

# The Third Culture: Virtual World Visual Culture in Education

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## Abstract

The visual culture of the virtual world is not an authentically reconstructed real world, but is a space containing a mix of worldwide and ideal cultures from designers' imaginations. The visualized virtual world of Second Life is forming a Third Culture from the combination of all virtual world users' original cultural backgrounds, ideal cultures, and imaginations. The researcher used grounded theory as the foundation of this research. The research methodologies used include observation, survey, and interview. The data for this study was collected entirely in the virtual world of Second Life (SL). The population of this research includes SL instructors, students, and land designers. The research reveals that this third culture system is being developed, shaped, and shared by all virtual world users. Because of the popularity of the animated virtual world and in order to reduce the influence of its hidden curriculum within all fields of education, it is important to promote the teaching of visual culture in education.

**Keywords:** Virtual World, Visual Culture, the Third Culture

## Introduction

Second Life (SL) is a continually developing 3D animated virtual world. In the virtual world of Second Life, academic institutions construct their learning environments as virtual campuses. In a virtual campus, the boundary between classroom, campus, and the rest of the virtual world environment is not obvious. Anywhere imaginable can become a learning environment in the virtual world. Instructors can easily take students off campus for field trips. Students can also travel outside the campus independently. The whole virtual world can be seen as a learning environment.

People in the virtual world of Second Life use avatars to represent themselves, and these avatars can be made to resemble anything from the user's imagination. The gender, age, race, and species of an avatar may be completely different from that of its user in real-life. In other words, when education takes place in the virtual world, who is the instructor and who are the students is not as obvious as in a real-life educational environment.

The main purpose of this research is to understand how people from different cultural backgrounds, when gathered together in the same image-based virtual environment, communicate visually and learn unconsciously from surrounding imagery. People from diverse cultural backgrounds may have different reactions to and perceptions of different formal visual qualities, technical qualities, and atmospheres.

The theoretical background of this article includes cultural theory and visual culture theory. This theoretical background explains how culture is formed and transformed, as well as how visual culture influences other aspects of life and culture. When applying this theoretical foundation to a virtual world, the researcher found the virtual culture of that virtual world to be transformed into a "third culture."

## Theoretical framework: Culture and visual culture

### Culture

Culture is about who we are and how we live. Culture is diverse, and each person may have different cultural identities at the same time (Wang, 2001). “Cultural identities emerge in everyday discourse and in social practices, as well as by rituals, norms, and myths that are handed down to new members” (p. 516). Biological differences between individuals form different cultures of gender, race, and age. Psychological differences between individuals form different cultures of career, hobby, and religion. Differences in the natural environment influence different lifestyles as well. As McFee and Degge (1977) note, “culture is a pattern of behaviors, ideas, and values shared by a group” (p. 272). “Each culture has its own individuality and has a pattern that binds its parts together” (Dewey, 1934, p. 349). In other words, people in the same culture have a similar way of thinking, feeling, and acting (Wang, 2001).

Some scholars believe that culture is homogenizing, while others believe that cultures shift. While the macrocultural system influences individuals, individuals also bring their own unique subcultures into the community. Culture is not stable (Anyanwu, 1998). Lemke (1993) contends that “autonomous cultural dynamics” (p. 3) are present in human social systems and are interdependent with the system of material processes. Hamelink proposes that due to cultural synchronization, the variety of the world’s cultural contexts is disappearing (as cited in Yaple & Korzenny, 1989). Culture is the “result of complex interactions among images, producers, cultural products, and readers/consumers. The meaning of images emerges through these processes of interpretation, engagement, and negotiation” (p. 69). Cultural ideas and values are maintained by visual images because images can communicate, teach, and transmit the behavior, ideas, and values of culture (McFee & Degge, 1977). As Machin and Leeuwen (2007) state, cultural synchronization-in other words, globalization-is associated with cultural imperialism. Mass media is one of the key instruments through which

cultural imperialism (Yaple & Korzenny, 1989) creates a global culture for its products. As Kellner (2006) points out, individuals are educated by media culture unconsciously.

