AN ABSTRACT OF THE THESIS OF

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Title: Exploring the New Visual Environment as a Strategy to Facilitate Successful Student Adjustment to Culture Shock Associated with Study Abroad

Abstract approved:

Hua-yu Li

This thesis seeks to explore how visual cues in the new environment affect Chinese international students studying abroad in the United States. Through open-ended interviews, Photovoice, and focus groups, Chinese international students shared their perspectives on their orientation, residence, campus places, color association, and on-campus place preferences. During the study, Chinese international students learned more about their visual perception and increased their awareness of how visual cues in the new environment may influence their emotions while studying abroad.

The study results revealed themes relating to students’ perceptions of their new visual environment that can affect their adjustment. This study suggests additional types of university support that could be useful to Chinese international students and their adjustment to the new environment, thus reducing culture shock of various degrees.
Exploring the New Visual Environment as a Strategy to Facilitate Successful Student Adjustment to Culture Shock Associated with Study Abroad

by
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I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Laura DeVito, Author
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Chapter 1: Introduction

University study abroad programs have been in existence for many years, and recent trends suggest that more university students, especially Chinese students, are participating in these experiences (Sayers & Franklin, 2008, p. 79). Study abroad programs are valuable because students "acquire global-mindedness, grow intellectually, and develop personally," (Hadis, 2005, p. 3). Unfortunately, research suggests that students are not always prepared for the culture shock that awaits them. Culture shock has been defined as "a disease precipitated by the anxiety that results from losing all familiar signs and symbols" (Oberg, 1960, p. 177), and it is an issue that affects students who participate in study abroad programs and also may linger upon their return home.

Current Status of Student Preparation for Study Abroad

Most universities provide a general guide to prepare students who will be studying abroad. This study abroad guide provides information about how to prepare for the culture of the country such as legal, health and financial issues, as well as what to pack, and how to cope with the effects of culture shock and reverse culture shock (NAFSA, 2007). For example, the University of Minnesota and the University of Pittsburgh, leading universities in international education, have detailed preparation for pre-departure, for living abroad, and for returning home.

Apart from the travel logistics, two areas of orientation are common: cultural knowledge and social networking. Cultural knowledge relates to the values and customs of the host culture. For instance, the International Programs website at Oregon State University provides this information for study abroad student preparation: “U.S.
Americans are very informal people. First names are commonly used. In a college atmosphere we may be encouraged to call our professors by their first names. We are also accustomed to an informal setting where students can eat or drink in class, and the professor may sit on the corner of his desk or swing his feet. Some professors who encourage discussion may not mind if a student interjects or ‘jumps in’ while the professor is lecturing. All of this can be considered to be quite rude in other cultures” (Oregon State University, International Programs, 2007).

Student preparedness and adjustment also relates to a proper social network that allows them to confide and feel connected, or the dismal feelings associated with culture shock will prolong and cause undue stress for them. "Social support, in terms of network size, diversity and quality were significantly associated with the degree of culture shock," was the outcome of a study conducted by Stella Pantelidou (2006, p. 780).

In contrast, there is little material on how the visual cues in the environment may affect the study abroad student, and little to no information on coping techniques related to this subject. This study explores how visual cues in the new environment influence Chinese international students studying in the United States.

Although a variety of university study abroad orientations and services exist, there is room for improvement. Research of some university programs by Richard D. Lambert concludes that, "any orientation to a foreign educational setting tends to be very general and only modest help to the student coming as a stranger into an unfamiliar institutional setting. Guidance is rarely given as to how to succeed or even survive within that environment" (Lambert, 1993, p. 313). Consequently, if the guidelines given by the
university to the student are too broad in nature, a student may not have adequate preparedness while studying in another country. For example, in the case of *Bloss v. The Minnesota Board of Regents*, the student sued for "negligence regarding the choice of housing, inadequate transportation, inadequate warnings of risks and failure to protect the students from foreseeable harm" and won the case (Birtwistle, 2002, pp. 236-237).

Although universities have devised some programs to help acclimate students going abroad and international students who are living in the U.S. currently, there is a need to improve these programs to meet student needs including adjustment to culture shock. At this time, there is little evidence or substantial support for addressing the visual cues in the environment and how this factor may affect the amount of culture shock students experience while moving to and from the host culture.

The purpose of this study is to examine the visual cues in the new environment in order to gain a better understanding as of whether they may influence students while studying abroad. Therefore, I have chosen to focus on how visual cues in the new environment affect Chinese international students while studying in the United States. If these new visual environmental cues are a factor in hindering or facilitating student adjustment, I plan to provide recommendations for both university personnel and international students that can enable them to have a more successful experience while studying abroad.

*My Related Experience*

I think it is necessary to address and examine my own bias as a researcher as I conducted this study. For the reader, it is important to look at my personal perspective,
and how it may affect how I present, interpret, and draw conclusions during the research
g on. Therefore, I will give a glimpse into my perspective and how the idea of this research began.

I have always been a very visual person. My background in the arts helped sculpt my perspective from a very young age. My ideas about visual perception, and how they may change throughout the time period someone is abroad was formed while I was studying and working in Clermont-Ferrand, France, for approximately six months. During this time, I was taking graduate photography studies and teaching English at the university. From the first week to the last moment I was there, I always had my camera with me. In the beginning, I didn’t notice anything particular about the photos, besides what I had been taught in my art classes about composition and style.

A few months later, while I was looking through my photos to edit or recollect what I had seen, I realized my eyes were seeing differently. In the beginning, my eyes focused looking upwards and on signage; and then later, I began to focus on people more and their environment. Not only had I noticed my changing perception over time within the photos I had taken, but I also noticed that my perception was different from my friends who were native to the country or region. These observations led me to question whether American students studying abroad and international students attending United States universities have different visual perceptions and whether those potential differences influence the stresses of culture shock.

The second time this thought occurred to me was while I was living and working in Xi’an, China for approximately one year. Photography was still a passion of mine, and
I was taking photos every chance I could find. Because I was a minority in China, another reason I carried a camera around was to take the attention off of me, and direct it to the Chinese people. Therefore, my motive was different in France, because in France I could pretend to be a native as long as I kept silent. Photography led to some work for three of magazines, one multi-national and the others Chinese. During this time, however, I could see that there were subtle changes in how I looked at my environment throughout different time periods in the year.

While in China, I realized that a second passion of mine was to combine international experiences with higher education. I decided I needed more education to pursue a career in study and work abroad in higher education, and selected Oregon State University’s Interdisciplinary Studies program because it allowed me to combine my areas of interest: Political Science (emphasis in Asia/China), College Student Services Administration, and Photography.

When beginning my first term at Oregon State University, I knew that I wanted to research a topic that included Chinese international students, the stages of culture shock, and visual communication. My interest in these areas grew and my exposure to living in China and its amazing culture, my own experience with culture shock while abroad, and my fervor for photography. First, I considered documenting American students attending Oregon State University who planned to study abroad in China, as well as Chinese international students attending Oregon State University. Even though this research involved visual perspectives and satisfied my need to use photography, I realized that I also wanted to examine student perceptions in greater depth and focus in on one culture,
and I chose Chinese. I decided that I should speak with Chinese international students directly and try to understand their visual perspective. The current research question studying how visual cues in the new environment influence Chinese international students came from their experience, and perspectives.
Chapter 2: Literature Review

This section contains a review of literature regarding the stages of culture shock, visual cues in the built environment, selection of the environment, and cultural meaning of the visual environment. Within this review, I will intertwine culture shock literature with visual environment literature to show how strong a relationship the two have with each other. The main theorists highlighted will be Oberg on culture shock, Kaplan & Kaplan on the visual environment, and other cited specialists in those two areas will also be addressed. In addition, I will examine existing theories of the visual environment by Lynch, Kennedy, Cangelosi and Lemoine, Markus, Dravigne, Stichler, and Herzog, in order to incorporate a spectrum of characteristics and perspectives about the built environment and give a holistic outline. Showing the relationship between culture shock and the visual environment will help me attempt to show how the visual cues in the environment may affect international students studying abroad and provide a platform for future studies.

Theory of Stages of Culture Shock

A specialist on the influence of the environment on people explains: “The whole of human life . . . is a dialogue between us and our environment . . . a sequence of questions and responses” (Fox, 1978, p. 346). Fox points to a pertinent relationship between people and their environment that facilitates responses. In the case of studying abroad, a person must create a new and stable relationship with the country of sojourn in order to adapt successfully.
The four stages of culture shock as described by Oberg (1960) are: honeymoon, the emptiness or rejection phase, the conformist or acceptance phase, the assimilation or complete adjustment phase, and the reverse culture shock phase. The honeymoon phase is a time in which sojourners feel excitement and believes the environment is friendly and full of opportunity. During the emptiness and rejection phase, sojourners feel that everyday tasks are more difficult, working within their environment takes more effort, and feelings of homesickness become more evident. The conformist or acceptance phase occurs when sojourners begin to have a routine and becomes more accustomed to the environment. The assimilation or complete adjustment phase is when sojourners feel a part of the environment, and no longer an outsider. Finally, during the reverse culture shock phase, sojourners return to their native environment and exhibit the same characteristics of the first four phases, because they are readapting to their cultural norms. All of these phases provide a transition period including emotions ranging from euphoria to depression.

Since Oberg, there have been different adaptations of what the stages of culture shock should look like. Craig Storti (1999) takes the route of cultural awareness, rather than culture shock. Storti’s stages of awareness are: (1) Unconscious Awareness (blissful ignorance), (2) Conscious Incompetence (troubling ignorance), (3) Conscious Competence (deliberate sensitivity), and Unconscious Competence (spontaneous sensitivity).

The stages of culture shock have also been variously displayed as a triangle or U-curve. Elizabeth Marx (1999) views culture shock as wavering, less severe triangle
compared to Oberg’s model of adaptation by adding recovery phases within the traditional Honeymoon and Culture Shock stages. In “Maximizing Study Abroad” by Paige, Cohen, Kappler, Chi, and Lassegard (2006), the stages of culture shock are called Euphoria, Cultural Confrontation, Cultural Adjustment, and Cultural Adaptation are identified as a U-curve based on a sense of satisfaction and time in the country. Throughout the years, the stages of culture shock by Oberg have been consistently referenced in culture shock literature, but the terminology has been somewhat modified from shock to adaptation or awareness of the culture.

*Theories Intertwining Visual Environment Cues and the Stages of Culture Shock*

Stephan and Rachel Kaplan are two prominent specialists in the area of how the visual aspects of the environment influence a person’s perception. For example, stages of culture shock by Oberg can be linked to the influence of the visual environment. The emptiness and rejection phase explains how sojourners may feel when they are making an extra effort, and this extra effort is supported by the idea that “Recognizing objects . . . is far more demanding than it might appear” (Kaplan & Kaplan, 1978, p. 23). Therefore, if sojourners have to recognize a new set of objects compared to people who are native to the area, they may feel weary and rejected. Also, “things tend to lose their identity when they are displaced,” (Kaplan & Kaplan, 1978, p. 26) which creates a possible further sense of instability for sojourners within the environment. These emotions contribute to positive and negative stresses for sojourners. They may be experiencing the stress of culture shock as follows: "Stress is a process by which the environmental events or forces-stressors-threaten or harm an” individual's "existence or well-being by which the
organism” learns to begin "coping with it, and adapting to it" (Feimer & Geller, 1983, p.130-131). Also, another way to interpret how stress may occur within visual perception of culture shock is “when cues are ambiguous, we can accept them as such and postpone judging pending their clarification. But perceptual mechanisms do not work that way. Instead, we are impatient, and we struggle to achieve clarity in the definiteness” (Hilgard, 1978, p. 41). The concept of “Mental Maps” addresses the idea that people define an image based on the mere representation of what it can provide (Stea, 1978). A “Mental Map” can be defined as “modes of organization” that have been called “images,” “cognitive maps,” and “schemata” (Stea, 1978, p. 45) Therefore, people seem to be programmed about how things ought to be, although this is not always the case when newly adapting to another culture.

The unfamiliar environment may be a determiner of the amount of stress the individual is experiencing. An individual may feel lost in an unfamiliar environment, causing feelings that stem from loss of survival techniques such as not knowing an escape route, finding necessary things to live or protecting oneself. In the study by Day, Stump, and Carreon (2003), it was discovered that the subjects “specifically described a fear of getting lost” and “noted that they felt better able to handle potential conflicts in familiar places” (p. 315). Also, “researchers tie fear of the unfamiliar environment places to over-stimulation” (Day et al., 2003, p. 315). Consequently, the unfamiliar environment comprised of new visual cues may cause more stress for the sojourner.

In terms critical incidents and growth from abroad experiences, it “is evident in descriptions of relationships to places as reflections of journeying in the world,” (Manzo,
which shows attachment through familiarity. Growing connections between an individual and a place can “become meaningful as transitional markers or symbols of critical life events, such as a benchmark in a significant relationship” (Manzo, 2003, p. 53). Thus, place attachment may play an important role as to how the sojourner acclimates to the new visual environment. Tuan’s notion that “space” transforms into “place,” explains how the individual gradually assigns meaning through experience within the space, therefore transforming it into a place, and perhaps a home (Tuan, 1974).

In addition to the impact of the environment upon the sojourner, Proshansky's Theory of Predictions of Cultural Differences examines how one person may live in a culture where a shape may not be dominant, and therefore the "inference pattern might be absent where objects are truly" present (Proshansky, Ittleson, & Rivlin, 1970, p. 154). Thus, one person may sojourn to another culture and be exposed to this dominant pattern for the first time, and have a different reaction since their mnemonic response may not be developed from one who is native to the environment, creating a possible stress reaction. It has been reported that "the physical environment is important as it may induce stress by the ways in which it affects individual needs" (Rashid & Zimring, 2008, p. 152). Therefore, this observation may directly relate to the visual perception of the environment by the sojourner in regard to study abroad preparation and adjustment.

Existing Theories of the Visual Environment

“Environmental images are the result of a two-way process between the observer and his environment. The environment suggests distinctions and relations, and the observer – with great adaptability and in the light of his own purposes – selects,
organizes, and endows with meaning what he sees” (Lynch, 1978, p. 154). There have been numerous studies done in learning and healing environments such as schools, offices, and hospitals, and they have shown that the physical environment monumentally influences a person psychologically and sociologically. Color, light and aspects of nature are highlighted in this section.

Regarding research done in schools, it was shown that depending on the age of the individual one color palette may be more suitable than another. For instance, research has shown that primary students tend to be more stimulated by "high-contrast and bright colors such as red, orange and yellow. . . . Adolescent students may respond better to colors such as blue or green that are less distracting or stress-inducing” (Kennedy, 2005, p. 5). Therefore, within a culture of ages, the type of color that benefits the individual may change. Office spaces have been another focal point of research on the physical environment and its effects on stress, employee satisfaction, and job performance (Cangelosi & Lemoine, 1988, p. 71).

Light is a major contributing factor to a person's psychological and physiological well-being. Studies have shown that employees feel more content and happy when exposed to natural light versus standard fluorescent lighting that was usually used in companies. Natural light has been proven to give people essential vitamins that raise endorphins and make them happier overall; however, there is a limit to the amount of natural light before it creates the reverse negative effect (Markus, 1967).

