativity to lead us to associate, and furnish freedom for us to redefine. In the context of businesses, these three elements evolve our media and shape our messages for business communications.

By definition, digital advertising is about informing potential and existing customers about relevant product, service, or event information mainly in three formats: i) static formats like a picture on a website or text-based email; ii) animated formats without interactivity in a banner ad, for example; iii) rich-media formats inclusive of interactivity, animation, sound, video, floating images, and screen take-over (Bruce et al., 2017). Such a definition should also cover the results of search engine optimization, search engine marketing, programmatic advertising, and native advertising, which generate tempting advertising revenue. Although digital advertising is still in its infancy, it has a myriad of instances enabled by technologies, puzzling many businesses regarding its appropriate uses (Liu-Thompkins, 2019; Malthouse & Li, 2017).

On the other hand, digital media, according to Kaul (2017), is the "digital information

transmitted through computers and wireless handheld devices and include, among others, the Internet, SMS or text messaging, instant messaging, blogs, social media, social games, websites, and virtual communities / worlds" (p. 15). Due to the lack of a universal tool that allows us to explore the power, creativity, and freedom of digital media through its ever-changing companion – digital advertising – this paper revisits discursive interface analysis by Stanfill (2015) to find out its suitability for this study, as digital advertising is heavily dependent on the Internet and includes websites.

Briefly, discursive interface analysis investigates the assumptions of the purposes and uses of websites through sensory, functional, and cognitive affordances referring to design choices, norms, and nominative features respectively. It is possible to interpret affordances as the visual cues of websites that support user participation and user-generated content in the context of digital advertising. There is a detailed discussion on discursive interface analysis in a later section. Once a study tool for digital advertising is defined, it is possible to identify and study the power, creativity, and freedom of its counterpart – digital media. From our perspective, this revelation of the intricate relations between digital advertising and digital media is valuable to the development of new theories and business applications that aim to improve the communications between businesses and their target customers.

In the following paragraphs, we first discuss our research method followed by a review of discursive interface analysis. Then we present the ten digital advertising cases for this study and the application of discursive interface analysis to these cases to show its insufficiencies. Finally, we suggest a revision of the sensory, cognitive, and functional affordances of discursive interface analysis and present their possible contributions to the study of digital media through digital advertising.

Research Method

We applied discursive interface analysis (Stanfill, 2015) to ten digital advertising cases to test our hypothesis that there is a need to revise it so as to make it fit the study of digital advertising as regards the power, creativity, and freedom of its counterpart – digital media that influences businesses in achieving branding and sales objectives. In this paper, the power originates from the constraints or directions on the information in digital media. Meanwhile, the creativity arises from the creative presentations of business ideas in digital media. Lastly, the freedom (freedom of speech) is dependent on the availability of user-generated content in digital media. The power, creativity, and freedom are further linked to the functional, sensory, and cognitive and sensory affordances of discursive interface analysis respectively. That is to say, in this study, the functional affordances relate to the constraints in digital media. The sensory affordances relate to its creative features when compared to the others in a specific period of time, while the

cognitive affordances relate to its selections of information presentation.

In this preliminary study, only recent digital advertising cases of well-known brands or organization in Asia in the period between 2013 and 2018 were adopted. They all had clear campaign objectives, the latest technologies, and the popular digital media in the regions. They covered the industries of airlines, beverage, cell phone, footwear, hair care, and insurance. The countries and cities involved were China, Hong Kong, Indonesia, Japan, Malaysia, Shanghai, Singapore, South Korea, Thailand, and Vietnam. The relevant digital media included augmented reality-enabled rich media ads, cross-platform mobile app / games, Facebook, interactive digital game installation, online games, Sina Weibo, WeChat, and YouTube. Note that due to limited time and resources, we constrained this preliminary study to ten digital advertising cases.