### **Visual culture**

Visual culture in this research includes not only art and design but also everything people create and see in daily life (Jenks, 2002). Seeing is a “cultural practice” (Evans & Hall, 2005, p. 310). When viewers look at the same image in different locations, times, moods, contexts and situations, and when viewers’ age, class, gender, and geographical regions are different, the meaning of the image changes (Jenks, 2002). Furthermore, “to look is an act of choice” (p. 10). People choose the image they are used to and/or interested in and they try to ignore images that are not familiar to them. Individuals’ cultural backgrounds also influence their choice of viewing, and cultural background alters a great proportion of the meaning of images as well.

To understand images is one of the most important issues in visual culture. For viewers, “to interpret images is to examine the assumptions that we and others bring to them, and to decode the visual language that they [images] ‘speak’” (Sturken & Cartwright, 2004, p. 41). When viewers look at an image, meaning is produced not by the image but by how viewers experience the image and in what context the image is seen (Duncum, 1997). Moreover, “living things negotiate the world’s meaning together” (Semali, 2002, p. 9) when people gather, share experiences, develop values, construct culture, and form their understanding and interpretation of images. Therefore, the same image may carry different meanings in the same culture as time goes on.

Images from the visual culture point of view, as Sturken and Cartwright (2004) explain, “are both encoded and decoded” (p. 56). When creators form an image, they are simultaneously encoding the dominant meaning of their culture into that image. Therefore, when viewers from the same cultural background as the image creators view the image, viewers can easily

understand the dominant meaning. Image creators can also choose the time and place to present images in order to influence the meanings understood from the image. In this way, images have been used to represent imaginary worlds and abstract concepts; make meaning; convey information; express sentiments about nature, society, and culture; afford pleasure and displeasure; influence style; determine consumption; and mediate power relations (Rogoff, 2005).

Mass media has been broadly discussed in the context of visual culture. "As these media become simultaneously technical analogs and social expressions of our identity, we become simultaneously both the subject and object of contemporary media" (Bolter & Grusin, 2000, p. 231). Media not only engages human minds but influences human views of life and even human lives (Garcia-Cardona, 2002). When people come from different cultural backgrounds to look at images through different media, this viewing involves "psychological or emotional realism for viewers which exists at the connotative rather than the denotative level" (Chandler, 2002, p. 63).

With today's advanced technology, many people own digital cameras with which to create their own images. They use a web album as their own gallery. They are not only the viewers of images; they are also the creators. These kinds of creation are mostly representational; however, the action that people take by clicking the shutter button of a camera is not just a random act. This action is shaped by specific cultural contexts determined by the image creator's ideology. As Sturken and Cartwright contend, "the world is not simply reflected back to us through systems of representation, but...we actually construct the meaning of the material world through these systems" (p. 13). Representation is not just true seeing, but it creates "only one of an infinite number of possible representations" (Chandler, 2002, pp. 62-63). Therefore, which images people try to represent and how they interpret the images they see all depend on the different cultural backgrounds they are carrying.

Today "images are not only produced and consumed, they also circulate within cultures and across cultural boundaries" (Sturken, & Cartwright, 2004,

p. 315). When people view images from other cultures, the images may contain “noise” they do not understand. Without a shared cultural understanding, no matter how many images people have seen, the given images might still be unfamiliar to them. When the understanding of images is not achieved, misunderstandings occur. People also may be unconsciously influenced by “noise” in images. Therefore, understanding visual cultures and intercultural interaction between different cultures becomes crucial to successful visual communication (Cooper, 1998).

## Research questions

All environments, in the real world and in the virtual world, are filled with didactic images. If educators do not reveal the didactic character of imagery in the virtual world, everyone (teachers, students, and users of the virtual world) may interpret the intention of images differently and may also learn from these misinterpretations. Teaching visual culture will help reveal the hidden curricula of and reduce misunderstandings and unconscious influences from these images.

Given the primary role and potential difficulty of visual communication in the virtual world, the main research question is: What is the didactic character of imagery in the 3D animated virtual world of Second Life?

Sub-question 1: What are the formal and technical qualities that site designers have incorporated in the imagery of SL?

Sub-question 2: How do viewers make site selections and describe their preferences?

Sub-question 3: How do participants describe their process of learning from their visual experience while living in SL?