Plants and nature in office spaces have been studied as well, and in the article, “The Effect of Live Plants and Window Views of Green Spaces on Employee
Perceptions of Job Satisfaction,” the results showed that "82% of the 'plants/windows' group and 69% of the 'plants/no windows' group stated that they felt 'content' or 'very happy' compared with only 60% of the 'no plants/windows' group and 58% of the 'no plants/no windows' group" (Dravigne, Waliczek, Lineberger, & Zajicek, 2008, p. 185). Consequently, this study shows that workers with plants and windows were much more content and in a happier state than those who were exposed to no plants or windows and supports the connection with the physical environment and stress.

Hospitals are also pertinent because it is a place where people spend their daily lives, and it is also a place where people are recovering from illness, disease, and injury. If the environment "incorporates natural light, elements of nature, soothing colors, meaningful and varying stimuli, peaceful sounds, pleasant views, and a sense of beauty," research has "indicated that patients have a shorter length of stay, take less medications for pain, and have fewer negative notations in the nursing notes than those who are placed in an environment that is not sensitive to these conditions" (Stichler, 2001, p. 2).

Attention Restoration Theory (ART) has been used to measure how the environment affects the individual in four different components: being away, extent, fascination, and compatibility (Herzog, Maquire & Nebel, 2003, p. 159). The “being away” component “refers to settings that call on mental content different from that ordinarily elicited” (Herzog et al., 2003, p.159). The second component is “extent” which is the “content and structure that . . . can occupy the mind for a period long enough to allow directed attention to rest” (Herzog et al., 2003, p. 160). The third component is “fascination” which refers to “effortless attention,” and the fourth component is
compatibility, in which “there is a good fit between an individual’s purposes or inclinations . . . by the setting” (Herzog et al., 2003, p. 160). The sojourner may exhibit these characteristics when residing in a new environment, because they are reacting to unfamiliar content and may not be allotted enough rest from their directed attention. The “fascination component” is healthful, but a short-term benefit. The compatibility component is the final desired stage in similarity to the final culture shock stage, assimilation or complete adjustment.

Selection of Environment

Personalization of space is a factor that may affect the well-being of the individual. If one is not content with their environment, they may change the area to make it more compatible with their personality. The Five-Factor Personality Theory, which deals with the relationships between individuals and their environment, consists of extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness (Wells & Thelen 2002, p. 303). Wells and Thelen (2002) assert that the place of employment, gender, employment, and what the individual’s occupation are all influencing factors on how and to what extent they may personalize their working space. Another potential influencing factor is whether the individual is from another culture. The freedom to change the new environment may be both positive and empowering, because it gives them more control of their environment.

Bandura identifies three types of environments: Imposed Environments, Selected Environments, and Constructed Environments (Bandura, 1986). The imposed environments “are those that individuals experience whether they choose to or not”
(Jones, Taylor, Dick, Singh, & Cook, 2007, p. 540). The selected environments “are those that we choose to experience” and the constructed environments “are those that we create” (Jones et al., 2007, p. 540). A sojourner may choose to live abroad, but not fully realize that the new attributes the environment may have are very different from their home country. Once the sojourner accounts for these unforeseen characteristics, they may choose to construct or manipulate that environment in order to lessen the heightened stress due to over-stimulation of new visual cues. Ways of changing their personal space in the new environment is niche-building by adding “personal relationship items” or items encompassing hobbies and activities that interest the individual (Jones et al., 2007, p. 541). Personalization is a very important element, because it “can serve as a window into the attitudes, behaviors, life histories, identities, and personalities of the residents” (as cited in Jones, Taylor, Dick, Singh, & Cook, 2007, p.541).

*Cultural Meaning of the Visual Environment*

To understand how the visual environment may influence people, it is important to consider potential cultural meanings associated with aspects of the visual environment. “All cultures have a visual aspect. For many people, the visual aspect of culture – its imagery, signs, styles, and pictorial symbols – is the most powerful component of the complex and sophisticated systems of communication that are a constitutive part of culture” (Bal, 2003, p. 13). “The environment thus communicates, through a whole set of cues . . . the cues are meant to elicit appropriate emotions, interpretations, behaviors, and transactions. . . . Thus the environment can be said to act as a mnemonic” device (Rapoport, 1982, p. 80). “Physical elements not only make visible and stable cultural
categories, they also have meaning,” which contributes to an individual’s increased
reassurance or anxiety depending on the visual cues they have learned or experienced
(Rapoport, 1982, p. 15). It has been argued that color may influence each individual
differently, depending on the cultural background, “for instance, white is the color for
weddings in Western societies but for funerals in traditional Chinese culture. Red is
associated with rage in the United States, but with happiness in China” (Carroll, 2005, p.
50). As a result, recognizing potential cultural variations regarding the assignment of
meaning to the visual environment is important.

Culture Shock and the Visual Environment

Although significant research exists regarding culture shock, there has been little
research done about visual stimulus of the environment, as previously stated. Culture
shock is fundamentally a person’s reaction to an abundance of new stimuli; eventually
the person may adapt to the new stimuli and develop a routine, ultimately becoming a
part of the environment. The preponderance of world cultures are predominantly visual
societies, therefore, the environment that surrounds us may create certain stresses on an
individual and may increase the likelihood of the symptoms of culture shock. Evidence of
this can be seen in a quote when describing culture shock: re-entry culture shock: “Even
your old street may have changed. The house next to you has been renovated and painted
a different color, and the house on the other side has a new garage (which makes your
dining room dark). The old oak tree out front came down in a thunderstorm last year and
your yard and living room are much more exposed than they used to be. Meanwhile, a
hedge out back has grown so tall that your kitchen no longer has a view of the park. The
place just doesn’t feel the same anymore” (Storti, 1997, p. 17). Therefore, colors, shape, light, space, nature, and overall design may influence the transition stages of culture shock experienced by the sojourning student.
Chapter 3: Methods

Purpose of the Study

This research project explores how the new visual environment influences Chinese students and their adjustment to the environment while studying in the United States. The ultimate goal for this study is to improve our understanding of what visual environmental cues facilitate or hinder Chinese student adjustment.

The related research seeks to address the larger questions regarding what visual cues in a new environment influence Chinese students’ experience abroad. To answer this question, the investigator collected Chinese student perceptions related to color, light, and design on campus and at their residences through in-depth individual interviews and a focus group including a Photovoice technique.

This chapter contains 1) a description of the design methodology; 2) selection of participants; 3) a description of the open-ended interview guide and focus group guide construction; and 4) data analysis.

Methodology

This study is designed to explore 1) new visual cues such as the effects that color, shape, space, light, nature, and overall design in their residence and campus places may have on students’ mental and emotional health based on the culture shock that they experience while they participate in study abroad programs; and 2) possible visual environmental strategies that may assist these students to cope more successfully with their new environment.
Due to the exploratory nature of this study, a qualitative descriptive approach that provided rich description by participants was adopted as the most fitting to answer the research question (Patton, 2002). Methods branching from of the qualitative approach included in-depth open-ended interviews, Photovoice, and a focus group.

The open-ended interviews and focus group methodology were selected because face-to-face interviewing includes “nonverbal communication” which is crucial when communicating interview questions accurately with participants whose native language is not English (Gubrium & Holstein, 2002, p. 541). Moreover, the face-to-face interview style creates the “likelihood of self-generated answers,” for a more in-depth view that potentially allows the participant to “express their humanity” (Gubrium & Holstein, 2002, p. 541).

The Photovoice method was used in order to have the participants express their own perception of their current environment through a different means.Photography is a way of “forging connections between human existence and visual perception. . . . Often called the mirror of the memory . . . photos are used to stimulate a quality of memory that word-based interviewing does not” (Denzin & Lincoln, 2005, p. 644).

A common thread triangulated the open-ended interview, Photovoice, and focus group: the goal is to “identify common themes through dialogue,” between visually communicating with a camera and sharing with others the visual perspective, or people discussing within a focus group (Wang & Burris, 1997, p. 370). Thus, by using an interdisciplinary approach it strengthened the relationships between all three methods used in the research study.
Selection of Participants

Participants for this study consisted of Chinese students attending Oregon State University. For this exploratory study, it was desirable to focus on students from one cultural background rather than an assortment of international students, because of their potential shared cultural patterns, and because the Chinese culture varies significantly from the U.S. culture, making the visual environmental cues more apparent. Also, university study abroad programs have been in existence for many years, and recent trends suggest that more university students, especially Chinese students, are participating in these experiences (Sayers & Franklin, 2008).

The majority of students were chosen because it was their first time studying abroad and because of their length of stay to date, which was approximately six months. Between the fifth and seventh month of living in another culture, the participant is experiencing the fourth stage: Cultural Adaptation, and the student has most likely reached a sense of stability (Paige et al., 2006, p. 98). Also, this gives time for Chinese international students to achieve a higher English skill level that increases communication accuracy when conducting the open-ended interview and focus groups. As a result, their strengthened English skills decreases the possible misunderstandings related to their visual perceptions and verbal communication during the research study.

Maximum variation sampling is a strategy used in order to best cultivate “central themes that cut across a great deal of variation” (Patton, 2002, p. 235). Thus, giving more distinction to capture “the core experience and central, shared dimensions of a setting or phenomenon” (Patton, 2002, p. 235). Maximum variation sampling provides “two kinds
of findings: (1) high-quality, detailed descriptions of each case, which are useful for documenting uniqueness, and (2) important shared pattern that cut across cases and derive their significance from having emerged out of heterogeneity” (Patton, 2002, p. 235). The participants varied in gender, geographical region in China, major, student status, and duration of time spent in the United States. Ten students were recruited at the beginning of the study. Whether the student was male or female was taken into account when the data was interpreted through the responses given by the participants, since gender has been shown to play a role in a person’s perspective.

With the assistance of the Chinese Student Association, Chinese international undergraduate and graduate students were contacted via email invitation. The email invitation gave a brief description of the study, informed the participants of my past experience living and working in China, my genuine interest in Chinese culture, and that they would receive a gift certificate for a coffee or tea at an on-campus coffee shop as a small incentive for them to participate in the open-ended interview (Bloor, Frankland, Thomas & Robson, 2001). Ten Chinese international students currently studying at OSU responded to the invitation and expressed interest in being involved in the research study.


The interview guide was constructed with open-ended questions to “minimize the imposition of predetermined responses” and to facilitate a more authentic response from the participant (Patton, 2002, p. 353). The interview guide was composed of six sections. Section one was Introduction and Orientation. This portion was designed to explain the
nature of the project, to explain that I have lived and worked in China and am highly interested in Chinese culture, to emphasize to the participants there is no right or wrong answer, and ask for the major of the participants and student status at Oregon State University. Section two was Description of Pre-study Abroad Experience. The second section was designed to get to know the participants better by asking questions about their home in China, what preparation they received before studying abroad (if any), what preparation they received upon arrival at Oregon State University, and why they chose Oregon State University in particular.

The third section, Environmental Cues – Color Association, was designed to explore the associations the participants had for selected colors. During this section, I had laid out a set of color swatches based on the Munsell Method, whereby I mentioned an emotion and asked them to choose one color from the swatches that best represents that emotion to the participant (Munsell, 1976). Fourteen words were chosen based on the culture shock and color theory literature I had read, in order to maintain consistency with the language being used. The words were happy, sad, excited, tired, inviting, uninviting, insecure, secure, anxious, calm, stimulating, boring, friendly, and lonely.

The fourth section was Visual Cues in Student Residence and Campus Facilities. In this section the participants were asked to describe their residence, explain what visual features they found most satisfactory or least satisfactory, and describe if they have altered anything about their visual environment. The participants were also asked what campus places they found most inviting and why. Then, the participants were asked at which facility have they spent most of their time and why, and to explain the facility in
Lastly, the participants were asked if there were any other locations that we had spoken about already they would like to share.

Section five was Campus Facility Preferences. The section was about design and color and light. The participants were shown two to four options, and asked to choose which one they prefer for a particular activity (e.g., eating, studying, living). The photos were taken on campus at Oregon State University to provide continuity for the participants and to encompass what the participants are actually experiencing in their daily life.

The sixth section was Introduction of Photovoice Concept & Invitation. The section invited the participants to participate further in the study by explaining the Photovoice concept. The Photovoice method essentially gives the participants a voice to communicate their personal perspective, and the meaning of VOICE is “voicing our individual and collective experience” (Wang & Burris, 1997, p. 381). It has been also known as “reflective photography” which “uses images taken by participants followed by a reflective interview in which they interpret the meaning behind the image” (Close, 2007, p. 28). Photovoice is used as a means for people do not typically have an opportunity to express themselves in order for other people to better understand their perspective, and consequently, learn from their own photo perspectives.

I explained that the participants would be given a disposable camera to use in indoor environments at their residence and campus places. The participants were discouraged from taking photos of people and asked instead to focus on the built indoor environment, but I told them that I also understood that in some public places it is
difficult to take such a photo. After approximately three weeks, the participants were asked to turn in their cameras to the Political Science Office. Each camera was given a marker corresponding to each participant, in order to maintain anonymity and also keep track of which participant was taking which photos. The participants were told that after they turned in their cameras, they would then be invited to participate further in a focus group to discuss the photos they had taken.

The focus group guide was constructed based around the themes that rose from the open-ended interviews and Photovoice project. An outline for the focus group was constructed to prepare for when the themes were developed. Global questions were worked out for the focus group participants such as what is one thing that universities can do to help your adjustment to your new environment (Fern, 2001, p. 99)? After opening up the with the globality stage, then the differentiation stage would occur by serving refreshments and further creating a more comfortable atmosphere (Fern, 2001).

Following refreshments, I would present the photos the participants took using the Photovoice method. To protect anonymity, if the participant chose, the photos would be labeled by number on the back of the photograph to identify which student had taken which photo. I instructed them to sort through the photos in terms of which represented calming environmental cues and which represented unsettling environmental cues. Then, the focus group would share and discuss these photos. Further probing questions included Show us one of your photos that best represents negative/unsettling environmental cues, and describe to your group why you perceive it that way. What change(s) would you
suggest to alter or change these environmental cues? Does anyone else have a similar or
different response to the photo?

During the discussion, I asked each student to write on the back of the photos any
positive or negative reactions relating to environment of the photo I had given them. This
afforded a way to record responses that were not possible to get with an audio recorder.
After the photos had been discussed, I would then the themes that rose from the open-
ended interviews and Photovoice.

Data Analysis

The data analysis will be described in detail including the three methods that were
used in this study.

Open-ended Interview

Before attempting to interview the Chinese international students I did two test
pilot interviews to address any possible miscommunication of my open-ended questions
and further evaluate if my open-ended interview guide was easily understood by people
whose native language is not English. The first test pilot interview was with a native
Chinese speaker, and the second test interview was with a person whose native language
was not English. During these two pilot interviews, I discovered I needed to clarify in the
third section, Environmental Cues – Color Association, and ask the participant to choose
one color they associated with each emotion that I mentioned.