Discursive Interface Analysis

According to Sundar and Limperos (2013), “affordances visually suggest not only how users can interact with the interface, but also how they can contribute and construct content by using that interface” (p. 511). That is to say, affordances support user participation and user-generated content – two common scenarios in digital advertising. Sundar and Limperos further claim that, “these affordances provide cues to media users, which then trigger cognitive heuristics (mental shortcuts) about characteristics of the content that they consume” (p. 512). In other words, affordances can help target

customers to comprehend the information in digital advertising. In this way, affordances can relate to the characteristics (such as a specific technology) of a digital advertising campaign and its preferred presentation (e.g. a humorous approach) that guide the target customers to perceive the related product, service or event on digital media in a specific way. In fact, affordances are the perceived and actual properties of a thing (Norman, 2013). In the context of social media, affordances support human actions (Schlagwein & Hu, 2017).

On the other hand, Lamerichs and Te Molder (2003) claim that the discursive approach includes i) an emphasis on its relationship with certain social phenomena; ii) analyses of text and talk as social practices and interactions leading to social actions, and iii) a focus on participant involvement for ongoing development in communication. Since digital media involve blogs, social media, social games, virtual communities, and virtual worlds that relate to social phenomena, text and talk, and user participation, it is possible to use the discursive approach to study digital media inclusive of digital advertising.

Stanfill (2015) further combines affordances and the discursive approach to form discursive interface analysis to study websites' assumptions as regards their purposes and uses. It emphasizes the "acceptance or rejection [that] occurs within pre-determined options" through three types of affordances – sensory affordances, functional affordances, and cognitive affordances. Sensory affordances focus on the design choices of websites that

enable users to sense websites and therefore "[apportion] scarce attention to both reflect and reinforce [the] assumptions and valuations" of websites (Stanfill, 2015, p. 1064). These affordances include color, text, images, sounds, motion, placement, and interactivity. Functional affordances construct the norms of websites defining what they can do in general. Lastly, cognitive affordances focus on the linguistic and nominative features of websites informing users of their capabilities through names, labels, and classifications – "social act of meaning-making." Stanfill highlights that his affordances of websites are about what the websites can furnish and offer to their users.

The acceptance of the three affordances allows advertisers to direct target customers to accept advertising ideas accordingly. Indeed, the interfaces of digital advertising, in general, also include the design choices of websites, while being supported, operationally, by the norms of websites and specified by proper names, labels, and classifications, contributing to the acceptance. As digital advertising on digital media is also heavily dependent on the Internet, it is feasible to use discursive interface analysis to grasp the power, creativity, and freedom of the relevant digital media, especially when these three aspects reflect the use of digital media. In fact, discursive interface analysis is unique in that it allows web designers to have a deeper understanding of the relations between design rationale, visual elements, and communication. It alerts web designers to what constitutes good user experience regarding communication. Although there

are other studies about affordances of emergent media such as the one by Sundar and Limperos (2013), their foci are not on communication through web design.

The ten Digital Advertising Cases

Below are the ten digital advertising cases adopted in this paper. Each case comes with the company or organization name, description, and the usage(s) of the relevant digital media for the processing of discursive interface analysis.

	Companies / Organization	Case Description	The Usages of the Digital Media
1	Coca Cola Korea (Mobile Marketing Association, 2013)	Coca Cola Korea used a mobile campaign to promote its products as energizing refreshments in South Korea. The campaign included a real-life and virtual playground and reward platform called "Coke Play" to build a happy and energetic brand image.	To raise brand awareness through Coke Play
2	Nike (Mobile Marketing Association, 2016b)	Nike launched an exclusive Kobe-moji sticker set on WeChat in China to celebrate the retirement of Kobe Bryant and to promote its limited edition Kobe 11 Elite Low FTB shoes.	To inform target customers of the new shoes endorsed by Kobe Bryant
3	Thai Life Insurance (Digital Training Academy, 2014)	Thai Life Insurance published an emotional YouTube video called "Unsung Hero" to build a kind and helpful image. The video is about a virtuous young man offering help to different people on the streets.	To build a kind and helpful brand image through YouTube
4	Samsung (Mobile Marketing Association, 2015)	Samsung held a "Love Story in Paris" campaign to promote its Galaxy S6 and S6 Edge mobile phones to young middle and high social class adults of Vietnam. The campaign motivated non-S6 users to try the dual-screen function of S6 by connecting a S6 in a Samsung store with an in-store tablet or desktop computer to watch the complete "Love Story in Paris" – an emotional video.	To introduce product features to target customers through a combination of mobile gadgets
5	Horlicks (Mobile Marketing Association, 2016a)	Horlicks designed NutriQuest, a cross-platform mobile game, for Malaysian kids and their mothers to grasp Horlicks' nutritional value and change their perception of Horlicks. They were encouraged to buy the limited edition pack of Horlicks with a code to unlock exclusive game contents in addition to NutriQuest souvenirs and giveaways. There were also Nutri-coins inside the product pack to encourage online redemption of in-game benefits and souvenirs.	Use exclusive game contents to induce target customers to consume Horlicks

