The effect of complex visual stimuli and conceptual fluency on purchase intentions in the context of luxury fashion brand communication on social media

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Abstract

The current research examines the interactive effects of visual complexity and congruency on consumer purchase intentions as well as the mediating role of conceptual fluency in the context of luxury fashion brand communication on social media. The study compared 3 types of visual stimuli: simple, complex congruent and complex incongruent images. The results of two experiments using multiple product categories and differing manipulations of complexity and congruity demonstrate that simple images trigger higher levels of conceptual fluency than complex images. Also, the results illustrate that complex congruent images are more conceptually fluent than complex incongruent images. Finally, the study revealed that the effects of visual complexity on purchase intentions are mediated by conceptual fluency
The current research makes several contributions to the literature on visual complexity, congruity and fluency and offers important recommendations to managers.

Key words: Conceptual fluency, visual complexity, purchase intentions

Track: Consumer Behavior

1. Introduction

Many luxury fashion brands use social media to communicate with consumers and to advertise their products. They use different visual brand communication strategies to attract consumers and increase the number of purchases. Some brands use images that place products within a contextual background, or surrounded by other elements, in order to communicate a certain message or to represent a semantic meaning to consumers. This practice was supported by several academics due to the claim that these images evoke "a sense of time and place" (Kusumasondjaja and Tjiptono 2019; Sekonda, 2014). In contrast, other brands adopt the opposite strategy and post pictures of products only, because in this way consumers would focus mainly on the product (Pracejus, Olsen and O'Guinn, 2006, Pieters, Wedel and Batra, 2010). Additionally, in the last few months a new trend has gained popularity on social media as Dolce and Gabbana started posting complex images, showing their products surrounded by other elements within an incongruent contextual background. These visual communication strategies raise the question regarding how consumers perceive these three different types of images and how these images influence purchase intentions?

The way people perceive images and form understanding of their meaning and message is a complicated process, involving cognitive and metacognitive processes. One of these processes is conceptual fluency, which relates to the ease with which people understand the massage and the semantic meaning of the stimuli (Reber, Schwarz and Winkielman, 2004). Past research suggests a positive relationship between visual complexity and conceptual fluency (Shapiro, 1999, Scott and Vargas, 2007). In brief, when a product is presented with a contextual background, all the presented elements group together and form a meaning which is easily identified by the consumers, hence the conceptual fluency is higher, compared to simple images presenting a product only. It is worth noting that congruency will play a significant role in influencing conceptual fluency wherein greater levels of congruency within the visual complex stimuli will lead to higher conceptual processing fluency (Reber, Schwarz and Winkielman, 2004, Van Rompay, de Vries and van Venrooij, 2010).

The current research examines the interactive effects of visual complexity and congruency on consumer purchase intentions mediated by conceptual fluency. The research makes an important contribution to the literature. First, the interactive effects of visual complexity and congruency on conceptual fluency lacks scrutiny and the present research aims to offer further clarity on that relationship. Second, the current research identifies the mediating role of conceptual fluency on the relationship between visual complexity, congruity and purchase intentions. In this way, the research makes a novel contribution to the

literature by exploring a novel mechanism that may explain how image complexity is processed in human mind. Finally, the study offers several implications for marketers, that show how managers can use visually complex and varying congruent images in order to enhance consumer purchase intentions through their social media communications strategy.

2.Theoretical Background

Fluency is the ease or difficulty with which an information is processed (Schwarz, 2004). It provides a feedback about how easy the thinking process felt (Schwarz, 2004; Reber, Schwarz and Winkielman, 2004). Fluency is a metacognitive and subjective experience (Reber, Schwarz and Winkielman, 2004), which is usually ranked on easy-difficult or fluent-disfluent scale. There are different types of fluency, however the primary focus of this article will be on conceptual fluency only. Conceptual fluency represents the ease of processing the meaning and message of the presented stimulus (Whittlesea, 1993).

Visual complexity is crucial for the perception of the visual stimuli as it is based on the quantity of the illustrated elements in the image (Snodgrass and Venderwart, 1980), the range of the elements, materials and surfaces (Heylighen, 1999), the number of colours presented (Leder and Carbon, 2005), and the symmetry and arrangement in the images (Pieters, Wedel and Batra, 2010, Mayer and Landwehr, 2014). Therefore, when a product is presented within a contextual background, then the image should be considered complex; while when the same product is presented on a plain background, then the image should be considered as simple.

We propose that visual complexity will influence conceptual fluency positively, such that the levels of conceptual fluency will be significantly higher for complex images compared to simple images. Specifically, we theorize that based on previous research suggesting that when a product is presented with a contextual background, the image has a certain meaning and message and it would be perceived easier by the consumers (Shapiro, 1999, Scott and Vargas, 2007).

Congruity refers to the similarity and the fit between two or more stimuli (Rokeach and Rothman, 1965). Drawing upon prior research confirming the positive link between congruency and processing fluency (Reber, Schwarz and Winkielman, 2004, Van Rompay, de Vries and van Venrooij, 2010), we propose that congruency between a product and its contextual background will influence conceptual fluency positively, such that the levels of conceptual fluency will be significantly higher for the complex congruent image than for the complex incongruent image. Processing fluency refers to the ease with which people process

stimuli, it consists of perceptual fluency and conceptual fluency. Hence, we assume that the findings concerning processing fluency should be valid for conceptual fluency.