Sub-question 4: What do participants report they have learned from their visual experience living in SL?

The researcher used observation to answer her first research question: What formal and technical qualities have site designers incorporated in the imagery of SL?

The researcher used a survey accompanied by an interview as her methods for addressing research sub questions two, three, and four. The survey, as well as interview, questions were divided into four sections. Section one covers Participant demographic information. Section two includes Participant site selection and preferences, to answer the research question: How do viewers make site selections and describe their preferences? Section three includes Participant learning from visual experiences and answers the research question: What do participants report they have learned from their visual experience in SL? Section four includes Motivation and process of learning, and answers the research question: How do participants describe their process of learning from their visual experience while living in SL?

## **Research methodology and participants**

The data for this study was collected entirely in the virtual world of Second Life (SL). The population of this research includes SL instructors, students, and land designers. Because users were required by SL to be at least eighteen years old when this study was conducted in 2010, the youngest age of this population was at least eighteen.

The research methodologies used include observation, survey, and interview. The researcher used the mixed method of concurrent triangulation strategy because both qualitative and quantitative data were important to this research. The researcher used these two methods to “confirm, cross-validate, and corroborate findings” within this study (Creswell, 2003, p. 217). This research “integrates the results of the two methods during the interpretation phase” (p. 217). The researcher also used axial coding to code data.

The researcher used “simple random sampling” for collecting the observation location data. Simple random sampling “involves selections at random from the sampling frame of the required number” of locations for the sample (Robson, 2002, p. 261). The researcher made an observation checklist for investigating the general environment, and this observation

checklist also paralleled the survey questions in section one. The researcher took factual field notes as records, and she also took note of her own reflections. The researcher took several snapshots of each place; the number of snapshots taken at each place ranged from 11 to 140, and depended on the size and detail of the place. The researcher also recorded screen videos to capture motion imagery.

The researcher used “stratified random sampling” to collect survey data. Stratified random sampling “involves dividing the population into a number of groups or strata, where members of a group share a particular characteristic or characteristics. There is then random sampling within the strata” (Robson, 2002, p. 262). The sample population of the survey was instructors and students who use Second Life as a learning environment. One hundred survey participants completed the consent form. Of these, 95 began the survey but only 64 finished. Out of the 64 completed surveys, two participants were under age 18, and two others gave answers unrelated to this research. Therefore, the number of authentic surveys in this research is 60.

The researcher used “multistage sampling” for collecting her interview data. Multistage sampling “involves selecting the sample in stages” (Robson, 2002, p. 263). Therefore, the end of the survey included a final section asking survey participants if they would be willing to participate in the follow-up interview and asking those who agreed to indicate the time, place, and communication tool they preferred for the interview. The researcher contacted the survey participants in Second Life after receiving their surveys and Second Life names.

The participants of the semi-structured interview were instructors and students who took the survey and made an appointment with the researcher to do the follow up interview. Fifty participants agreed to do the interview. However, only 25 actually scheduled an interview time and only 20 kept their appointments. Interviews were conducted in synchronized text and voice chat, face to face, and in the virtual world. Depending on the communication methods and the content of the interview, the interview time ranged from one



hour to two hours. Only one participant chose to use voice chat for the interview and nineteen participants chose to use text chat.

The researcher compared and contrasted the similarities and differences from the observation checklist with the data from survey section two: Participant site selection and preferences. To answer the first research question, the researcher generated column and bar charts to illustrate the differences and similarities between observation and survey data sets. The researcher compared and contrasted patterns found through overall observation, survey, and interview data when compiling the final results.

The researcher used grounded theory as the foundation of this research. As Robson (2002) states, “a grounded theory study seeks to generate a theory which relates to the particular situation forming the focus of the study. This theory is ‘grounded’ in data obtained during the study, particularly in the actions, interactions and process of the people involved” (p. 190). The researcher developed her theory of the Third Culture in the virtual world from the research data.