I recruited ten Chinese international students to participate in the open-ended
interview. I scheduled the open-ended interviews for the middle of February 2009,
approximately six months into the adaptation stage of culture shock as addressed
previously. As mentioned earlier in the literature review, the visual environment influences how people may feel, all participants were interviewed in the same room and in the same manner to maintain consistency of responses during the interview.

Before the interview occurred, I asked each participant to review and sign an informed consent form, so they understood fully what was happening in the research study, why I was interested in it, and that they could stop participating at any point with no consequence. I emphasized that the interview would be audio-recorded, but that I would be the only one to listen to the recordings. All of the participants agreed and signed the consent form. Each participant was given a copy of the informed consent form for their own records. Even before I began to audio-record, a few participants were eager to know more about the study, since they hadn’t thought of how visual cues in the environment may actually influence their emotions and how they experience culture shock.

During the interviewing week, I learned more about the demographic of the participants. Six were women and four were men. Eight out of ten of the Chinese international students had been in the United States for approximately six months. The other two participants had been at Oregon State University for approximately three years. Nine were graduate or doctoral students and one was an undergraduate student. The undergraduate was an English major on a newly developed exchange program, and the graduate and doctoral students’ majors consisted of three in Engineering, two in Computer Science, one in Food Science, one in Chemistry, one in Agricultural and Resource Economics, and one in Human Development and Family Sciences.
The undergraduate student lived on-campus at an all women’s co-op facility. All nine of the graduate and doctoral students lived off-campus. Eight of the graduate and doctoral students lived in two-bedroom apartments with one other roommate, while one lived in a four-bedroom house with three roommates.

There was a wide geographical range from where they lived in China. Students lived from northeast, central-China, to southeast China. The population was also a wide range, though none came from villages. The population range was 300,000 people in a city in Zhejiang Province (comparable to Corvallis in the United States), to 12 million in Guangzhou. Thus, participants were coming from different population densities and varying geographical featured areas, from arid lands in northwest China near Inner Mongolia, to middle land areas with more precipitation and all four seasons, to the coast of Xiamen for more tropical weather, to even hotter and more humid weather continuing south to Guangzhou. All of these contributing factors help diversify the sampling of the participants, in order to find a richer meaning through the maximum variation method.

The interview was conducted in sections as previously addressed in the Open-ended Interview and Focus Group Construction section. During the first section, I was getting to know the participant and letting them know my interest in China and Chinese culture. In the second section, I asked questions concerning how or whether they had any preparation before studying abroad, and what kind of orientation they received upon arrival to Oregon State University. The third section concerned color association, in which they would point to a color that corresponded with a word that I said. They were instructed to choose one color for each word. Some students found it difficult to find a
color that suited the word I was saying. When they were having trouble with knowing what the word meant, I would help them by using synonyms to describe it further.

The next steps were to get to know the visual cues in both their residence and on-campus places. During this time, I explored with them how these places look, what they thought was inviting or uninviting, and, if they were not satisfied with the space, how would they change it. As the interview continued, the more comfortable and descriptive the participants became.

After having the participants describe their residence and on-campus places, we moved on to photos of on-campus residences and places. In this section, they were asked to choose which photo from a set of two to four was most inviting to them and explain why. Some students had trouble at first, while others were quite fluid in their responses. Some participants went even further with their descriptions by explaining how they would choose a different place for a different type of activity. For example, there was a set of four different eating areas, and one person might say that one would be suitable for breakfast and the other for dinner.

At the end of the interview, I invited them to participate further by way of the Photovoice method. As part of this explanation, I gave them a piece of paper that thoroughly described the tasks involved and what photo content I would like them to capture, and that they were to return the camera after three to four weeks. I used 35mm disposable cameras, and gave a brief description about how the camera worked including advancing the film and turning on the flash. Some of the participants hadn’t ever used a disposable film camera before and were excited to try something new. After describing
the Photovoice method and how to operate the disposable camera, I left for a moment to make copies of the informed consent form and gave them more time to think of any questions they had before the session ended.

The interviews lasted between 25-35 minutes, and directly following, the participant was given a gift certificate for a coffee or tea at an on-campus coffee establishment to show my appreciation for their time. After the interviews, I transcribed the audio recordings, and began to draw themes from the transcriptions.

Photovoice

After the third week, I sent out a reminder email to the participants before spring break. Four out of ten participants returned their cameras because they were busy with finals. The Sunday before spring term began; I sent out another reminder email and received all the cameras. The cameras were numbered according to each participant and I had the film developed to begin pulling themes from the photos taken by the participants.

Focus Group

Once the themes were drawn from the open-ended interviews and Photovoice project, the focus group guide was ready to be used. A final email was sent out to the ten participants to invite them to participate in the focus group. Nine out of ten participants responded to the email, and two focus groups including seven students were arranged were made in order to accommodate various time constraints of the participants.

Focus Group One

Focus group one met in the early evening and contained three participants who were all graduate students living in two bedroom apartments. One was male and the other
two were female. Four photos were selected from the Photovoice project to share with this focus group. There were three reasons that four photos were selected for each participant. First, it was because many photos were taken outdoors and not focusing on indoors and therefore could not be used. Second, many of the photos were too dark to view the subject of the photo. Third, many of the students took twelve or fewer photos.

*Focus Group Two*

Focus group two met at noon and contained four participants. In focus group two, two were female, two were male, three were graduate students and one was an undergraduate student who lives in a women’s co-op facility. Three photos were selected from the Photovoice project to share with this focus group. The same three considerations given in focus group one are applied to focus group two. Moreover, one of the participants only had three usable photos, and I wanted to have each participant have the same numbers of photos to maintain consistency within the focus groups.

*Conducting the Focus Groups*

The focus group was held in the same room where the interviews were conducted in order to reduce confusion and maintain continuity. Refreshments were offered as a small incentive. After all participants were present and seemed ready to begin the focus group, I reminded participants that the focus group would be audio-recorded, and that any answers they might give would be anonymous, and that there were no right or wrong answers.

After beginning the audio-recording, I continued to introduce Section one, Global Questions, which included an introductory statement to the effect--that all of us in the
room at least shared one thing in common—we all had studied abroad. I said we would be looking at the photos the participants had taken through Photovoice, and would also be discussing the themes that I had discovered through the open-ended interview and Photovoice method. I also addressed that the participants could begin thinking about one thing that universities could do to help with their adjustment to their new visual environment while conducting the focus group, and that I would ask this question at the end of the focus group.

I distributed identical sets of photos the participants took and asked them to sort through their own photos first, in terms of which represented calming environmental cues and which represented unsettling environmental cues, and then share with the other participants. After sharing their own photos, the participants were asked to review all the photos that were given to them, and sort them out in the same terms and discuss with the focus group their observations. During this time, I gave them pens to write their reactions on the back of some of the photos, whether it was calming, unsettling, inviting, uninviting, etc. Each photo was numbered according to the participant who took the photo and also which photo belonged to which participant, in order to reduce miscommunication of who produced which photo or remark. The photos were also numbered individually, in order to have a reference point as to which photo the participant was discussing.

After the photos from the Photovoice method were shared and discussed and shared by participants, I moved on to the themes that had developed from the open-ended interview and Photovoice method. The first theme was based on safety, and stated that
Chinese international student answers showed that safety is an important part of the visual environment. The second theme was based on color association and stated that Chinese international students indicated during the color association section of the interview, that if the emotion was positive, it was more likely to be at the warmer and/or lighter part of the color spectrum, and the more negative the emotion, the more likely the color association was with darker and/or cooler tones. The third theme was based on personalization of space, and stated that Chinese international students like to personalize their home and work-space. The fourth theme was based on preferences that emerged from showing campus places during the open-ended interviews. After each theme was stated, I asked to what degree the participants agreed with the statement and if the participants had anything to add to the statement.

Four sub-themes emerged from the fourth theme about preferences. The first stated that Chinese international students preferred a brighter study room or one that had a window, compared to darker study rooms or study rooms that had no windows. The second stated that Chinese international students preferred a hallway that showed history on display, appeared to be like a university, was classic, and organized. The third stated that Chinese international student preferred an entranceway that had interesting design, openness, and seemed new. The fourth stated that Chinese students preferred the shape of round lights rather than rectangular lights because they are round, special, cuter, not sharp, and/or felt like home. After each sub-theme was introduced, if the participants seemed confused, I would tell them about how many Chinese international students
preferred one photo over another photo, and I would re-introduce the photos that were used in the open-ended interviews for reference points.

After we discussed the themes, I returned to the main question I asked them to think about during the focus group: What is one thing that universities can do to help your adjustment to your new visual environment? Following the discussion, I asked if any of the participants had anything more to add to the focus group, and then concluded the focus group meeting by thanking the participants for all their participation.
Chapter 4: Results

In order to retrieve in-depth information from each of the participants, understand their personal visual perspective, and understand their collective perceptions of the visual environment as a group, in-depth, open-ended interviews, Photovoice, and focus groups were used. Thus, a bricolage of meaning was created from the three methods (Patton, 2002). I am aware I may have bias as a researcher, and that bias may influence what information I choose to focus on, and “In performance, we infuse powerful feelings and try to recreate a way in which to understand those we study and ourselves in our relationships to them” (Denzin & Lincoln, 2005, p. 714). As a consequence, I have thought about how it may be difficult to shield my bias from choices related to quote or summarize discussion. In order to not lose focus of the material, I reviewed the purpose of the study before drawing quotes, discussion points, and eventually, themes (Krueger & Casey, 2000, p. 127).

In this chapter, I present in-depth descriptions for each interview including individual results and subsequent open-ended interview theme development. Next, is an in-depth analysis of the Photovoice results for each participant, accompanied by derived Photovoice theme development. After both open-ended interviews and Photovoice themes were obtained, I compiled them to distinguish what main themes emerged from the two methods. Finally, the in-depth descriptive results of two focus groups provide an additional opportunity to discern the importance of the emergent themes along with any other ideas that came from the focus group participants that were missed in the open-ended interviews or Photovoice.
In-depth Description of Open-ended Interview

Each participant had a different a unique perspective to contribute. In order to provide a more in-depth perspective of each participant, I included the individual outcomes of each participant and their responses during the open-ended interview.

Participant #1

Participant #1 arrived in Corvallis to begin her graduate studies in Food Science approximately six months ago. She is from southeast China, and lives off-campus in a two-bedroom apartment. The reason she chose Oregon State University was because it had a science major and she received a scholarship to attend.

During the open-ended interview, participant #1 indicated she took several language exams, the GRE, and applied and received a scholarship to Oregon State University in preparation before coming to Corvallis. When speaking about what orientation she received upon arrival to Oregon State University, participant #1 said OSU, “told me a lot of safety issues. And insurance issues. And also about visa [sic].” Other than that, she did not mention any other orientation.

Regarding color association with emotions, brown was mentioned the most and was identified with the emotions of sad, tired, and uninviting. Orange and red were both mentioned twice, with orange being associated with happy and excited, and red being associated with insecure and anxious.

When speaking about her residence life, she mentioned she lived with another Chinese student, and when asked what visual features she enjoyed about her residence, she did not mention visual features, but spoke about how it was inexpensive and safe.
Concerning the visual environment on on-campus places, she mentioned that the Memorial Union was most inviting because it was “elegant” and made her “feel very relaxed.” She also spoke about how she liked to play the piano at the Memorial Union. When asked about where she spent most of her time aside from her residence, she said first and foremost was at her department, and second was the Valley Library. When asked about what place may be distracting or uninviting, she said that the International Office was because “the color is totally contradictory of the other building and it is blue, but the other buildings in the campus are orange. So, I feel, it’s awful.” When asked about other places she would like to mention, she chose to speak about Dixon Recreation Center, and highlighted that she could play sports there and have “some entertainment…and meet some friends over there,” but when asked about the visual qualities of Dixon, she began to speak about the Memorial Union again.

Upon examining selected campus facility photos for her preferences, she made comments on choosing photos that were inviting because of light, and also made choices on photos of facilities based on which one would suit a particular activity the most.

Participant #2

Participant #2 arrived in Corvallis to begin his graduate studies in Civil Engineering approximately six months ago. He is from southeast China, and lives off-campus in a two-bedroom apartment. The reason he chose Oregon State University was because of its diversity and because he felt it was warm and welcoming.

During the open-ended interview, participant #2 indicated he generally prepared himself for studying abroad. Participant #2 said that the orientation he received was a
half-day long and addressed an issue such as security, showed diversity of different culture, and asked the people participating in the orientation to introduce themselves.

Regarding color association with emotions, brown and orange were both mentioned twice. Brown was mentioned for uninviting and boring, and orange was mentioned for inviting and stimulating. Blue was also mentioned for sad and lonely.

When speaking about his residence, he mentioned he lived in a two-bedroom apartment, and that it was not far from campus and when he felt bored he could just look out his window. His room had a lot of electronics, and he didn’t mind that there wasn’t much color, and felt satisfied. He pointed to the yellow swatch from the Color-Association section when explaining the color of his room. When he spoke about campus places, the place he spent his most time when he arrived was the Valley Library, and not in is his office. Participant #2 thinks that the library is “beautiful” because of the “diversity of culture” and “different people.” When asked about what he thought of the color and lighting, he said “the color is very comfortable.” Participant #2 also mentioned that the Memorial Union was another place he thought was inviting because “the color you feel very welcome [sic].”

Upon examining selected campus facility photos for her preferences, he seemed to choose the more inviting photo because it reminded him more of home. Other reasons he chose a photo he thought was more inviting was based on the amount of light, the amount of space, and how it seemed to impose more rules than the other.
Participant #3

Participant #3 arrived in Corvallis to begin his graduate studies in Chemical Engineering approximately three years ago. He is from northwest part of China, near Inner Mongolia, and lives off-campus in a two-bedroom apartment. The reason he chose Oregon State University is because he knew an adviser at OSU, the weather in Corvallis, and it was nice and quiet.

During the open-ended interview, participant #3 indicated he prepared himself by passing the GRE and TOEFL exams. He also read articles on people who have written about Chinese people, advice on living in the United States, and read some OSU materials before studying abroad. Upon arrival to Corvallis, he said that the Chinese Student Association helped make for an easier transition, and that OSU provided some transportation and temporary living as well. Participant #3 received orientation from the College of Engineering and one for international students. He elaborated further, saying that the international student orientation “doesn’t provide with more new information…just a chance to meet each other. I think that’s the best part for us.”

Regarding color association with emotions, light blue, light green, and gray were mentioned the most. Light blue was associated with happy and secure, light green was associated with inviting and friendly, and aqua was associated with tired. Gray was associated with sad, boring, and lonely, while black was associated with uninviting.

When speaking about his residence, Participant #3 mentioned that he lived in a two-bedroom apartment with another Chinese student. He explains that he liked his residence because it is close to the super market, but wished that the living room was
smaller and his bedroom was bigger, and thought his apartment was “American style.” He also thought that carpeting was too dirty, and collected a lot of dust compared to other flooring. When asked further on if there are any other changes he would like to make, he said he wished it were more quiet and that the ceiling was too low, which is bad for summer, when it was hot. Participant #3 mentioned that he enjoyed the pool, the arrangement of the apartment buildings, and that there are a lot of Chinese international students that live there. When speaking about campus places, participant #3 said he spent most of his time in his lab. He described it as a very old building, and that it’s not good because “It’s very hot in summer. And also very noisy.” Some places he felt were inviting: Dixon Recreation Center and Kelley Engineering Center. When participant #3 described Kelley, he said, “I always am jealous about the Kelley building. I mean, the College of Engineering students, we pay like the same tuition…but, like, for me, my department is in Glison…so we pay the same money, but we didn’t get the same room. We didn’t get the same facility.” When speaking about Kelley Engineering Center, participant #3 enjoyed the high ceilings, and that there were so many different activities you could do in the space, such as meet a friend or take a rest.

