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The effects of static avatars on impression formation across different contexts on social networking sites

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ABSTRACT

When making judgments about others, people use whatever social information is available in online environments. Such is the case for forming impressions of others. One type of such social information is a user's avatar. This study examines different types of avatars (photographs, cartoon humans, and nonhumans) created for task, social or dating/romantic situations to study the effect of avatar type on judgments of uncertainty and task-specific attractiveness. Data suggest various patterns of uncertainty and attractiveness in these situations. Both the graphic from of an avatar and the context of impression formation have effects on subsequent impression formation. Judgments of uncertainty and attraction were affected by both the graphic from of avatar and by the consistency between the context of impression formation and the attractiveness cues of the avatar. These findings are discussed as are implications for future research.

1. Introduction

Social information processing theory (SIPT; Walther, 1992) assumes that people want to (and can) enact interpersonal processes online in order to attain interpersonal goals. One goal that is central to communicators – online or offline – is reducing uncertainty about others (Berger & Calabrese, 1975). In the text-based systems that typified CMC at the time of SIPT's inception, people had few, if any, visual cues available to use for uncertainty reduction purposes. However, SIPT also suggests that people use the information that is available in an environment to accomplish their goals. Thus, even as more modern CMC systems provide increased visual cues – such as Facebook's recent redesigns that emphasize visual information (Rodriguez, 2013), SIPT provides a useful framework to explain how users accomplish interpersonal goals online. The current study examined how increased visual information (of even a relatively low level) in a social networking site (SNS) can impact the impression formation process online.

1.1. The use of visual information (avatars) in SNS

Although some CMC is done through text-only channels (Walther & Parks, 2002), there are growing areas of CMC that incorporate visual information about communicators. One prominent online space utilizing such information is the social networking site (SNS). These sites provide cue-rich arenas for users to communicate using a mix of textual and visual cues. In fact, one of the hallmarks of such sites is that they allow people to "construct a public or semi-public profile" (boyd & Ellison, 2007, p. 211) and part of that profile construction is the inclusion of pictures. For example, Facebook, the largest SNS with over one billion monthly active users as of March 2014 (Facebook, 2014), recently reported that over 350 million unique photos are uploaded to its servers every day (Kotenko, 2013).

One important piece of visual information that SNS users will provide is how they choose to represent themselves in their profile pictures. Visual appearance plays a big role in the impression formation process, both online and offline. This is especially true during first impressions of strangers, when nonverbal information can lead to spontaneous impressions of another person within a few seconds (Schneider, Hastorf, & Ellsworth, 1979) that can be very resistant to change (Kelley, 1950). Content analytic work by Hum et al. (2011) found that the majority of a sample of 150 college student Facebook profile pictures tended to be posed, inactive (not in motion), and containing only the subject. However, a profile

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picture does not have to be a photograph of the person. Instead, it can be what might be more generally referred to as an avatar.

An avatar can be defined as a users' graphical representations in a given virtual environment (Nowak, 2000), which can also include simple icons chosen as a form of self-representation (Suler, 1997). Overall, avatars can range from simple, static images to more animated and dynamic characters that are chosen to represent a person online (Bailenson & Blascovich, 2004). Avatars are different from agents in that avatars represent an actual person, whereas agents are computer-controlled entities. These various types of representations have a long history in online spaces, dating back at least to the use of icons, photographs, and other symbols in personal home pages (Chandler, 1998).

Online spaces, such as SNS, provide users an increased opportunity to control their self-presentation (Walther, 1996). For example, people tend to exaggerate their attractiveness in their dating profiles, reporting the most deception in their profile pictures (Toma, Hancock, & Ellison, 2008). Donath (2007) also points out that people infer various character traits about other people based upon the visual appearance of an avatar. Van Der Heide, D'Angelo and Schumaker (2012) found that users privilege the photographic over textual information on Facebook profiles. Utz (2010) found that people were viewed as more socially attractive when their profile was more "extraverted", including a more extraverted picture. Friends' profile pictures also had an impact on judgments of the profile owner (Utz, 2010; Walther, Van Der Heide, Kim, Westerman, & Tong, 2008). Notably, these are photographs used to represent people in various social profiles. What is unknown is how people will respond to various types of avatars that one might use to represent oneself in SNS. Thus, the following two research questions are offered:

RQ1: How does the graphic form of an avatar (photograph, cartoon human, and nonhuman) influence a receiver's uncertainty regarding the source?
RQ2: How does the graphic form of an avatar (photograph, cartoon-human, and nonhuman) influence receiver perceptions of source attractiveness (social, physical, and task attractiveness)?