## **Findings**

Some interview participants described instances when they could not, at first, understand the meaning of imagery seen in Second Life. They needed to discuss the imagery with its creator or search for information about the imagery in order to understand it. Images in the virtual world challenge conventional knowledge about images, meaning, and culture. The meaning of images in the visualized virtual world is based on the dominant cultural meaning intended by site designers. The dominant meaning of a culture is the ideology of that culture. Ideology is a pervasive process about which people may not be conscious, but in which all people engage. Ideology is the representational means by which people experience and make sense of reality.

When interviewees viewed the same image provided by the researcher, they gave very different responses. As Adelson and Bergen (1991) state, how people perceive things actually varies because people have different

experiences. Human beings respond to and make sense of what they experience, and they accommodate new experiences to old ones (Dewey, 1934; Taylor, 2000). The relationship between images and virtual-world users is not just direct or transparent (Burnett, 2004, p. xiv). Users in the virtual world learn from the images they see unconsciously, and how they understand the images may not follow the original meaning intended by site designers. However, regardless of what users see in the virtual world and what they think the images mean, these images will influence how users see and think about images in the future.

Because human mental life reflects cultural reality, new technology does not just link computers but also connects all of humanity together, sharing their cultural experiences with the world (Masalela, 2005). In the virtual world, the distance between different cultures is closer than in the real world, and culture is transmitted more rapidly and more easily than in the real world; because of this closeness, virtual world residents not only experience technological and presentational limitations, they also encounter cultural adaptations (Traub, 1994). When people come from different cultural backgrounds to look at the same images in the virtual world, this viewing involves “psychological or emotional realism for viewers which exists at the connotative rather than the denotative level” (Chandler, 2002, p. 63).



Figure 1 Site 1 Insilico  
These Trees



Figure 2 Site 2 The Space Between

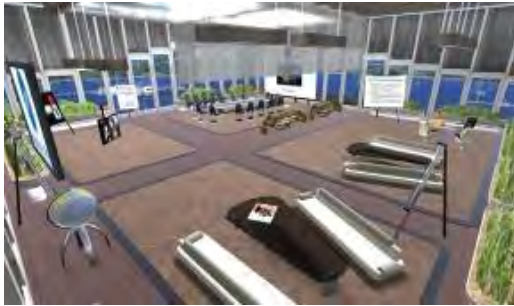


Figure 3 Site 3 Kamimo Island



Figure 4 Site 4 Avilion: Medieval Fantasy Role Play Community

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According to the interview data, the survey participants' favorite site genres did not follow their previously stated preferences of four sites presented by the researcher (see Figure 1-4). This discrepancy parallels Jamieson's (2007) statement that human visual perception is constantly adjusted, re-patterned, and engaged with social and arbitrary signs; therefore, sometimes how people perceive things is shaped and changed by their previous experiences. In other words, previous experiences can re-form mental frameworks (Eisner, 1997; Groom et al., 1999; Jamieson, 2007). Eisner (1997) states that visual perception becomes increasingly complex and refined as people extend their life experience. "We become familiar with our environment when we begin to recognize certain regularities in our experience" (Efland, 2002, p. 24). When people repeat experiences, their experiences may move from short-term to long-term memory (Barry, 1997; Kellogg, 1995). In other words, people do not need to have direct experience to form long-term memories; visual experience in the virtual world also forms long-term memories.

The interview participant responses parallel the assertion of cognitive Gestalt psychologists Barry (1997) and Kellogg (1995), that synthesizing and integrating visual images and mental images facilitates people's visual experience to future visual perception, and helps people structure knowledge. Home also states, "realities by which we see existence are not really reality but an intellectual creation" (as cited in Anyanwu, 1998);

therefore, virtual worlds are also embedded in different cultural backgrounds (Penny, 1994). Virtual worlds give people experiences of images, perceptions, and thoughts; in this way people can visualize, manipulate and interact with complex data (Aukstakalnis, 1991; Burnett, 2004).