Upon examining selected campus facility photos for his preferences, he chose photos that were more inviting because they seemed more organized or in better condition. Participant #3 also designated photos in how there may be different uses for different space.
Participant #4

Participant #4 arrived in Corvallis to begin her undergraduate studies in English approximately six months ago. She was from southeast China, and lived on-campus in a women’s co-op facility. She chose Oregon State University because of its new exchange program in which two students from each university are selected to study abroad at OSU or the Chinese university.

During the open-ended interview, participant #4 indicated she passed the TOEFL, had an interview, GPA check, and an instructor in China would choose one of them according to all of those scores. Participant #4 mentioned that when she first arrived in Corvallis, she enjoyed the three-day homestay program. Participant #4’s orientation was provided by the International Student office, and consisted of advice about “the law, the US, and how…and offer language Buddy Program…and they have a US student” for her, in which she became good friends. She elaborated even further about safety and said that the orientation spoke about preventing sexual assault.

Regarding color association with emotions, light brown and light blue were mentioned most. Light brown was associated with calm and boring, and light blue was associated with secure and tired. Pink was associated with inviting, and gray was said to be uninviting.

When speaking about her residence, she mentioned she lived on-campus in a women’s co-op, and that her roommates were American, and most of the women who lived at the co-op facility were American. Participant #4 explained that the facility is “just like a whole family. Like, every week we have a house meeting. It really helped me.
I feel homesick a lot. I help people. They really help me, I really enjoy living there.”

Participant #4 described her room as not too big, but that she liked it to be a bit crowded. When describing the colors, she used the Color Association swatches as examples, and said that the room had a window, a couch, and three desks, since everyone slept in the sleeping porch area. Basically, the co-op facility had an area for study in which approximately three people share a room, and then all of the residents slept in one area, called a sleeping porch. When speaking about campus places, she found the Valley Library to be most inviting and the place she used most besides her residence. She found the library inviting because it was very comfortable, there were not many people, and there were different types of areas to study in. Participant #4 said that the Memorial Union was uninviting, and went onto describe a previous experience of attending China Night there, and that the room was too dark.

Upon examining selected campus facility photos for her preferences, she chose photos that were more inviting based on the color being a warmer tone and the amount of light, and whether the light was natural or artificial. When examining the light comparison photos, she thought both were uninviting, because they both seemed dark.

Participant #5

Participant #5 arrived in Corvallis to begin his graduate studies in Civil Engineering approximately six months ago. He is from southeast China, and lived off-campus in a two-bedroom apartment. The reason he chose Oregon State University was because he applied to several universities, but his specific area of research fit well with his current adviser, and he also received financial support.
During the open-ended interview, participant #5 indicated the preparation he took involved looking on websites for information about OSU and the US, and said that he attended several orientations, but that the first was most impressive. The first was most impressive because it introduced him to other cultures at Oregon State University.

Regarding color association with emotions, light green and blue were mentioned most. Light green was associated with calm and friendly and blue was associated with sad and anxious. Participant #5 regarded orange as friendly, because he associated it with the Oregon State colors.

When speaking about his residence, he spoke of changing it by adding red Chinese paper decorations, having a small tree, and also having pictures up of mountains. When I asked him if he found anything unsatisfactory about it, he said he wanted to change the table because it was too big. When speaking about campus he spent most of his time in his office, but thought the Valley Library was inviting because it was beautiful and there were times that he saw fog, that was beautiful to him as well. When asked if any place is not inviting, he said he hasn’t “found a place which is not inviting.”

Upon examining selected campus facility photos for her preferences, he chose photos that were more inviting based on how clean and organized the space was. Participant #5 also began to designate the spaces based on how he thought they might be used.

**Participant #6**

Participant #6 arrived in Corvallis to begin his graduate studies in Chemistry approximately six months ago. He was from southeast China, on the coast, and lived off-
campus in a two-bedroom apartment. The reason he chose Oregon State University was because one of his undergraduate advisers did her post-doctoral work at OSU, and recommended the university to him.

During the open-ended interview, participant #6 indicated his preparation was a normalcy and many students at his university in China knew how to prepare for studying abroad. Participant #6 explained that he had received two orientations, one was the Graduate School orientation and the second was a teaching orientation for the department assistants. When I asked him if he had received orientation from the International Office, he didn’t remember many details, except that it was in an auditorium.

Regarding color association with emotions, yellow was mentioned the most and was associated with happy, excited, stimulating, and friendly. Black was second in times mentioned, and associated with secure and calm.

When speaking about his residence, he explained that he lived off-campus in a two-bedroom apartment, and that visually, it made him feel warm when he entered the apartment. Participant #6 questioned whether he should mention that he didn’t like his room, once assured, he went on to explain that, “I like the arrangement of the rooms and the furniture there, but…I don’t like my room, because it’s not facing out. You cannot receive sunshine.” He mentioned that in his room in China, there was a lot of light. When speaking about campus places, he spent most of his time in his office. The most inviting place to him was the Valley Library. In both cases, he mentions his dissatisfaction if there was not enough light or satisfaction with the place if there was a good amount of light.
Upon examining selected campus facility photos for her preferences, participant #6 mentioned light a number of times, and chose photos that were inviting by the amount of light, how much decoration was in the space, and would remark on how clean they were. When speaking about windows, he said that it was important to have a view, and not lose a connection from society.

Participant #7

Participant #7 arrived in Corvallis to begin her graduate studies in Agricultural & Resource Economics approximately six months ago. She was from central China, and lived in a two-bedroom apartment. The reason she chose Oregon State University was because it was in the top-5 for her major in the United States, and she likes the weather.

During the open-ended interview, participant #7 explained that her preparation included searching on OSU’s website, and that the Chinese Student Association helped her with questions she had or information she wanted, and helped her find an apartment and roommate. Participant #7 says that she received orientation from the Graduate School, the International Student Organization at OSU and her department.

Regarding color association with emotions, orange was mentioned the most and was associated with happy, secure, and stimulating. Second most mentioned was brown, and it was associated with uninviting and lonely. Light brown was associated with being tired.

When speaking about her residence, she said she lived in a two-bedroom apartment and she thinks it is safe, because unlike in China, sometimes they don’t lock their door. Participant #7 thought that her residence was “spacious” and both she and her
roommate liked to keep things clean. When speaking about campus places, participant #7 she spent most of her time at the office, and that she enjoyed seeing her friends there, but the decorations were a little old, “especially for a girl, you know, I need some…very bright colors.” Participant #7 found the Memorial Union most inviting because the colors and lights made her feel “so comfortable.”

Upon examining selected campus facility photos for her preferences, she emphasized how clean or dirty a space was, and when choosing photos that were most inviting mentioned how special the decor was or the amount of light in the space. Participant #7 also mentioned a few times that the reason she did not choose the other photo option(s) was because the space looked like a hospital.

Participant #8

Participant #8 arrived in Corvallis to begin her graduate studies in Computer Science approximately six months ago. She was from northeast China, between Beijing and Shanghai, and lived off-campus in a four-bedroom house. The reason she chose Oregon State University was because she felt the west coast suited her more, and the tuition was relatively lower in comparison to other universities.

During the open-ended interview, participant #8 said that her main purpose was to learn English and make sure her parents received enough money. Participant #8 said she received no materials from their university for preparing to study abroad, but that she received a brochure from Oregon State University. When asked if she received any orientation, she said she received a lot and that it addressed different subjects like “sexual harassment, politics, traveling in the States, and…of course, how to prepare ourselves for
the Ph.D. program.” When asked what was most helpful, she promptly answered “the bus route.”

Regarding color association with emotions, red was mentioned the most and associated with happy, excited, inviting, stimulating, and friendly. Second most mentioned was gray and was associated with tired, uninviting, and lonely.

When speaking about her residence, she said she lived close to campus in a two-story house, and had three American roommates. She mentioned that she was the only one that used the kitchen. When asked what visual features she finds most satisfying, participant #8 described that there was bamboo outside her window, which was her favorite color and made her happy. When asked what she thought is unsatisfying, participant #8 found that the walls were too thin. In campus places, participant #8 spent most of her time at the lab, and didn’t think anything was particularly uncomfortable. When asked what places on campus were inviting, she didn’t know, and when asked about uninviting she mentioned one building because “it’s too complicated. It always takes me forever to find a classroom.”

Upon examining selected campus facility photos for her preferences, she mentioned color being a determiner on how she chose the most inviting photo. Certain colors would remind her of feeling impure, induced appetite, or of “Heaven.” Whether the space seemed too common or not was also was a factor in her preference.

Participant #9

Participant #9 arrived in Corvallis to begin her graduate studies in Computer Science approximately six months ago. She was from central China, and lived off-
campus in a two-bedroom apartment. The reason she chose Oregon State University was because she was admitted, she was offered financial aid, the rank of the university, and she liked the climate.

During the open-ended interview, participant #9 indicated she prepared by strengthening her English skills, especially terms used in her field, and that she received a brochure from Oregon State. After arrival at Oregon State, she received “a lot of information from MU (Memorial Union).” Participant #9 described entering a three-day homestay program in which she was welcomed by a family, and “still has a good relationship with them.” During that time she received various orientations about how to use the Valley Library, Dixon Recreation Center, Memorial Union, and the Chemical Engineering Center.

Regarding color association with emotions, green and black were mentioned most. Green was associated with happy and secure, while black was associated with sad and uninviting.

When speaking about her residence, she described it as a two-bedroom apartment close to a super market and campus. She said that she lived with another Chinese international student, but would prefer to live to get more “involved with the local culture more,” and “to be here means to experience something new.” She explained further that first it was good to have a roommate that was Chinese, to remind her of home, but now she wants something more “fresh” and “exotic.” Participant #9 mentioned changing her environment by adding fake flowers to make it feel like home, rather than a “hotel.” Besides her residence, participant #9 spent most of her time in the lab, and had added
pictures to her board, and decorations for the Chinese New Year. The place she felt most inviting on campus was Dixon Recreation Center, and focused mainly on the different activities she had been involved in. When asked about visual features of Dixon, she briefly listed the rooms she had been in.

Upon examining selected campus facility photos for her preferences, she chose photos that were more inviting based on the amount of light, how common it was and how uncommon it was. Participant #9 designated certain photos based on how they would be used.

Participant #10

Participant #10 arrived in Corvallis to begin her graduate studies in Human Development and Family Sciences three years ago. She was from northeast China, and lived in a two-bedroom apartment. The reason she chose Oregon State University was because of her dissertation topic and she found her adviser while researching the topic.

During the open-ended interview, participant #10 remembered the International Student orientation, the orientation of her department, and a Graduate School orientation. She didn’t recall the activities, or what the other universities did for preparation, since it was three years ago.

Regarding color association with emotions, black was mentioned the most and is associated with sad, tired, anxious, boring, and lonely. The second most mentioned color was red, and it is associated with happy, exited, and secure.

When speaking about her residence, she described living off-campus in a two-bedroom apartment with a roommate, and said that at first she found the color and the
swimming pool satisfying because it was new and different from China, but after time had passed, those elements became less satisfying, because the newness was lost. Participant #10’s complaints were that the bathroom facility didn’t work very well at times, but she seemed quite satisfied with how she has changed her room and added bright colors that made her “pretty happy.” Besides her residence, the place she spent most of her time was her classroom, but she did not feel strongly either way about how it looked. The Valley Library was inviting because it was organized and convenient. Participant #10 did not feel that Milam was satisfying because it is an old style, and she felt unsafe because not a lot of people studied there at night.

Upon examining selected campus facility photos for her preferences, she chose photos based on the amount of light and how special it looked. Participant #10’s regarded special as one of a kind, and color also was a factor in determining which photo was more inviting as well.

*Open-ended Interview Theme Development*

The following themes were derived from my interview note transcriptions and reflect patterns that emerged across the ten Chinese international student responses. Thematic patterns are linked to response frequencies, and typically the greater the frequency, the stronger the pattern with the participants. I reviewed the purpose of this study and requested data about gender, major, student status, arrival to Oregon State University, previous times they had studied abroad, hometown location, current residence, and the reason they chose to attend Oregon State University.
Description of Pre-study Abroad Experience Themes

Preparation before coming to Oregon State University mostly involved students doing their own research on websites and receiving an Oregon State University brochure. The Chinese Student Association was mentioned by two participants and was described as helpful in finding a place to live and answer questions the participants had. When asked about any orientation they received, the International Office and Graduate School were mentioned by four out of ten of the participants. Orientation by their department was specifically mentioned by three out of ten of the participants. Three participants mentioned how the temporary three-day homestay upon their arrival to Corvallis was very helpful, and one was still in good communication with the family where she stayed.

Five themes developed from the orientation: Safety, diversity, facts about the United States, transportation, and explaining how to navigate and use facilities at Oregon State University and in Corvallis. Safety was mentioned most, and three participants also mentioned learning about sexual harassment in the United States.

Environment Cues – Color Association Themes

Participants chose one color that best described the emotion they were presented. Selected words and the colors chosen most often in association with them are as follows: happy – yellow (three participants); sad – black (four participants); excited – red and orange (three participants each); tired – gray (four participants); inviting – orange (four participants); uninviting – brown, black and gray (three participants each); insecure – white (three participants); secure – orange, light blue, and black (two participants each); anxious – blue & brown (two participants each); calm – light blue (three participants);
stimulating – yellow (three participants); boring – brown (three participants); friendly – light green (three participants); and lonely – blue and gray (two participants each). A graph for reference is located in the Appendices section of this thesis.

Sad and inviting were first in number of responses for the same color. Sad received four responses for black, three for blue, and two for gray. Inviting received four responses for orange, two for red, and the color range mainly stayed in the reds, oranges, and yellows. Uninviting had equal participants whose choices included brown, black and gray.

The selected words formed a pattern with either their positive and negative connotation. In a majority of instances, the positive emotion would be associated with the warmer and/or lighter color spectrum, whereas the negative emotion would be associated with the cooler and/or darker color spectrum. This was true in the cases of comparing happy/sad, excited/tired, inviting/uninviting, stimulating/boring, and friendly/lonely. However, insecure, secure, and anxious had a wide range from the warmer to cooler tones and lighter to darker values.

**Visual Cues in Student Residence and Campus Facilities Themes**

Eight out of ten participants lived off-campus in a two-bedroom apartment. Between the other two, one lived in on-campus in a women’s co-op and the other lived off-campus in a four-bedroom house. Most of the students mentioned they like that their residence is close to campus. Three students mentioned how they would like where they lived to be quieter; these were students living off-campus in a two-bedroom apartment or in a four-bedroom house. When asked what they thought was visually satisfying about
their residence, some responded it was the furniture arrangement. When asked if the participant would like to change anything, he or she then described things the participant had already changed, such as having added fake flowers, decorated the bedroom in bright colors, or added Chinese decorations. Following the response to what had the participants currently changed; some participants mentioned that they would like to change things such as having the living room smaller and the bedroom bigger, having the table smaller, being allowed to hang things on the wall, or they would have a room with more light. Some also mentioned, that it was only temporary housing, even though they plan to stay at that residence for at least two years and that because it was temporary, they felt less inclined to change things.