Drawing upon previous research, suggesting a positive link between processing fluency and behavioural intentions (Song and Schwarz, 2008, Storme, Myszkowski, Davila and Bournois, 2015), we posit that conceptual fluency will positively influence purchase intentions, such that the complex image would be significantly higher in conceptual fluency, which will lead to higher levels of purchase intentions, compared to the simple image.

3.Overview of the study

The aim of the current study is to compare three types of images (simple, complex congruent and complex incongruent) and to study their link to conceptual fluency and purchase intentions. We used two experiments to test these relationships. In Study 1, we investigate the relationship between visual complexity and conceptual fluency. In Study 2, we test the relationship between visual complexity, conceptual fluency and purchase intentions.

3.1 Study 1

The primary objective of Study 1 is to examine the relationship between visual complexity and conceptual fluency with the moderating effects of congruency. Three images were used for the experiment: simple image presenting a black Montblanc business bag on a plain background; complex congruent image, presenting the bag on a matching background, surrounded by business accessories; and complex incongruent image, presenting the product on a beach. For the reasons of brevity, the images are not included but available upon request.

A total of 108 people living in England were recruited for the study (39% male and 61% female participants). All participants provided informed consent and then were first asked to fill some questions related to some socio-economic factors and their social media preferences. Later, they were exposed to a single image (simple, complex congruent or complex incongruent) and were asked to rate the level of conceptual fluency, using the Wu et al. (2016) scale. Specifically, participants were asked to rate on a 1-7 semantic differential scale: “The meaning of the image was easy to understand”, “The message of the image was easy to understand”, “The idea of the image was easy to understand”.

3.1.1 Results and Discussion

The findings (using ANOVA) revealed a significant difference in the level of conceptual fluency between the simple and complex images ($F(1, 103) = 8.99$; $p<0.005$) wherein the simple image has a significantly higher influence on conceptual fluency ($M_{simple} = 4.89$; $SD = 1.57$) than complex image ($M_{complex} = 3.95$; $SD = 1.49$). Similarly, we also

observe that complex congruent image offers significantly higher conceptual fluency ($F(1, 67) = 21.10$; $p<0.001$; $M_{congruent} = 4.67$; $SD = 1.22$) than complex incongruent images ($M_{incongruent} = 3.22$; $SD = 1.40$). Therefore, the results further support earlier research in demonstrating a positive link between congruency and processing fluency (Reber, Schwarz and Winkielman, 2004, Van Rompay, de Vries and van Venrooij, 2010). Additionally, the results demonstrate that the level of conceptual fluency differs based on the level of congruency for complex images highlighting the unique contribution of this study.

3.2 Study 2

Study 2 extends the earlier study by examining the relationship between visual complexity, conceptual fluency and their subsequent influence on consumer purchase intentions. Three images were used for the experiment: a simple image, presented a Valentino bag on a white background; complex congruent image, presented the bag in a living room surrounded by other objects; and complex incongruent image, placing the bag on a river rock.

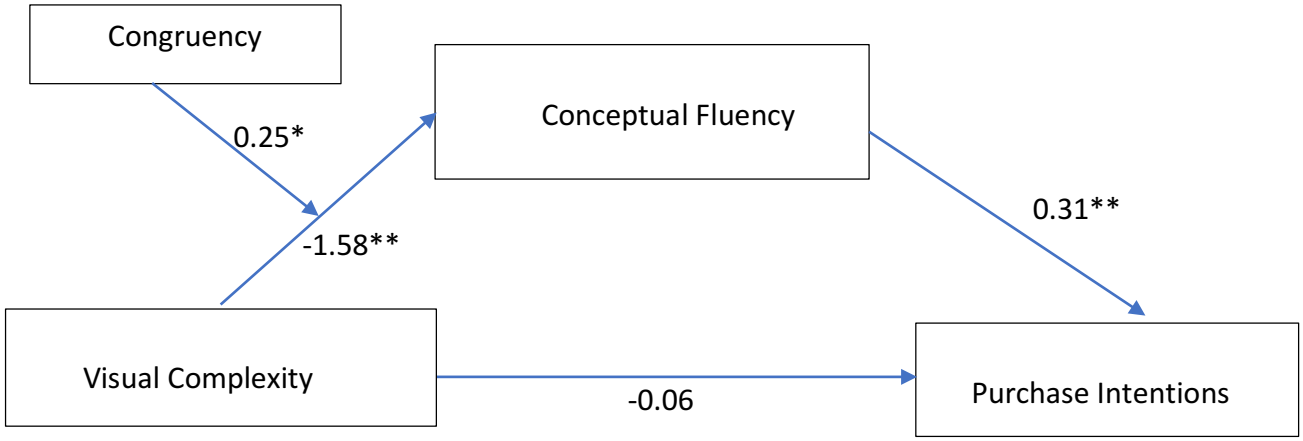
In the experiment participated 76 people living in England (33% male and 67% female participants). All participants provided informed consent. Similar to Study 1, participants first answered some socio-economic questions as well as some questions related to their preferences and sharing behavior on social media. Later, the participants were exposed to a single image (simple, complex congruent or complex incongruent) and then asked a set of questions related to the level of conceptual fluency and purchase intentions. The level of conceptual fluency was measured using the Wu et al. (2016) scale. Participants were asked to rate on a 1-7 semantic differential scale the following factors: “The meaning of the image was easy to understand”, “The message of the image was easy to understand”, “The idea of the image was easy to understand”. To measure the level of purchase intentions, we use the Smith et al. (2007) scale, where participants were asked to rate on a bipolar scale the possibility to purchase the product in a future on the following criteria: “Unlikely-Likely”, “Improbable-Probable” and “Impossible -Possible”.