1.2. The role of context in judgments of people using avatars

Past research shows that people make judgments based upon the avatars used in various platforms. These perceptions include intelligence (Koda, 2004), sociability and attractiveness (Weibel, Stricker, Wissmath, & Mast, 2010), personality traits (Marcus, Machilek, & Schütz, 2006), uncertainty (Nowak, 2004), credibility (Nowak & Rauh, 2005, 2008), group identity (Kim, 2009; Kim & Park, 2011; Lee; 2004; Lee & Nass, 2002) and affiliation (Lortie & Guitton, 2011; 2012). In general, the research suggests that people make judgments of avatars and the people that use them.

Although people may make judgments of others based on visual cues, this is not the only source of information that may be used. Tagiuri (1969) suggests that people form impressions of others by a combination of object cues and situational context. In fact, past studies involving avatars in CMC (Nowak & Rauh, 2005) have called for more research examining the effects of different contexts on impression formation. We might expect that avatars created to provide information that was consistent with goals of the interaction context would do a better job of reducing uncertainty and increasing liking.

Why might this be the case? Generally stated, information that conforms to expectations should reduce uncertainty, whereas an expectancy violation may increase it. Expectancy violations tend to increase uncertainty (Berger, 1993; Planalp & Honeycutt, 1985). Applied to CMC, an avatar that fits preconceived notions of an interaction context should reduce uncertainty, whereas one that violates preconceived notions of what to expect in a given context may raise questions and increase uncertainty. In FtF settings, an ambiguous interaction context has been found to create more uncertainty than a more specific, task-based context (Rubin, 1977). This suggests that context of an interaction can reduce uncertainty by providing a focal point for initial interaction. In other terms, context helps specify which information in an interaction is important to a task (Kelly, 1955). Without an understood context for interaction, it is difficult to imagine what information participants in previous research might have gained from avatars to help reduce uncertainty or form initial impressions about their interactional partner.

At a broader level, the basic information one usually provides on a social network – starting with the earliest MySpace pages to more popular Facebook profiles – may be thought of in terms of McCroskey and McCain's (1974) classic measure of interpersonal attraction: namely, social attraction, physical attraction, and task attraction. Most SNSs, even sites more aligned with professional rather than personal networking such as LinkedIN, request one to provide their physical picture (physical attractiveness) as well as their hobbies and interests (social attractiveness) as well as their education and work experience (task attractiveness).

The focus on these features of social interaction points to their importance in interpersonal communication and calls our attention to them in efforts to understand online communication. We presume that different expectations for an interaction are established by the belief that an online exchange is motivated by one purpose versus another. Moreover, we should anticipate that uncertainty reduction is governed by the extent to which information received during an online exchange conforms to expectations created by these different contexts. Information that conforms to expectations should reduce uncertainty, whereas an expectancy violation may increase it. In this manner, information interacts with context to influence uncertainty reduction. For example, cues that conform to expectations for a social interaction task might conflict with expectations for a business related task. This leads to the following hypotheses:

H1. The context of an online interaction (potential dating, hanging out, or task achievement) interacts with cues present in an online avatar (physical, social, and task attractiveness) to influence perceptions of uncertainty regarding the source such that cues that conflict with expectations for the interaction context lead to greater uncertainty regarding the source than cues that conform to those expectations.

H2. The context of an online interaction (potential dating, hanging out, or task achievement) interacts with cues present in an online avatar (physical, social, and task attractiveness) to influence perceptions of source attractiveness such that cues that conform to expectations for the interaction context lead to greater source attractiveness than cues that conflict with those expectations.

2. Method

2.1. Overview

A 3×3 mixed design varied the context given to respondents for online interaction and the attractiveness cues of avatars attributed to 15 apparent online partners. The between subjects factor was context. Respondents were randomly assigned to one of three conditions varying the reason given for their online interaction (for potential dating, hanging out, or task achievement). The within