Concerning campus places, five participants when asked what place they felt was most inviting said the library. Closely following, the Memorial Union and Dixon Recreation Center (three participants each), and Kelley Engineering Center (one participant) were mentioned. Reasons that the Memorial Union was found most inviting was because participants enjoyed the colors, light, felt comfortable, and could use the space for different activities (e.g., study, practicing music, sleeping). Besides their place of residence, the most time the participants spent was their department with nine responses, and this included their office, lab or classroom. Second most mentioned was the Valley Library by three participants. Sometimes, the participant went further and expressed places that were not inviting. The Milam Building was mentioned by two participants as not being inviting because it was difficult to navigate, and they did not feel safe there at night. The International Office was mentioned as not being inviting because
the color did not match other parts of Oregon State University’s campus, and the Memorial Union was mentioned by one person as not being inviting because the ballroom was too dark.

Overall, the themes emerging from their residence, is that if allowed, many participants would change their residence, personalize it, and prefer more quiet. Safety was an underlying theme and an important factor. Themes that rose from the campus places were that the participant felt comfortable in the space because of the color, light, choices in activities, and continuity with other facilities and safety. Therefore, choice and safety were two important reoccurring themes.

Campus Photo Facility Preferences Themes

Photos taken on-campus such as dormitories, stairways, study rooms, hallways, exits signs, entranceways, dining facilities, railings, and lighting were the subjects. The participants were asked to choose which photo from a grouping was more/most inviting. The photo sets below explain the outcomes of those groupings. The numbered photo set samples can be referred to in the appendices section of this thesis. For reference of the photos used, please refer to Appendix D in this thesis.

Photo Set #1 (Dormitories)

Six out of ten participants chose dormitory photo one as more inviting than photo two. Four students mentioned that photo one was more inviting because it was warmer, and other reasons were because it reminded them of home and they enjoyed the furniture in it. The four students that chose number two chose it because it was tidier and
organized than photo number one. Therefore, color, light, cleanliness, and organization were key factors when choosing the most inviting photo.

*Photo Set #2 (Stairways)*

Five out of ten participants chose stairway photo three as more inviting than photos four and five. The main reason for choosing photo three was because of the cartoon character painted on the wall, which made the participants feel more at home, think it was funny and colorful, etc. Although, one participant thought the opposite, and that photo three looked like a dungeon or a bar on the street. During the interview, participants also mentioned that they would be less inclined to choose a photo if it looked dirty or not well-taken care of. The amount of light in the space was also a determiner.

*Photo Set #3 (Study Rooms)*

Nine out of ten students chose photo number six because the study room was brighter than the other two and gave a warm feeling. Participants also began to designate rooms and say that they would choose photo six to study in, but photos seven and eight might be for other uses, such as sleeping, being sad, or socializing. Photo seven, which was composed of green and blue tones was least inviting, and was associated with being too dark, reminding the participant of rain, upsetting, and sad. Photo eight was composed of most red tones and was thought of as a place to socialize.

*Photo Set #4 (Hallways)*

Nine out of ten participants chose photo number ten because the hallway showed history on display, looked like a university hallway, and was classic, organized, and good-looking. Opinions of photo number nine were that it was colder, the gray color was
uninviting, and it was too common, mechanical, and neutral. However, two students mentioned that one could feel photo number nine was more open because the doors were open in the photo.

*Photo Set #5 (Exits)*

Seven out of ten participants chose photo number 12, containing a green exit sign, as more inviting than the red exit sign. Reasons were because the green was more calming, colorful, and special. However, each student debated on which one they may choose, because green is calming, but perhaps red would be better to alarm someone to use the exit.

*Photo Set #6 (Entranceways)*

Seven out of ten participants chose entryway photo number 14 because of the design, openness, and newness. Photo number 13 was seen as dirty and old. Consequently, participants did not enjoy the blue tones in photo 14, found the yellow tones in photo 13 as more inviting, but still chose photo fourteen because of lighting and design.

*Photo Set #7 (Dining Facilities)*

The most inviting was dining facility photo number 17 that received four out of ten votes from the participants. They reasoned being that it was comfortable, well-designed, not boring, and since the tables were more spaced out, there was more privacy for the participant to socialize with others. Three out of ten participants mentioned how they would like to divide the four facilities into places they would eat for different meals or social functions.
Photo Set #8 (Railings)

Seven out of ten participants chose photo number 20 because the railing was made of wood instead of steel. Participants repeatedly would address that steel was too cold. Three of the participants chose photo number 19 because it had a special design and was more interesting. However, the participants chose how the material would feel if touched, over the design of the railing.

Photo Set #9 (Lights)

All participants chose lighting photo number 22 as more inviting than photo number 21. Reasons that photo number twenty-two’s light was round, more special, cuter, not sharp, and feels like home. Reasons that photo number 21 was seen as not inviting were that it was too common, boring, more of an office space, and looked like too many rules. Therefore, the round shape mainly influenced the choice of the participant, and there were also some mentions on how each light may be used at home or in an office space.

Photo Set #10 (Study Rooms)

Nine out of ten participants chose study room photo number 24 as more inviting than number 23. The largest reason for choosing photo number 24 was because it had a window, which would allow the participant to escape, have a view, stay awake, and be connected. Other reasons were that it was more natural and comfortable. Reasons for not choosing photo number 23 were because it was a place the participant would like to eat or fall asleep. One participant chose 23 as more inviting because it reminded him of home. Some students identified that the aqua color in photo number 24 was less inviting than
the yellow color in photo number 23, but that they would still choose photo number 24. Therefore, a window was a more important factor to most of the participants than the color of the space.

Therefore, factors in preference included a multitudinous number of reasons including tidiness, an art feature, the condition of the building, shape, design, newness, spatial arrangement of furniture, and whether the space had a window present. Two other factors that strongly emerged were color and light. Photo preferences for color included warmer colors and photo preferences for light included how bright the room was, and if the light was artificial or natural.

In-depth Description of Photovoice

All participants returned their cameras with photos taken according to the criteria that I had given them, a remarkable response. At the end of the open-ended interview, the participants were given instructions for the Photovoice assignment. One of the Photovoice instructions was to take photos of indoor environments; some participants did not follow this instruction. Therefore, some of the photos could not be used for this study. Another reason some of the photos could not be used was because they were too dark to view the subject matter that was taken. I have indicated whether photos were usable or not for this study. Results for each participant are reported below.

Participant #1 took fourteen photos. Eleven of the photos were not usable for this study. The other three photos were taken of hallways.

Participant #2 took twelve photos. Three photos were not usable for this study. The other nine photos were of classrooms, an office, and hallways.
Participant #3 took twenty-two photos. Thirteen of the photos were not usable for this study. The other nine photos were of hallways, stairways, and a classroom.

Participant #4 took thirteen photos. Some were pointed upwards toward light fixtures, others were of hallways and windows, one was taken of a lounge, and the other was taken of a study area.

Participant #5 took twenty-three photos. The subject matter consisted of hallways, stairways, mailboxes, and an office.

Participant #6 took twenty-six photos. Seven of the photos were not usable for this study because they were taken outdoors. However, one could tell that he was paying attention to his residence and department. The other nineteen photos were taken of hallways, stairways, mailboxes, and offices.

Participant #7 took seven photos. The photos taken were of a light fixture, hallways, and an office.

Participant #8 took nineteen photos. Three of the photos were not usable for this study. The other sixteen photos were taken of hallways, windows, and offices.

Participant #9 took seven photos. The photos were taken of hallways, windows, and an office.

Participant #10 took twenty-three photos. The photos were taken of hallways, stairways, and herself in her office. The photo with herself in the room will not be shown at the focus group because, I want to maintain anonymity of the student, unless they feel comfortable personally telling that they, indeed, took the photo.
Participants took photos mainly of hallways, stairways, and offices. Other elements within those spaces the participant took photos of were light fixtures and mailboxes. Most participants did not include an interior photo of their residence, but if they did take photos of their residence, it was the exterior. Therefore, the participants focused on their work and study environment, rather than their personal environment.

**Combining Open-ended Interview Themes and Photovoice**

Four themes developed from the open-ended interview and Photovoice method. The first theme focused on how safety was important in the visual environment to the participants, which was derived from sections one and two of the interview, addressing preparation and orientation, was mentioned in section four, when the participant selected a residence and some campus places, and also section five, because the participant response to some of the photos was concerning safety.

The second theme focused on color association, and how warmer and/or lighter colors were associated with more positive emotions and cooler and/or darker colors were associated with more negative emotions by the participant. This theme was taken from the participant responses to in section three of the open-ended interview.

The third theme focused on personalization of home and work-space, which was developed because of the student responses in section four of the open-ended interview, concerning their residence and the place they spent most of their time, which was usually their office or lab.
The fourth theme focused specifically on campus facility preferences, since some of the response ratios were very high and facilitated seven-out-of-ten to ten-out-of ten, and demonstrated a consistency in preference for certain photos.

_in-depth Description of Focus Groups_

The scheduling of the focus group was difficult, thus two focus groups were made instead of one. The students were sent an email invitation for the focus group and to note what were the two or three best possible dates and times for them to participate. Nine out of ten participants responded. Seven out of ten were able to attend one of the two focus group dates offered. The seven participants are: #1, #2, #3, #4, #5, #7, and #9.

Focus Group One

Focus group one was scheduled on a Monday at 5:00 p.m., in the same meeting place as the interviews, in order to maintain consistency, and reduce risk of confusion of where to meet. Food and drinks were provided as a small incentive, and students began arriving at 5:00 p.m. The focus group had three participants: #2, #7, and #9. All three were graduate students, had been living in Corvallis approximately six-seven months, it was their first time studying abroad, and were living in two-bedroom apartments. One was male, and two were female.

Before beginning the focus group session, I made sure all the participants were informed that they were being audio-recorded, that any answers they may give would be unidentified, and that there were no right or wrong answers.

Photovoice Responses
I began the focus group introducing the fact that all of us had experience studying abroad, and that we would be looking at the photos the participants had taken and talking about the themes that had developed from the open-ended interview and Photovoice method. Upon handing out the photos, all three had a similar reaction that the photos they had taken were too dark, and not what they expected. In response, I said that the photos were only a reference, and the purpose of the focus group was to explain what the participant was thinking and feeling to the group, therefore the participant would receive a chance to explain the accuracy or inaccuracy of the photo.

In the beginning of the focus group, I introduced the global questions that addressed we had all studied abroad, and based on their experience studying abroad to reflect on two areas. The first area was to begin thinking about a few things that universities can do to help the participant’s adjustment to the new environment concerning the visual environment. The second area was having a discussion about the photos taken by the participants. After distributing the photos to the participants, I asked them to sort through the photos in terms of which represent calming environmental cues and which represent unsettling environmental cues, and choose a few to write on the back of the photo and explain further any positive or negative emotions. After the participants reviewed and wrote on the backs of the photos, then each participant showed the photos that they had personally taken, explained positive/inviting or negative/unsettling environmental cues, and described to the focus group why he or she perceived it that way. After sharing and explaining their views, I also asked if the participant had any suggestions to change any of the environmental cues.
Participant #9 began to describe her photos first. The first photo was of her bedroom in her apartment, and she took it to show the sunshine and how it gave her a warm feeling to begin the day. Participant #9 included no remarks on that photo. Participant #9 also mentioned how her curtain in her bedroom was from China. The other three photos were all places that participant #9 studied. Participant #9 described the first photo of being in a classroom, and wanting to sit by the window so she could look outside, and participant #9 also wrote on the back of the photo, “bright and spacious outside scene. Relaxing.” The other two were taken in the Kelley building, and she took one in early morning to show the sunshine again and wrote words describing it as, “Bright, quiet, clean and neat. Positive.” The other photo was of the corridor in Kelley, and she described it to the group as, “just naked…industrial, hard, and not colorful,” and when asked how she felt about it, she said she was mostly neutral, but sometimes too cold. Participant #7 added that the industrial feel may be boring.

Participant #2 then showed and explained his photos. Most of the photos selected were of his office building, which he said, was mostly to show a negative feeling. He felt that his office building was too cold, and didn’t feel like an office. He also remarked that the windows in the staircase could not be opened, and he felt this was uninviting, and wrote the word “cold” on the back of the photo. Participant #2 remarked on a classroom photo he took, and said it looked like a “nightmare” because the windows were not clear. Participant #2 also made distinctions between what felt warmer and colder when writing on the back of a photo that the yellow door looked warmer than the white one.
Participant #7 then described her photos and wanted to compare her photos of her building, Ballard, with Kelley, since they differed immensely. Participant #7 mentioned how she did like her building, but wished that the wires in the hallway would be concealed, and also wrote on the back “limited space, still informing.” Participant #7 then described her office as the furniture being old, but the color was warm. Participant #9 agreed. Participant #7 also remarked on how the space was quite small, but that the people made good use of it by adding shelves on top of the desks. Participant #7 then described a photo of the library at midnight, she explained that the light is “a bit darker, and my eyes already feel so uncomfortable from that,” and she wanted to show this photo because the light was too dark. In the last photo, participant #7 said the photo was taken in Milam lab, and she wanted to show the projector, and how she wished it had “more color” and was “more vivid.” Participant #9 contributed as well, but said she was embarrassed that such a machine did not demonstrate more humanistic qualities, because her department was responsible for making these projectors.

As a group, participants #2, #7, and #9 began to look at all the photos and remark on photos that were not taken by them, specifically. Participant #7 remarked on participant #2’s photo, and gave a similar reaction, and thought it looked like a factory. Participant #9 also agreed that the photo looked “cold and uninviting.” Participant #9 remarked on participant #7’s photo of an office space and said she liked it because it was “clean and tidy” and “because it’s old, it feels like something of your own, not something that doesn’t belong to you. And compared to this, I just think new, very modern building doesn’t belong to me. It’s like there, it’s forever there, but I’m just temporary…it’s like
you and the table and the shelf are together. You can get into the environment. Fit into the environment very easily.” Participant #2 thought that the photo of the office being explained really did look like an office.

Participant #2 then shared a photo that he liked the photo of Kelley because it reminded him of “living in the future world.” Participant #2 added that she liked the window in this photo, and the natural sunshine coming in. Participant #9 also added that she felt Kelley wasted electricity because there was all this natural sunshine to use, and added while laughing, “We come from China.”