	Companies / Organization	Case Description	The Usages of the Digital Media
6	ShanghaiPRIDE (GlennTan, 2016)	ShanghaiPRIDE used WeChat and Sina Weibo to build awareness of the LGBT community in China. The campaign engaged its audience by using videos with real-life interviews to move them, and invited them to take pictures of themselves holding hands with their loved ones to be uploaded to the Net with the hashtag "#ShanghaiPRIDE." Each photo became a pledge adding a minute to a pair of virtual entwined hands on the organizer's website that could be separated if there was no pictorial support.	To alert target groups of the LGBT community in China through WeChat and Sina Weibo
7	Singapore Airlines (Mobile Marketing Association, 2016c)	Singapore Airlines used a mobile app for smartphones, smart watches, and tablets to increase customer engagement, loyalty, and satisfaction. After proper customer investigation, the app offers user-friendly and intuitive flight booking and trip management functions to maximize the travel experiences of its air travelers.	To immerse target customers and make them loyal to Singapore Airlines through a mobile app
8	Sun Life Financial Hong Kong (Punch, 2016)	Sun Life Financial Hong Kong organized the Sun Life Stanley International Dragon Boat Championships as a branding campaign. There was an interactive digital game installation that sprayed dragon boat water – a Chinese tradition – to escalate players' mood. The game can also capture the players' happy moments to be shared on Facebook.	To induce target customers to share their happiness with an interactive digital game installation on Facebook so that their friends could also know about Sun Life Financial Hong Kong
9	Zwitsal (Mobile Marketing Association, 2017)	Zwitsal adopted emotional YouTube videos by mommy influencers to induce new mothers in Jakarta to share their special moments with their babies in the augmented reality-enabled rich media ads and use the given e-coupons in the ads to purchase Zwitsal's shampoo and hair lotion products.	To increase brand affinity and motivate target customers to purchase the products through YouTube and rich media ads
10	Nestlé Japan (Koe, 2018)	Nestlé Japan used social media inclusive of YouTube and Facebook, key opinion leaders (KOLs), and online games to promote its Ambassador programs that invite Nestlé coffee lovers in offices to be ambassadors and help other office workers to purchase Nestlé coffee capsules from the Nestlé exclusive online shop at discounted rates.	To promote Nestlé Ambassador programs to office workers through social media, KOLs, and online games

Table 1: The Ten Digital Advertising Cases for This Research Study

Applying Discursive Interface Analysis to Digital Advertising

If the focus of discursive interface analysis is now on digital advertising, and its mission is to find out what these campaigns are furnishing and offering to their target customers, it is very likely missing the elements in Table 2 for its three affordances. Note that the sensory affordances are now describing the characteristics of the digital advertising campaigns that rely on the Internet. These characteristics enable the target customers to sense them. Further, the cognitive affordances describe the preferred presentations of the campaigns, informing

the target customers in specific ways of the offerings and capabilities of the relevant companies or organizations. These preferred presentations are shown in the three formats of digital advertising as discussed earlier and are backed up by branding, emotional appeal, gaming, and technology, to name a few. As for the functional affordances, they are now the advertising and marketing rules adopted by the campaigns. These rules define what the campaigns should do. On the Internet, these rules also affect what websites can do and offer. For instance, product marketing leads to chatbot on a website.