Some interview participants described instances when they needed to discuss imagery with its creator or research imagery in order to understand it. This statement confirms that the meaning of images is not only constructed in each individual's mind, but is also constructed by sociocultural background. Learning is also influenced by sociocultural background. According to Efland (2002) meaning is not passively received but is constructed by the learner. In the virtual world, learning activities allow students to interact with information from a first person perspective (Dickey, 2005). As Lindlif and Shatzer (1998) stated, "meanings are embodied in practice" (p. 1). Because people do not get the same information from the viewing the same image, they need to learn to assign meanings to the symbols they use. The cultural background of the viewer influences how powerfully the imagery of the virtual world may affect them. Therefore, when the cultural backgrounds of image viewers and image producers collide, visual culture begins to transform. As a new culture is forming through the imagery of the virtual world, users will need to learn how to communicate visually in that virtual world.

Educators need to understand this new culture so they can help students learn to communicate visually with other virtual world residents. As Ess and Sudweeks (2006) point out, in the online learning environment, intercultural communication focusing on interactions between students is more important than understanding individual cultures.

## **Second Life culture**

In the virtual world of Second Life, there are hundreds of events and thousands of activities every day. As Wang (2001) states, "cultural identities emerge in everyday discourse and in social practices, as well as by rituals, norms, and myths that are handed down to new members" (p. 516). According to McFee and Degge (1977), "culture is a pattern of behaviors,

ideas, and values shared by a group” (p. 272). “Each culture has its own individuality and has a pattern that binds its parts together” (Dewey, 1934, p. 349). In other words, people in the same environment, such as Second Life, are forming their own culture and eventually the ways of thinking, feeling, and acting will follow similar patterns.

Most research participants are not only viewers in Second Life but also builders in Second Life. Second Life turns viewers into active users and thereby changes the concept of images (Manovich, 2001). As Evans and Hall (2005) state, seeing is a “cultural practice” (p. 310). The meaning of images in the virtual world exists in a simultaneous circulation between viewers and designers (Appadurai, 2005). According to Freedman (2003), “An expressive object, regardless of the meaning of the production for the artist, does not have inherent meaning; the experience of an audience with visual culture makes it meaningful” (p. 69). McPhail (2002) also states, many Internet users around the world have more in common with others in the online community than in their real-world communities, and the culture they form in the virtual world is not only a subculture but a mainstream hyperculture shared by all online users.

As the data show, in the virtual world of Second Life, culture comes from around the world with different backgrounds and levels. Second Life becomes a ritualized place where users have to be initiated into one kind of its shrines or another. As Taylor (2000) states, “Everything that we create somehow affects everything around us. Therefore, everything we do, read, and create plays a part in our experience” (p. 380). The culture in Second Life is blending to create a unique Third Culture.

## **Discussion: Virtual world visual culture**

The survey and interview data of this research show that most of the reconstructed cultures in the virtual world are not authentic, but have instead been simplified, mixed, and twisted from authentic real world cultures. In the virtual world of Second Life, Chinese sites may be reconstructed by Japanese designers, and Japanese sites may be reconstructed by

Americans. When reconstructing a culture in the visualized world without having been an authentic part of that original cultural environment, the creator is not reconstructing the original culture, but is instead creating an interpretation—a new culture. Every culture's stability depends on how residents understand the meanings of the experiences circulated in that culture. Meanings can be “submitted to disassembly, reassembly, investment and exchange” within the same culture (Harasim, 2006, p. 109). Foucault (1980) also notes that technologies of production permit people to produce, transform and manipulate things. Site designers produce, transform, and manipulate different cultures in the virtual world visually; site designers are forming a new culture.

### **Second Life culture**

As many interviewees declared, it is important to realize that Second Life is not a game, but a big world similar to the world of real-life. People react, reflect, and participate in this online environment. Second Life is different from other visualized virtual worlds because it is a virtual world in which all content is created by users. All of the users in this virtual world can create 3D objects to form or change the look of this world. As Lindlif and Shatzer (1998) state, “human beings act on the basis of collective understandings that are continually negotiated through linguistic and other symbolic practices. These cultural understandings are neither mentalistic entities nor a correspondence of physical reality” (p.1). Culture does not originate from culture but from the integration of all human beings who are situated in the same environment.

As the survey data indicate, even though users describe themselves as explorers, they only explored those places they were interested in. It is a psychological necessity for all human beings to belong to a culture. Culture is the “result of complex interactions among images, producers, cultural products, and readers/consumers” (Sturken, & Cartwright, 2004, p. 69; see also Jamieson, 2007). Cultural ideas and values are maintained by visual

images because images can communicate, teach, and transmit the behavior, ideas, and values of culture (McFee & Degge, 1977).