Checking Emerging Interview Themes

Beginning with theme #1, I stated that Chinese international students reported that safety is an important part of the visual environment, and asked to what degree do they agree with the statement and if the participants had anything to add. All participants agreed that safety was an important issue. Participant #9 agreed that she “seldom notices the emergency lights, we just ignore that part,” and adds, “I can’t recall if there’s a fire distinguisher [sic] in my department…I don’t know where to find it.” Participant #2 also agreed and said that when she first arrived, it was difficult for her recognize the exits and where the elevators were located. Participant #2 joined in saying that it’s “special for international students. For our country, there is an apparent sign for it, and different colors.” Participant #9 remarked on the difficulties of finding her way in some buildings on campus, because the floors were confusing, and the rooms would be marked in no apparent order. Participant #7 remarked on how the doors are so heavy compared to
China, wondered why there were so many doors, and explained, “if some emergency happens, you cannot get fast [sic] out of the building.”

Theme #2 focused on color association, and I stated that in response to color associations, Chinese international students were more likely to associate positive emotions with warmer and/or lighter parts of the color spectrum; and are more likely to associate negative emotions with darker and/or cooler parts of the color spectrum. I asked to what degree do they agree with the statement and if the participants had anything to add. Participant #2 and #7 agreed and participant #9 partially agreed. Participant #2 remarked that different countries may have slightly different views on colors and gives the example that “in China, red means happiness.” And participant #7 added that some countries may not like the color red. Participant #7 also spoke about light, and said that she thought that the amount of light may be a universal opinion, and that other cultures may feel the same way about light.

Theme #3 focused on personalization of space, and I stated that Chinese international students like to personalize their home and work-space, and asked to what degree do they agree with the statement and if the participants had anything to add. All participants agreed with the statement. Participant #9 actually changed apartments to a more comfortable one that would allow her to hang decorations on the wall. Participant #7 spoke about the generation difference in China, and said that “I think just for our parents’ generation, they have been educated to be the same…but for the young generation, everyone wants to show his or her unique personality. So, everyone wants to personalize their private space, like the dormitory or the office.” Participant #2 explained
how he doesn’t want to follow others, but follow his own feeling, and he states, “I think the most important feeling is choice.”

Theme #4 focused on Chinese international students preferences to on-campus places. The first preference was that Chinese international students preferred a brighter study room or one that had a window, compared to darker study rooms or study rooms that had no windows, and I asked to what degree the participants agree with the statement and if the participants had anything to add. All three participants agreed with this statement. Participant #9 adamantly stated, “I can’t stand in a room that no matter in all four directions, there is no window. No matter how big this room is. And even though it is a small room, if there is a window facing the direction of the sun…I’m fine.”

The second preference was that Chinese international students preferred a hallway that showed history on display, appeared to be like a university, was classic, and organized. As a follow-up, I asked to what degree do the participants agree with the statement and if the participants had anything to add. Participant #9 strongly agreed with this statement, and so did participants #2 and #7. Participant #7 remarked that she thought it was about the Chinese international students’ “imagination about Western culture.”

The third preference was Chinese international student preferred an entranceway that had interesting design, openness, and seemed new. And I asked to what degree do the participants agree with the statement and if the participants had anything to add. The students agreed with this statement, and when I showed the photo examples used in the interview, they explained further that perhaps the reason Chinese international students
did not choose the other photo is because it looked like a “dead-end.” Participant #9 also added that it may be because one “is natural light” and the other is “artificial light.”

The fourth preference was Chinese students preferred the shape of round lights rather than rectangular lights because it is round, special, cuter, not sharp, and felt like home. And I asked to what degree do the participants agree with the statement and if the participants had anything to add. The students all agreed with this statement. All three participants mentioned how Chinese culture preferred the round shape over the rectangular shape. Participant #9 said that, “we all like to be one, we like to be together,” adding “our tables are round, traditionally…the moon is round,” and “it means that everyone is together, and no one is missing. It’s just a traditional view in the Chinese culture.” A comment by participant #7 that was not about Chinese culture was that the rectangular shape seemed to be more “industrial.”

When concluding the focus group, I asked if the participants had anything to add to the statement posed before about thinking about a few things that universities can do to help your adjustment to your new environment concerning the visual environment. All three participants seemed content with their answers, and did not have anything else to add. I thanked the participants for all their effort and participation and conclude the focus group.

*Focus Group Two*

Focus group two was scheduled on a Wednesday at 12:00 p.m., in the same meeting place as the interviews, in order to maintain consistency, and decrease the risk of confusion of where to meet. Food and drinks were provided as a small incentive, and
students began arriving at 12:00 p.m. The focus group had four participants, #1, #3, #4 and #5. Three of the participants were graduate students, it was their first time studying abroad, and they were living in two-bedroom apartments. One participant was an undergraduate, it was her first time studying abroad, and was living in an on-campus women’s co-op facility. Three of the participants had been living in Corvallis for approximately seven months, and one participant had been living in Corvallis for approximately three years. Two were female and two were male.

Before beginning the focus group session, I made sure all the participants were informed that they were being audio-recorded, that any answers they may give would be unidentified, and that there were no right or wrong answers.

**Photovoice Responses**

I began the focus group introducing the fact that all of us had experience studying abroad, and that we would be looking at the photos the participants had taken and talking about the themes that had developed from the open-ended interview and Photovoice method. Due to the prior focus group indicating that the photos sometimes were too dark, I pointed out that the photos may or may not accurately portray what the participant saw, and the purpose of the focus group was to explain what the participant was thinking and feeling to the group. Consequently, the participant would receive a chance to explain the accuracy or inaccuracy of the photo.

Participant #4 began the discussion of her photos. Participant #4 described that the first photo she had taken was of her residence women’s co-op facility, and she wanted to show the “interior construction” of it. Participant #4 described the facility as a little
crowded, but that it gave her a feeling of togetherness. The second photo was of the co-op facility as well, and she wanted to show the big windows and the sunshine coming through them and she wrote on the back that it was, “relaxing and inviting.” Participant #4’s last photo was of her study room, and she took this photo to show that there was not enough light to study.

Participant #3 continued the discussion with his photos. Participant #3 began with a photo taken of the Kelley building and he remarked on how he liked the space, because it was open, quite bright, the structure was “very simple” and didn’t “feel complicated.” Participant #3 wrote that the “open structure lets me feel calm” and “for study and it’s pleasant to study there.” Participant #3 then spoke about another photo of a staircase and explains how he did not like the space because the “floor is too old . . . and in evening it’s very scary if you’re just here.” And when “it’s very hot in summer, in this area. . . it has too much window [sic]” and goes onto explain how the roof in his building is not good quality, and that the department has had a new one for two years, but has yet to replace it. Participant #3’s third photo was the Dixon track, and he liked it because it was also an open space and he could see other people participating in recreational activities while he runs.

Participant #5 explained next about his three photos. He explained in one photo, he took it because he liked “the design of the room . . . the lights . . . because it feels very modern,” and also added that he liked that the windows were quite large to allow sunshine to come through the building. The next photo participant #5 described was in the Civil Engineering building and he explained that the structure in the photo was “like a
bridge, and it is related to our majors,” and thought it was a good idea. Participant #5 also added that the structures in this photo reflect the “language” of Civil Engineering because the outside was not hiding, and a person can see the whole structure. Participant #5 then elaborated on his third photo of the International Office, and overall he liked the feel of the flags that surround it, but thought it was too small and the color of the shades were “not good.”

Both participant #3 and #4 then joined the conversation. Participant #4 said she liked the photo of the Civil Engineering because of the design, and participant #3 explained how “everyone likes new buildings” and wondered why he got charged the same amount as students that get to use Kelley, when he must be in Graph, which is a much older building in worse condition. The discussion continued with all four participants, and they began to compare different buildings on campus, and also wondered why the tuition is the same for certain students, even though the facilities within the buildings may differ immensely.

Participant #1 began to explain her three photos. Participant #1 explained that compared to Kelley or Kerr, her building was “not very outstanding,” but she still liked it because it had posters on the wall and she received a warm feeling from it. Participant #1 also mentioned that “sometimes I think that, maybe the building is ugly, but you find a place that belongs to you, so you feel warm, you feel very happy,” and also mentioned that her building was very bright with light. The next photo she discussed was taken in the library, and she remarked that she liked the library because it was convenient, and the book shelves “can move automatically.” The last photo was taken in the library as well,
and participant #1 said she took this photo because she “liked the light . . . and the construction is very modern.”

As a group, participants #1, #3, #4 and #5 began to look at all the photos and remarked on photos that were not taken by them, specifically. Participant #4 said she liked the Civil Engineering building photo, the photo of Dixon because of its good design, and the photo of the library because it’s lighting, desks, and chairs are “good for studying.” Participant #4 thought the International Office is “too small” and thought that the people working there may be “quite lazy” because there was a sofa in it. Participant #3 agreed with her comments, and stated that the library made him feel very “calm” and also liked the windows.

Participant #3 remarked on participant #1’s photo of her department and said the facility was good, but perhaps not good for study. Participant #3 also said how he liked participant #4’s photo of her living room in the co-op facility, because it seemed comfortable and gave him “good feelings.”

Participant #5 mentioned how he also agreed with participant #3’s feelings about the stairway photo, and further explained how one cannot even open the windows to receive fresh air from outside, and that it felt like a factory. Participant #3 completely agreed with him. Participant #5 also responded to the photo in Kelley and how the openness gave him a good feeling, and that even though there are no windows in the hallway photo, he still thought there was enough light. Participant #5 began to critique participant #4’s study space, saying the picture was too large, and everyone began to laugh, because he didn’t realize someone in the focus group decorated that space.
Participant #5 also wrote on the back of the photo “I think there are too many stuff on the desk. And the picture should be put aside, not in front of the people.”

Participant #1 began to contribute that she also liked the Kelley building photo because it “is almost the newest building in our campus, so I think everyone will like it. There is a coffee shop there, and it’s very convenient for me.” In contrast with #3 and #5, participant #1 liked the photo of the stairway because of the “sunshine.” Participant #1 added that she liked the International Office because it felt “welcoming.” Participant #4 added that she still felt the space was too small and the people were lazy that worked there.

After that, participant #5 critiqued the track that participant #3 and #4 liked. Participant #5 thought that the walls surrounding the track were “too simple,” and gave a suggestion to add more windows and more nature scenes. Participant #3 joked, “So run outside.”

*Checking Emerging Interview Themes*

Beginning with theme #1, I stated that Chinese international students answer showed that safety is an important part of the visual environment, and asked to what degree to they agree with the statement and if the participants had anything to add. All four participants agreed that safety was an important issue to Chinese international students. Participant #3 stated that, “I think safety is the first place for us, because we don’t have any sense of what happens here and what stuff happens, and you know, it’s usually, when we leave China, our parents always says, keep yourself safe, so that’s the most important thing for us.” Participant #4 agreed and mentioned how a warm and safe
environment was important, and “sometimes the building’s light is too dark . . . especially when you are alone, and you can imagine a very horrible picture . . . and you feel unsafe.” Participant #3 added that the more open the structure, the safer he feels, because if he were in trouble, someone would see him. And participant #5 mentioned that the arrangement of the rooms was important so that you can find where you are going. Once this was mentioned, all four participants joined the discussion in the importance of being able to find a place, and how directions should be included in the entrance of the building.

Theme #2 focused on color association, and I stated that in response to color associations, Chinese international students were more likely to associate positive emotions with warmer and/or lighter parts of the color spectrum; and are more likely to associate negative emotions with darker and/or cooler parts of the color spectrum. I asked to what degree to they agree with the statement and if the participants had anything to add. All four participants mostly agreed with this statement. Participant #4 mentioned that it was a “global” perspective, and went onto explain preferences of Chinese people briefly. Participant #1 was in 90% agreement of the statement and said she understood why the statement would be true, but that also there may be buildings that have dark or cool colors that are still “impressive.” Participant #5 gave examples from the photos and said there was a balance of black and white that gave a “classical” look. Participant #3 elaborated that the color someone preferred depended on the usage of the space.

Theme #3 focused on personalization of space, and I stated that Chinese international students like to personalize their home and work-space, and asked to what
degree to they agree with the statement and if the participants had anything to add. Participant #1 responded prominently saying, “Absolutely,” but when the other three began to talk about their home and work-space being less personalized, she changed her opinion. All four participants agreed that they would like to decorate their home, but it was temporary, and their office as well seems temporary, since most of them see themselves returning to China in the near future. However, some of them did mention that they added little things like pictures, plants, or personalized planners in their home and/or work-space environments.

Theme #4 focused on Chinese international students’ preferences to on-campus places. The first preference was that Chinese international students preferred a brighter study room or one that had a window, compared to darker study rooms or study rooms that had no windows. I asked to what degree the participants agree with the statement and if the participants had anything to add. Participant #4 said she 99% agreed with the statement, and the other participants agreed as well. The participants mentioned that they like the “fresh air,” “escape,” and that the window can relax their eyes after studying.

The second preference was that Chinese international students preferred a hallway that showed history on display, appeared to be like a university, was classic, and organized. As a follow-up, I asked to what degree do the participants agree with the statement and if the participants had anything to add. Participant #9 strongly agreed with this statement, and so did participants #2 and #7. Participant #7 remarked that she thought it was about the Chinese international students’ “imagination about Western culture.”
The third preference was Chinese international student preferred and entranceway that had interesting design, openness, and seemed new. And I asked to what degree do the participants agree with the statement and if the participants had anything to add. All four participants agreed. The participants all agreed with this statement. Two of the participants discussed when looking at the photos used in the open-ended interview, that the preferred photo looked more academic.

The fourth preference was Chinese students preferred the shape of round lights rather than rectangular lights because it is round, special, cuter, not sharp, and felt like home. And I asked to what degree do the participants agree with the statement and if the participants had anything to add. All participants agreed with this statement. Participant #4 began the discussion by saying that the round shape was a part of Chinese culture and it means “harmonious and be together” not “too sharp” or “extreme.” Participant #1 felt the rectangular light is more formal than the round light. It was also brought up in discussion that the rectangular light was more practical, functional, and saves energy. But the consensus showed when participant #5 said that his first impression was that he liked the round light, and the other participants agreed.

When concluding the focus group, I asked if the participants had anything to add to the statement posed before about thinking about a few things that universities can do to help your adjustment to your new environment concerning the visual environment. All of the participants mentioned how Chinese design was different from American design, and how they must adjust to it. There was a discussion amongst the participants on whether it was the newness of a building that showed quality, or the overall design that showed the
school cared about the research, faculty, and students. It was determined that even though a building might be old, it did not mean it could not be regarded as a place that cared. Another suggestion was about keeping the library open twenty-four hours, but nothing else was added about the visual environment. After I had observed the discussion had dwindled, I thanked the participants for all of their effort and participation.

**Summary of Results**

The results from the open-ended interview, Photovoice, and focus group show an in-depth view to better understand their personal visual perspective, and collectively understand their perceptions of the visual environment. The open-ended interview provided a more personal glimpse of the participant concerning gender, major, student status, hometown, pre-departure preparation, arrival to the U.S., orientations received, residence, campus places, color association, and campus place preferences. Photovoice provided a means for the participant to express their visual perspective, and the focus group created a sounding board for the participant and reconfirmed statements derived by the themes that were gathered from the open-ended interview and Photovoice results.
Chapter 5: Discussion

A descriptive qualitative approach was used for this research study to explore how the visual environment influences Chinese international student adjustment while studying in the United States. In this chapter, I briefly review the four themes regarding visual environmental cues that emerged, and based on these themes, I present recommendations to facilitate student adjustment by university staff. I also acknowledge study limitations.