	Companies / Organizations	Sensory Affordances (Campaign Characteristics)	Cognitive Affordances (Preferred Presentations)	Functional Affordances (Campaign Rules)
1	Coca Cola	<ul style="list-style-type: none"> • Mobile campaign • Real-life and virtual playground and reward platform 	A happy and energetic brand image	Brand awareness
2	Nike	Exclusive Kobe-moji sticker set on WeChat	A sharing of Kobe legacy on the social media in China	<ul style="list-style-type: none"> • Consumer engagement • Product marketing
3	Thai Life Insurance	Emotional YouTube video	A kind and helpful image	Brand building
4	Samsung	<ul style="list-style-type: none"> • A combination of mobile gadgets • Mobile campaign 	A celebrity-endorsed high-tech presentation of the product feature	Product marketing
5	Horlicks	<ul style="list-style-type: none"> • Cross-platform mobile game • Exclusive game contents • Online redemption of in-game benefits 	A funny game play that incorporates product features as game elements	<ul style="list-style-type: none"> • Gamification • Product marketing
6	ShanghaiPRIDE	<ul style="list-style-type: none"> • Hashtag • Real-life interviews • Sina Weibo • Virtual entwined hands • WeChat 	An emotional presentation of the LGBT community enabled by popular social media and impressive web technology	To raise awareness of the LGBT community in China

Companies / Organizations	Sensory Affordances (Campaign Characteristics)	Cognitive Affordances (Preferred Presentations)	Functional Affordances (Campaign Rules)
7 Singapore Airlines	<ul style="list-style-type: none"> • Flight booking and trip management functions • Mobile app 	A user-friendly and intuitive high-tech presentation of products and services	<ul style="list-style-type: none"> • Brand loyalty • Consumer engagement
8 Sun Life Financial Hong Kong	<ul style="list-style-type: none"> • Facebook • Interactive digital game installation • Sun Life Stanley International Dragon Boat Championships 	A funny social media-enabled and interactive festival game	<ul style="list-style-type: none"> • Brand building • Gamification
9 Zwitsal	<ul style="list-style-type: none"> • Augmented reality-enabled rich media ads with e-coupons • Emotional YouTube video 	An emotional approach enabled by YouTube and rich media ads	<ul style="list-style-type: none"> • Brand affinity • Product marketing
10 Nestlé Japan	<ul style="list-style-type: none"> • Ambassador program • Facebook • KOL • Online games • YouTube 	A humorous approach enabled by popular social media, KOLs, and online games	<ul style="list-style-type: none"> • Brand loyalty • Gamification • Product marketing

Table 2: The Missing Elements of the Three Affordances of Discursive Interface Analysis in the Context of Digital Advertising

The original sensory affordances are to identify the design choices of websites. They do not identify e-commerce, e-coupons, game-related information, KOL, mobile technology, online redemption, and popular digital media, as stated in the above ten digital advertising cases. The original sensory affordances cannot recognize the characteristics of digital advertising campaigns and describe what they are offering to the target customers. In particular, they cannot highlight any innovativeness of digital advertising such as using two mobile gadgets to watch a complete video in case 4 and immersing target customers in augmented reality-enabled rich media ads in case 9.

Similarly, the original cognitive affordances do not hint at how the different presentations of digital advertising campaigns due to consumer behavior, cultural code, social trend, and so on inform the target customers. Referring to the above ten digital advertising cases, these presentations cover augmented reality, an emotional video, and games. In view of the various advertising and marketing approaches, these presentations might be caused by brand building, emotional appeal, humor appeal, etc. The cognitive affordances for digital advertising should give insights into how digital advertising campaigns induce target customers to perceive information in particular ways.