3.2.1 Results and Discussion

To analyze the relationship between visual complexity and conceptual fluency, the study used ANOVA. The findings revealed a significant difference in the level of conceptual fluency between the simple and complex images similar to Study 1 ($F(1, 71) = 16.39$; $p<0.001$) wherein the simple image was observed to be more conceptually fluent ($M_{simple} = 4.49$; $SD = 1.60$) than the complex images ($M_{complex} = 2.93$; $SD = 1.55$). Similarly, there was a significant difference between complex congruent and complex incongruent images ($F(1, 46) = 10.83$; $p<0.005$) where the complex congruent image offered a significantly higher influence on

conceptual fluency ($M_{congruent}$ = 3.57; SD = 1.45) than a complex incongruent image ($M_{incongruent}$ = 2.23; SD = 1.36).

Figure 1: Study 2 framework



*Note: * = p<0.1; ** = p<0.05*

To study the relationship between visual complexity, conceptual fluency and purchase intentions, Process Model 7 was used (see Figure 1). The results show that the effects of visual complexity are mediated by conceptual fluency (F (2, 70) = 4.73; p<0.01). Also, congruency has a moderating role in influencing the relationship between visual complexity and conceptual fluency. However, the relationship is significant at p<0.1 level.

The findings of Study 2 affirm the Study 1 results for the link between visual complexity and congruency on conceptual fluency. Specifically, the results demonstrate that complex congruent images influence higher levels of conceptual fluency than complex incongruent images. Further, the study also revealed that simple images influence greater levels of conceptual fluency than complex images. These results are inconsistent with previous research suggesting that consumers would perceive easier a complex image, presenting a product within a contextual background, as it has a certain meaning and message (Shapiro, 1999, Scott and Vargas, 2007). In addition, the results of Study 2 show that the effects of visual complexity are channeled through conceptual fluency on behavioral intentions.

4.General discussion

Brands use different strategies for their visual brand communication on social media: some use complex images presenting the product with a contextual background, in a real world settings; others rely on complex incongruent images that place the product in a non-fitted

contextual background; while many others use simple images showing their product on a plain background. These different strategies raise the following question: which type images should brands use on social media in order to influence consumer behavioral intentions? This study provides an answer to this question by examining the relationship between visual complexity, conceptual fluency and purchase intentions.

The current study contributes to the literature in several ways. First, the research demonstrates the varying effects of types of visual complexity on conceptual fluency. Findings of the study demonstrate that simple images influence higher levels of conceptual fluency than complex images. The results of this study contradict received wisdom that consumers would perceive a complex image easier as it communicates a certain meaning and message (Shapiro, 1999, Scott and Vargas, 2007). Second, the study shows that the the level of conceptual fluency differs based on the level of congruency for complex images. Specifically, complex congruent images have greater influence on conceptual fluency than complex incongruent images. Thus, we affirm the moderating role of congruency on the relationship between visual complexity and conceptual fluency. Finally, the study revealed that the effects of visual complexity on purchase intentions are mediated by conceptual fluency, which expands assertions observed in prior research that conceptual fluency positively affects behavioral intentions (Song and Schwarz, 2008, Storme, Myszkowski, Davila and Bournois, 2015).

Luxury fashion brands use different strategies to present their products on social media and compete with one another for consumers' attention, time and purchase intentions. While brands use different levels of visual complexity in communicating their message, the aim of their communication is to make sure that customers process the meaning and message of the presented stimulus easily. This article offers a key solution for luxury brands in this regard. We recommend that managers use simple visual stimuli to increase the meaning and message presented in their communication. While it may sound intuitive, many brands are developing more and more complex campaigns with multi-layered meanings. Such brands may observe that consumers are unable to derive meaning from their complex communication and thus are less likely to purchase their brands. Focusing on simplicity will lead to greater levels of conceptual fluency and in turn lead to high levels of purchase intentions. Additionally, due to the nature of competition and differentiation needs, brands may have to use complex visual stimuli. In this case, we recommend brands to employ complex congruent images than complex incongruent images. In other words, consumers

find it easy to understand the meaning and the message of an image when it is either simple or complex and congruent with the brand's product category.

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