New Visual Environment Cues Influence on Chinese International Students

Four central themes that emerged from the interviews, Photovoice, and focus groups centered on safety, color association, personalization of space, and campus facility preferences. Regarding campus facility preferences, two sub-themes emerged. The first sub-theme was the amount of light and whether it was natural or artificial. All four themes were drawn from the open-ended interview, reconfirmed in the focus groups, and supported in the literature. Details of these major findings including Chinese cultural-specific references are presented in the Conclusion.

Recommendations to Facilitate Chinese International Student Adjustment

The following recommendations to facilitate Chinese international student adjustment by university staff are based on three periods: pre-departure, orientation, and while the students are studying abroad.

Pre-departure

Participant response to pre-departure preparation consisted of engaging in their own research, receiving information from their university in China about Oregon State
University, receiving a brochure from Oregon State University, and making connections with the Chinese Student Association at Oregon State University. The information received by the participants usually contained a brief overview of what Oregon State University and the United States may be like, but none of the participants mentioned preparation related to adjusting to visual cues in the new environment. However, the Chinese Student Association seemed to have more of a dialogue with the Chinese international students prior to study abroad, and therefore, could have been unaware of giving their own visual perception of the environment to the participants.

Visual cues in the new environment seem to be a factor influencing positive and negative emotions, even though the participant seemed unaware of it. In the participant’s personal research before studying abroad, some mentioned viewing photos of Corvallis and Oregon State University in order to receive a better visual interpretation of where they may live. Based on the results of this study, it is apparent that visual cues in the new environment may influence Chinese international students studying abroad, and perhaps should be addressed in preparation. Considerations regarding safety, color association, personalization of space, amount of light in the indoor environment, and design should be taken into account, and noted in a small portion of the Oregon State University brochure to prepare and to increase awareness for international students before arrival. Another way to increase awareness and inform Chinese international students about the new visual cues at Oregon State would be to navigate them to the virtual tours website link, in order to provide them with a better perspective and alert them to steps they can take to
ease their transition, such as bringing a few items from their country to help personalize their living space.

Orientation

Student orientations varied widely and consisted of orientations received from the International Office, the Graduate School, and the participant’s department. Although none of the participants mentioned any suggestions at the orientations about how to adjust to new visual environment cues. Due to the emerging themes and results, it is apparent that visual cues in the new environment may influence Chinese international students studying abroad, and perhaps should be addressed in the on-campus orientation. Safety, color association, personalization of space, amount of light in the indoor environment, and design should be taken into account, and incorporated into the orientation. Ways to address these issues would be to incorporate multi-media presentations that would allow the Chinese international student to view selected campus places, and perhaps distribute a CD giving another opportunity to receive a virtual tour of buildings they may be interested in knowing more about or locating.

Since the International Office is in contact with the most international students, a possible recommendation is to create a pamphlet and/or lesson for the international students about the visual cues in the new environment, how it may affect the international students and the culture shock they experience, and what ways the international student can adjust to their new visual environment. Adjustment to the new visual environment require becoming aware of the environment, and also becoming aware of the colors, light,
and design that may be most beneficial for an educational and home setting for the international student.

Moreover, during the time of the interviews, participants had a negative perspective of the visual cues of the International Office. There were negative comments about the color of the outside of the building, the small size of the building, and the arrangement of the furniture that portrayed the International Office as lazy. A positive comment about the International Office was that the flags on the outside of the window were welcoming, and that the students felt their country was adequately represented. Since the International Office has moved since the times of these interviews, perhaps the International Office staff should take into account these observations. From the findings of this study, the International Office could incorporate warmer and lighter colors in their color pallet and pay attention to how the space is utilized by how they arrange the furniture.

*While Abroad*

After pre-departure preparation and orientation, a reminder of the new visual cues could be of importance and provide stability and support when experiencing the affects of culture shock. If a study abroad adviser observes that a student is exhibiting the effects of culture shock, he or she could suggest visual environmental adjustments. I will give four possibilities for those adjustments. First, Chinese international students could study in brighter areas. Second, an adviser could suggest that the Chinese international students personalize their space to make it feel more like their own and, in turn, make the environment more familiar to them. Third, advisers could encourage that Chinese
international students surround themselves with more warmer and brighter colors if they are feeling depressed. If Chinese international students are feeling too stimulated, then they could surround themselves with cooler colors in the color spectrum. Fourth, students could adjust the design of the room and perhaps add more round shape to remind them of togetherness and harmony, which is characteristic in Chinese traditional culture.

All of these recommendations related to the visual environment could be used to help alleviate the intensity of culture shock felt by the Chinese international student and this additional support could create a more healthful visual atmosphere.

Limitations

Participant sampling, recollection of past experiences, and quality of equipment and training for Photovoice are limitations listed in this study and are identified and examined in this section.

Participant Sampling

A limitation in this study was participant sampling. The first sampling limitation was the number of graduate students that participated in the study, and how that affected the information I received about on-campus residences. Both undergraduate and graduate Chinese international students were invited to participate, but the graduate students may have had more interest in supporting the research than the undergraduate students. Nine out of ten were graduate students, and graduate students tend to live off-campus, rather than on-campus. This is evident by reviewing the results in which the nine graduate students all lived off-campus, and the undergraduate lived on-campus in a co-op facility. If the study had focused more on undergraduates, I perhaps would have received more
information, perspectives, and preferences from Chinese international students about on-campus residence, and I also would have been able to give more recommendations for what Chinese international students and residence halls could do to make a student feel more comfortable in their environment. The second limitation in participant sampling was the fact that they were all Chinese international students; however, I thought it better to be more focused in this exploratory study, rather than be too broad and risk losing in-depth detailed information that might be culturally specific.

Recollection of Past Experiences

Recollection of what occurred for pre-departure, arrival, and orientation may have been altered due to the amount of time that had past. Therefore, capturing the essence of how they felt during these times was difficult. Eight of the ten participants were interviewed six-seven months since their arrival in the United States, and the other two participants had been in the United States for approximately three years, a significant amount of time. Even though I wanted to interview the participants during the six-seven month period because of the culture shock U-curve plateau, it may have been to my advantage to interview the participants upon arrival, when the participant’s experience was fresh in their memories. It also may have been good to interview them upon arrival, approximately three months, and six-seven months, in order to receive more first hand information during the culture shock phases.

Quality of Equipment and Training for Photovoice

Disposable cameras were used for the Photovoice method, however, some of the photos were too dark, because the participant forgot or didn’t use the flash. Therefore,
about one third of the photos were unusable. Perhaps the use of a different camera may help the quality of the photo. Another way to increase the amount of usable photos may be to show photo examples, and then show what camera settings (flash on or off) should be used for that particular setting to achieve the desired camera shot. Fortunately, students were able to clarify what they were trying to capture during the focus group discussions.
Chapter 6: Conclusion

The descriptive qualitative approach I used to explore how the visual environment influences Chinese international students’ adjustment while studying abroad in the United States has been an interesting journey for the participants and me. The ten Chinese international students that participated in my study did not mention any direct orientation upon arrival at Oregon State University to increase their visual environmental awareness. While participating in this study, they seemed to have developed an understanding of the impact of visual environment cues, and this was shown by how the participants responded in the focus group. Through our cooperative studies four major findings have emerged. They are safety, color association, personalization, and campus facility preference sub-themes regarding amount and type of light in the indoor environment and design.

Safety

When studying abroad, safety is an important issue for all cultures. If one is travelling to an unfamiliar land, they may be cautious or fearful because it is unknown to them. People may fear getting lost in an unfamiliar environment. That is also why orientation programs at universities usually incorporate safety rules in their orientation materials for incoming international students. Some students acknowledged receiving information about safety in their orientation. Both focus groups agreed that it was an important factor.

In addition, students repeatedly explained during the open-ended interviews and focus groups that their previous notion was that the United States was very dangerous,
but as the international students became more accustomed to the new environment, they realized Corvallis was much safer than they had imagined. One participant said that she was very surprised her roommate and other people she knew in Corvallis didn’t lock the door to their home. In China, especially in larger cities, most everyone locks their doors, and may even have a gate keeper to guard the grounds. Living in such a small town like Corvallis has changed their perception about safety in the United States, but perhaps Corvallis is an exception compared to other urban cities in the United States. I believe safety should be an important part of the visual environment education for Chinese international students, and most likely all international students.

*Color Association*

Color association is a second major finding. Chinese international students stated in their individual interviews and confirmed in the two focus groups that they are more likely to associate positive emotions with warmer and/or lighter parts of the color spectrum; and they are more likely to associate negative emotions with darker and/or cooler parts of the color spectrum. In the focus groups some participants thought Chinese international students might have different color associations from other cultures or varying degrees of difference. There was some mentioning how the color red may represent more of a positive response for Chinese culture, rather than in other cultures. In Chinese culture, the color red is associated with happiness and often used in traditional Chinese weddings and celebratory festivals. Moreover, the color orange received a positive response by many participants, but as one participant mentioned during the open-ended interview, he associated it with Oregon State colors. Therefore, cultural
associations related to colors may have been affecting the Chinese international students based on their Chinese culture and the culture they experienced while attending Oregon State University.

Personalization

Personalization emerged during the open-ended interviews when some participants spoke about their residence or work environment, such as changing the color of their bedroom or adding personal photos to their office desk. Both focus groups agreed with this idea, but it was also strongly mentioned in both focus groups, that if they felt their living space was less temporary, they would be more likely to personalize it.

In particular, one of the students had changed her residence. She was also the same participant who added a curtain she brought from China to her room. She made remarks about how she liked living with a Chinese international student when first arriving to the United States, but now she wanted to change her living situation, because she wanted to explore and be exposed to more “exotic” things. During the focus group, she mentioned that she had changed her residence because it would give her more freedom to decorate it. Another participant, who had been studying abroad at Oregon State University for approximately three-years said she noticed that upon arrival, her residence seemed new and exciting, but now that she has lived there for a longer period of time, she has gotten used to it, and it seems normal.

Both of these participant examples show that they were both in the honeymoon stage of culture shock, when everything seems new and exciting. Once they adapted to the new environment, the excitement dwindled. One chose to change her environment so
she could personalize it more, while the other chose to keep living in her residence, even though it wasn’t giving her the excitement she once experienced upon arrival.

*Campus Facility Preferences*

The two sub-themes that emerged concerning the campus facility preferences, were the amount of light and whether it was natural or artificial and the design of the indoor environment. Both sub-themes emerged during the open-ended interviews and were mentioned when the participants spoke about their residence, campus places, and when viewing the campus place photos. Both focus groups agreed that light was an important factor, especially in the environment in which they study. In one of the focus groups it was mentioned that from a young age, their parents emphasized how it was important to have a place of study that was bright so that their eyes would not become overly stressed.

Regarding design, some students noted that the arrangement of the furniture in their apartment and the amount of space delegated to the rooms were typically American. For instance, some Chinese international students believed that the larger living room they currently lived in was a waste of space and that the bedroom should be larger. Both focus groups agreed that design played a role in their preference. The most vivid design example was that 10/10 participants preferred a round light over a rectangular light. Some of the reasons for the design preference given by the focus groups members were that round meant togetherness and harmony in traditional Chinese culture.

*Study Implications*
After exposure to this study through interviews, Photovoice, and focus groups, the participants became more consciously aware of their visual environment, and what changes they have made in the past, and what changes they can make in the future concerning their home, work, and/or study environments. This awareness of how color, light, and design may influence their emotions gave students more control, because now they had a better understanding of how to evaluate whether the visual environment was facilitating or hindering their ability to adapt to a space.

*Increased Awareness*

The stages of culture shock literature by Oberg, Storti, and Marx, show a progression of awareness that leads to being fully assimilated into the new environment. The more aware the individuals are about their environment, the more in control they may become. This idea is partially attributed to the duration of time a student is studying abroad and can be supported in this study by the two Chinese graduate students who had been studying abroad in Corvallis for the longest duration of time, which was approximately three years. These students showed more awareness of visual differences between Chinese and American environments than the eight students who had been studying abroad for approximately six months. The two students who studied abroad for the longest period of time gave examples of how their current residence in the United States differed from their home in China. In contrast, this issue was scarcely mentioned by the eight students who studied abroad in the United States for approximately six months.

*Taking Control*
This study provided a means for the participants to play an active role in their new environment. In turn, this knowledge introduced new ideas about how to change their environment to what they perceived as positive. Some participants had already begun to take action in changing their environment, while others learned from this study that they may alter or choose another environment to create a more positive setting.

The findings are consistent with previous research proposing that altering a space to one’s personal preference is a way to personalize, and therefore, creates a degree of place attachment. A few students who had studied abroad for the shorter period of time gave examples of personalizing their environment by placing Chinese decorations in their home or at their place of work. Accordingly, this awareness provided participants with a coping mechanism for consciously adapting to his or her visual environment.

**Questions for Future Research**

Because this was an exploratory study to examine the influence of the new visual environment on Chinese international students, there are many opportunities for future research. I offer five possibilities for advancing this research.

**Expanding Across Cultures**

For this particular study, I chose Chinese international students in order to focus my research on one culture. However, in the future, this study could be applied to students from other cultures, and those results may clarify whether visual perception is different, and to what degree, in other cultures. Further, expanding the range of cultures may also provide insight to further culture shock studies related to how international
education programs can help study abroad students adapt to their new visual environment.

*Duration of Time Studying Abroad*

This study shows that the amount of time spent studying abroad may affect the visual awareness of the individual. Therefore, applying the methods of this study and separating the participant groups into how long they had been studying abroad may show further variations in visual perception and culture shock.

*Examining the Outdoors*

The indoor visual environment was examined in this study to narrow my field of research, even though this area contains significant reference materials. Expanding the scope to include the outdoors may give rise to other insight about how Chinese international students view exterior architecture and nature in the new visual environment.

*Gender Differences*

Due to the size of the sample, I chose to have both male and female participants, however, for future research, it may be interesting to separate the two if more students can participate, and see if there are variations in the results, and to what degree across cultures being examined based on gender.

*Stages of Culture Shock and the Visual Environment*

Due to time constraints, this study happened during a two-month long period from late-February to mid-April. Implementing this study upon arrival, after three months of arrival, and after six-seven months of living in the United States may show greater insight
into the ebb and flow of culture shock during these periods, and how culture shock pertains directly to visual environmental cues. This approach would enable participants to recollect their experiences simultaneously. The open-ended interview, Photovoice, and focus group methods would possibly give a fresher perspective and also show how the perceptions of the participants change throughout the six-month period.

Final Comments

Being able to identify visual cues is an important skill in order to be aware of the differences being imposed upon the sojourner when encountering a new environment. In addition to conventional social support for international students provided by university international programs, a new area of support should be added. My research shows that increased awareness of visual cues in the new environment and their influence can help facilitate adjustment for Chinese international students studying abroad. I strongly urge international education programs to incorporate visual environment awareness and associated coping skills into their orientation and advisement in order to provide a more successful environment for incoming international students.
References


Oregon State University, Cultural Issues: International Programs. Retrieved March 26, 2009, from: http://oregonstate.edu/international/studyabroad/students/gone/cultural


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University of Pittsburgh, University of Pittsburgh Study Abroad Office, Retrieved March 26, 2009, from: http://www.abroad.pitt.edu/


APPENDICES
Hello!