In human culture, people create sign systems to visually represent, record, and make sense of the world geographically and historically (Bolter, 2003; Jamieson, 2007; Semali, 2002; Smith-Shank, 2007). Culture is an arbitrary sign system; it is not stable but is a process. The meaning of culture is always changing and may be modified by images from different cultures; cultural meaning is the result of interactions between images, culture, products, creators and viewers (Jenks, 2002). As Sturken and Cartwright (2004) state, "Images are not only produced and consumed, they also circulate within cultures and across cultural boundaries" (p. 315). McFee and Degge (1977) note that signs and ideas are fundamentally inseparable in each culture because culture is the process of human behaviors, ideas, and values that are shared by the same group. In other words, when people create signs, these signs are arbitrary and culturally bound because the sign systems are based on a shared cultural background (Dewey, 1934; Denis, 1989). Images form cultural identities and serve a particular meaning within one culture; the fundamental value of an image is the meaning the image carries (Burnett, 2004; Duncum, 1997). Viewers and images are "codependent" (Hayles, 1999, p. 20) because the meaning of an image changes with culture over time. When images are seen at different times or in different places, they may tell viewers a different story (Pettersson, 1993; Smith-Shank, 2007). In other words, images reflect who the viewer is by how the viewer understands and interprets the meaning in images (McFee & Degge; Mitchell, 2005).

Culture is about who we are and how we live our lives. The First Culture the researcher defines is the Heritage Culture (Efland, Freedman, Stuhr, 1996), also known as Macroculture (Wang, 2001). This is the dominant culture that people live in and this influences the majority of the people who live within it. The Second Culture is the Interest Groups (Efland, Freedman, Stuhr, 1996), also known as the Subcultures (Wang, 2001). According to Mercer (1958), subcultures are subgroups in a society; each of the groups

has its own characteristics and ways of thinking and acting (as cited in Yinger, 1960). The Third Culture is an intercultural, worldwide mix of cultures. It exists in virtual worlds that are created by users who speak difference textual languages. Because the Third Culture cannot be language dependent, users learn primarily about each other's culture through visual imagery, whether the information learned is culturally authentic or not.

Immersed in the Third Culture, users learn and relearn multiple meanings and contradictions of imagery. In the Third Culture, the meanings of images, built by users, are negotiated by Third Culture residents to create the culture.

## Conclusion

The visual culture of the virtual world is not an authentically reconstructed real world, but is a space containing worldwide mixed and ideal cultures from designers' imaginations. The visualized virtual world of Second Life is forming a Third Culture from the combination of all virtual world users' original cultural backgrounds, ideal cultures, and imaginations. This third culture system is being developed, shaped, and shared by all virtual world users. So that they may understand this new culture, it is imperative for all virtual world users to be able to interpret the visual culture they encounter.

Because of the popularity of the animated virtual world and to reduce the influence of its hidden curriculum within all fields of education, it is important to promote the teaching of visual culture in art education. According to Gair and Mullins (2001), "the hidden curriculum is not something we must look behind or around in order to detect; in most cases it is plainly in sight and functions effortlessly" (p. 23), and visual culture impacts how people communicate with others through visual images (Miller & Burton, 1994). As Myles (2004) states, the "visual system may enhance the ability of children and youth with social-cognitive challenges to understand their environment, including the hidden curriculum" (p. 19).



Images in virtual worlds unconsciously influence people's feelings about learning (Barry, 2006).

McFee and Degge (1977) state that the mental lives of people become more complex when their visual experiences grow. Human beings learn and relearn the meaning of images until they become part of the visualized virtual environment, and they move from understanding the denotation of images to the connotation of images (Semali, 2002). No images in the virtual environment are presented accidentally; all images in virtual worlds deliberately appear (Zhai, 1998). It is important to reveal the hidden curriculum of images in the visualized virtual learning environment by teaching visual culture in art education; as Anderson (2002) states "once revealed, the hidden curriculum becomes negotiable advisable to all participants" (p. 117).

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