Moreover, the original functional affordances are not able to identify and describe the advertising and marketing rules used in digital advertising. In the above ten digital advertising cases, these rules cover brand affinity, brand awareness, brand building, brand loyalty, gamification, and product marketing. These rules greatly affect the relevant sensory and cognitive affordances. For example, due to brand building, Thai Life Insurance in case 3 renders a kind and helpful image in its YouTube video. In case 5, due to gamification, Horlicks uses a cross-platform mobile game to deliver its messages.

Once the original discursive interface analysis is tuned for digital advertising, it is possible to use it to locate the power of digital media through the functional affordances. That is to say, we can find out which of the functional affordances of a digital advertising campaign the relevant digital media has adopted so that the information running over it is constrained or directed in particular ways. An example is the augmented reality-enabled rich media ads with pre-distributed e-coupons of Zwitsal due to product marketing. The new mothers involved are directed to receive e-coupons for e-commerce. As for the creativity in digital media, we should be able to identify and grasp the creative presentations of business ideas, for instance, on digital media through the sensory affordances of digital advertising. In case 6, using a photo as a pledge that adds a minute to a pair of virtual entwined hands in order to alert the target groups to the LGBT community in China is

absolutely a creative presentation. Lastly, the freedom of speech of target customers can also be found in certain sensory and cognitive affordances such as KOL, a popular digital media – Facebook (posting and sharing), and appeal strategies that encourage user-generated content for sharing. An example is the adoption of Facebook by Sun Life Financial Hong Kong in case 8 so that its target customers can share their experiences with the interactive digital game installation freely, informing their friends and relatives of Sun Life Financial Hong Kong.

Discussion

In this section, we revise the three affordances of the discursive interface analysis for the study of digital advertising as regards the power, creativity, and freedom of digital media as follows:

- Sensory affordances are about the characteristics of a digital advertising campaign that can be seen, heard, touched, felt, and even smelt. These characteristics are enabled by certain technology(ies) and digital media affecting the perception of the target customers of the relevant product, service, or event.
- Cognitive affordances refer to the preferred presentation of a digital advertising campaign that persuades or informs the relevant target market. Proper cognitive affordances imply a proper understanding of consumer behaviors relating to the feature(s) of a product, service, or event.
- Functional affordances are now about the advertising and marketing rules,

models or frameworks adopted by a digital advertising campaign and its relevant digital media including mobile application, social media, and website that limit or direct the campaign to happen in a particular way. Functional affordances support sensory and cognitive affordances.

Theoretically, sensory affordances are the cues that trigger cognitive affordances. In the case of Zwitsal (Mobile Marketing Association, 2017), its sensory affordances must include emotional YouTube videos that emotionally drive (an act of cognitive affordances) its target customers to purchase its products. The functional affordances that support the sensory and cognitive affordances in this case include brand affinity, consumer behavior, e-commerce, and product marketing. Under these circumstances, the power of YouTube is about its functions that support brand affinity (use video content to make an emotional connection), consumer behavior (through customer segmentation), and e-commerce/ product marketing (through hyperlinks to the relevant e-commerce platform and company website). The creativity of Zwitsal is about the creation of the emotional story for YouTube. The freedom of speech of the target customers is found in the comments on YouTube regarding the emotional video. Through our revised discursive interface analysis, businesses can make an objective measurement of the

power, creativity, and freedom of digital media, assisting them in analyzing and choosing digital media to have effective business communications for branding and sales.

On the other hand, it is possible to extend this study to investigate any manipulation of functional affordances by digital media backed by conglomerates leading to a specific type of power. It is also possible to consider the functional affordances of digital media revealed in digital advertising as the productive constraints (or the norms) that induce certain human associations, actions, and organizations. In the future, we will further apply our revised sensory, cognitive, and functional affordances of discursive interface analysis to more digital advertising cases in Asia and even other parts of the world to test their validity and reliability and to find out the answers concerning our questions on collective power and productive constraints. We hope our exploration of a tool for the study of digital advertising as regards the power, creativity, and freedom of its counterpart – digital media – can also shed light on the ontological development of digital media (Hung, 2017a, 2017b, 2019; Hung et al., 2018) as well as digital media development targeting effective business communications.

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