I am a graduate student at Oregon State University and have had a great interest in the people, culture and language of China for several years. My background in China consists of living and working for one year in Xi'an. The Chinese people I met taught me so much, and I made some life-long friends as well. Overall, it was an amazing experience, and I plan to make future trips to China.

Because of my China experience and my career interest in working with students who study abroad, I am conducting research for my thesis about how Chinese students are influenced by their new environment while attending Oregon State University. I hope this thesis study results improve our understanding of what visual environmental cues (color, light, and design) facilitate or hinder Chinese student adjustment. I plan to use these findings to develop recommendations for improvements that can be considered by college administrators.

I would like to invite you to participate in a research study designed to explore how the visual environment influences Chinese student adjustment while studying in the United States. During this study you will be asked questions in a private interview about your perceptions of your study abroad experience pertaining to your adjustment and to the visual environment including the OSU campus and your residence. To thank you for your participation in the private one-on-one interview, you will receive a gift certificate that is equivalent to a regular coffee or tea at JavaStop in the Memorial Union.

After the interview, you will be invited to participate in taking photos of your residence and campus places to show your point of view. You will be given about two weeks to take photos on a disposable camera that I will supply. After you take the photos, you will be asked to participate in a small group discussion with other Chinese students to talk about the photos you have taken. Refreshments (food & drink) will be provided.

When the results are reported, no student responses will be linked to a particular student.

Please respond to this email or call if you are willing to participate. I will correspond with all interested participants to find a time that works for everyone. I hope to see you in a few weeks. If you have any questions, please contact me by email (lauradevito@gmail.com) or cell phone at 503.890.9960. Thanks!

Sincerely,
Laura DeVito
Graduate Student
in Interdisciplinary Studies

P.S.: Attached is a photo I took while living in China. It was such a great experience.
APPENDIX A (Continued)
APPENDIX B:

Informed Consent Form

**POLITICAL SCIENCE DEPARTMENT**

[Logo]

**OSU**

307 Gilkey Corvallis, Oregon 97331-6206
Telephone: 541-737-2811 Fax: 541-737-2289

**Informed Consent Document**

**Project Title:** "VISUAL ENVIRONMENT INFLUENCES ON CHINESE STUDENTS STUDYING IN THE UNITED STATES"

**Principal Investigator:** Dr. Haoyu Li, Political Science

---

**What is the purpose of this study?**

You are being invited to take part in a research study designed to explore how the visual environment influences Chinese student adjustment while studying in the United States. The related research question is: "What visual cues in a new environment influence Chinese students experience abroad?" In particular, the investigator wishes to collect Chinese student perceptions related to color, light, and design on campus and at their residence through individual interviews and a focus group. The results will be a part of a Master's thesis. We are studying this in order to improve our understanding of what visual environmental cues facilitate or hinder Chinese student adjustment and hope to use our findings to develop recommendations for improvements.

---

**What is the purpose of this form?**

This consent form gives you the information you will need to help you decide whether to be in the study or not. Please read the form carefully. You may ask any questions about the research, the possible risks and benefits, your rights as a volunteer, and anything else that is not clear. When all of your questions have been answered, you can decide if you want to be in this study or not.

---

**Why am I being invited to take part in this study?**

You are being invited because you are a Chinese student studying abroad at Oregon State University, and it is also a part of my thesis.

---

**What will happen during this study and how long will it take?**

During this study you will be asked questions in a private interview which will be audio recorded and field notes will be taken confidentially about your perceptions of your study abroad experience pertaining to your adjustment and to the visual environment including the OSU campus and your residence. The main focus will be on visual environmental cues including color, light, and design. The private one-on-one interview will last about 30-45 minutes. After the interview, you will be invited to participate in taking photos of your residence and campus places to show your point of view. You will be given about two weeks to take as many photos as possible (Maximum of one roll (~27 exposures) on a disposable camera that you will be given. After you take the photos, you will be invited to participate in a focus group which will be audio recorded and field notes will be taken confidentially to talk about the photos you have taken with 3-5 other students. The focus group meeting will be about 1 hour.

---

**What are the risks of this study?**

There are no foreseeable risks and/or discomforts to participating.

---

**What are the benefits of this study?**

We do not know if you will benefit from being in this study. However, we hope that, in the future, you or other students might benefit from this study, because it may provide a better understanding on how the visual environment may affect students studying abroad in the United States.

---

**Will I be paid for participating?**

You will be compensated for the private one-on-one interview by being given a gift certificate that is equivalent to a regular coffee or tea at JavaStop in the Memorial Union.
You will be provided refreshments (food and drink) at the focus group meeting.

---

**Who will see the information I give?**

The information you provide during this research study will be kept confidential to the extent permitted by law. To help protect your confidentiality, I will use identification code numbers rather than student names on data collection forms. Any records maintained and information collected will be in a filing cabinet, and computer files will be password-protected.
APPENDIX B (Continued)

Do I have a choice to be in the study?
If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. You will not be treated differently if you decide to stop taking part in the study. Participants are free to skip any questions he/she would prefer not to answer while being interviewed or participating in the focus group. If you choose to withdraw from this project before it ends, the researchers may keep information collected about you and this information may be included in study reports.

What if I have questions?
If you have any questions about this research project, please contact:

Principal Investigator: Dr. Hua-yu Li
Tel: 541.737.2811
huyu.li@oregonstate.edu

If you have questions about your rights as a participant, please contact the Oregon State University Institutional Review Board (IRB) Human Protections Administrator, at 541.737.4933 or by email at IRB@oregonstate.edu

Your signature indicates that this research has been explained to you, that your questions have been answered, and that you agree to take part in this study. You will receive a copy of this form.

Participant’s Name: (printed) __________________________________________

(Signature of Participant) __________________________________________

(Date) __________________________________________

Oregon State University • IRB Study #4202 Approval Date: 2/3/09 Expiration Date: 2/10/10
APPENDIX C

Open-Ended Interview Guide
Laura DeVito

Section 1: Introduction & Orientation

1. Explain the nature of the project re: Chinese students’ perceptions of a new environment in the United States and students’ responses to visual cues in a new environment. This project could benefit Chinese students studying abroad by achieving a deeper understanding of their perception of the new visual environment. It could also be applied to study abroad program orientation procedures aimed at assisting students adapt to their new environment.

2. Explain that I have lived and worked in China, am interested in Chinese culture and study abroad, have had a career in study abroad and Chinese culture, and continue to pursue Chinese language and culture studies. Explain to all students that the focus of the interview is about their perceptions as students abroad regarding the visual cues of their new environment at Oregon State University. If they have questions about my knowledge and experience, I will be happy to respond after the interview ends to reduce the likelihood that my responses would bias theirs.

3. Emphasize that there is no right or wrong answer so that the student may feel comfortable answering as openly as possible, and that the answers they give will be held confidential.

4. Ask for major and student status.

Section 2: Description of Pre-study Abroad Experience

1. Let’s begin our discussion by my getting to know you a little better.
   a. Where is your home in China?
   b. Why did you decide to study in the US and at OSU in particular?
   c. How did you prepare for your study abroad experience?
      Probes:
      Who was involved with your preparation? (home university, OSU, yourself, and other)
      What content? (legal, health, financial, packing, culture shock, cultural knowledge and social networking, visual environment such as personalizing space)
APPENDIX C (Continued)

How was the content delivered? (e.g., preparation/advising/orientation)
When was the content delivered? (e.g., preparation/advising/orientation)

Section 3: Environmental Cues - Color Association

2. Colors: Let’s explore the associations you have for selected colors, I will mention a feeling or emotion from a list of words and ask you to select a color you associate with that emotion. For some emotions, you may not have an association.

Show sets of color swatches and ask student to choose which is the most relaxing/calming and which is the most exciting/stimulating.

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APPENDIX C (Continued)

Section 4: Visual Cues in Student Residence and Campus Facilities

1. Residences
   a. Do you live on- or off-campus? How many waking hours do you spend there?
   b. If on-campus, which residence hall?
   c. If off-campus, what kind of housing? (e.g., house vs. apartment)
   d. Describe your residence? (e.g., how many bedrooms, other rooms, and roommates)
   e. What visual features of your residence are most satisfactory to you? Why?
   f. What visual features of your residence are least satisfactory to you? Why?
   g. Have you altered anything about your visual environment? If so, what and why?

2. Campus places/facilities:
   A. What campus places/facilities seem most inviting? Why? (color lighting, and design)
   B. Besides your residence, at which facility do you spend the most time and why? Are there any visual features about it that are inviting to you? Distracting to you? Stimulating to you?

3. Other locations:
   A. What locations seem most inviting? Why? (color lighting, and design)
   B. What location do you spend the most time and why? Are there any visual features about it that are inviting to you? Distracting to you? Stimulating to you?

Section 5: Campus Photo Facility Preferences

NOTE: This section is about Design and Color and Light: Show two options and Ask each to choose one he/she prefers for a particular activity (eat, study, live) and ask why he/she chose it? If appropriate, ask why he/she didn’t choose the other photo.

Directions to student: Next, I’d like you to respond to some campus facility photos. I’ll be showing you two options (APPROXIMATELY 6 SETS) and will ask you to choose one that you prefer for a particular activity and why you chose it.
Section 6: Introduction to Photovoice Concept & Invitation

Conclude with introduction and invitation to Photovoice and Focus Group.
### APPENDIX D

#### Table

**Color Association Results**

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*Note:* The graph shows the color association of the Chinese international students and how many associated a color with a particular emotion. The abbreviations for the colors are as follows:

- R: Red
- LR: Light red (pink)
- O: Orange
- LO: Light orange
- Y: Yellow
- LY: Light yellow
- G: Green
- LG: Light green
- A: Aqua
- LA: Light aqua
- Be: Blue
- LBe: Light Blue
- P: Purple
- LP: Light purple
- Bk: Black
- Gy: Gray
- Bn: Brown
- LBn: Light brown
- W: White

*aThe student debated on purple or red in association with anxious.*
APPENDIX E

Photos used in Section 5: Campus Photo Facility Preferences of Open-ended Interview

Photo Set 1: Dormitory Rooms
1.  
2.  

Photo Set 2: Stairways
3.  
4.  
5.
APPENDIX E (Continued)

Photo Set 3: Study Rooms
6.  

8.  

Photo Set 4: Hallways
9.  

10.
APPENDIX E (Continued)

Photo Set 5: Exits
11.

12.

Photo Set 6: Entrance Ways
13.

14.
APPENDIX E (Continued)

Photo Set 7: Dining Facilities
15.

16.

17.

18.

Photo Set 8: Railings
19.

20.
Photo Set 9: Light Fixtures
21.

Photo Set 10: Study Rooms
23.

22.

24.
APPENDIX F

Photovoice Instructions

Photovoice:

Thank you for your information thus far. Up to this point, you’ve been responding to color and photos I have selected. Now I would like to invite you to participate further by giving you a disposable camera to use at your place of residence and around campus. This approach is an interesting way for you to use a camera and relate your feelings to what you see. I’d like for you to show what you see. Don’t be limited by the photos I’ve shown you. It’s very likely that you may capture new images beyond what I have provided. I’m interested in you voicing your own perspective. Instructions (which will be given with the disposable camera):

a. Take photos of indoor environments: Both residence and campus places.
b. Do not take photos of people; try to focus on the visual environment.
c. Think about how this makes you feel.
d. Take photos of an environment you consider positive (e.g., enjoy being in, feel calm in)
e. Take photos of an environment you consider negative (e.g., want to leave immediately, feel unsettled, and feel anxious in)
f. Make sure the flash is on in dark areas in order to see the subject matter more clearly.
g. What question do you have for what I have asked you to do?

Lastly, please return the disposable camera to me personally (503.890.9960) or to my mailbox in Room 307 of Gilkey Hall.
APPENDIX G

Focus Group Topic Guide
Laura DeVito

Introductory Remarks:
A focus group is a facilitator-led, semi-structured group discussion used for collecting textual data from a group of participants about a particular topic in a limited amount of time. The purpose of focus groups in this study will be to refine, clarify, and expand on themes that have emerged from the content analysis of the in-depth interviews and collection of photos taken by the students. The information the students provide during this focus group meeting will be kept confidential. Tell students that there is no right or wrong answer so that they may feel comfortable answering as openly as possible.

1. Global Questions: All of us share at least one thing in common, we all have studied abroad. Based on your experiences as a student studying abroad,

   a. During this focus group, I want you to begin thinking about a few things that universities can do to help your adjustment to your new environment concerning the visual environment. Probe: pre-study abroad, orientation upon arrival to OSU, during study abroad at OSU

   b. I have distributed copies of the photos you took recently. Please sort through them in terms of which represent calming environmental cues and which represent unsettling environmental cues. Let’s share and discuss some of these photos.

      i. Show us one of your photos that represent a positive/calming environment, and describe to our group why you perceive it that way. Do you have any suggestions for further improvement of these environmental cues? Does anyone else have a similar or different response to the photo?
      ii. Show us one of your photos that best represents negative/unsettling environmental cues, and describe to your group why you perceive it that way. What change(s) would you suggest to alter or change these environmental cues? Does anyone else have a similar or different response to the photo?
      iii. During this discussion, I will ask each student to write on the back of the photos any opinions in the form of positive or negative reaction relating to environment of the photo I have given them.
2. Specific Questions based on themes from interviews: I’d like to review the four main themes that emerged from the in-depth interviews in which many of you participated.

This is our opportunity to refine, clarify and expand on these themes so that your experiences are reflected as accurately as possible. For each theme I mentioned, could you please offer comments that you think would improve the description of that theme area.

a. Theme #1

Chinese international students answer showed that safety is an important part of the visual environment. To what extent do you agree with that? Do you have anything to add?

i. For example, if a room is too dark, or very old. It may seem insecure.

b. Theme #2

In response to color associations, Chinese international students were more likely to associate positive emotions with warmer &/or lighter parts of the color spectrum; and are more likely to associate negative emotions with darker &/or cooler parts of the color spectrum. To what extent do you agree with that? Do you have anything to add?

i. For example, students would associate inviting with reds, oranges, and yellows, and uninviting with aqua, black, gray, and brown.

ii. For example, students would associate happy with yellow, orange, and red, and sad with blue, black, and gray.

c. Theme #3

Chinese international students like to personalize their home and work-space. To what extent do you agree with that? Would you like to add anything?

i. For example, adding photos to the wall where you work.
APPENDIX G (Continued)

ii. For example, adding your favorite color in your room.

d. Theme #4

Chinese international students express that campus facility preferences include the following:

i. Chinese international students preferred a brighter study room or one that had a window, compared to darker study rooms or study rooms that had no windows. To what extent do you agree? Do you have anything to add?

- For example, 9/10 students chose study room number six because it was brighter than the others and gave a warm feeling.

- For example, 9/10 students chose photo number twenty-four because it had a window to allow the student to escape, view, stay awake, and be connected. It was also chosen because it was more natural and comfortable.

ii. Chinese international students preferred a hallway that showed history on display, appeared to be like a university, was classic, and organized. For example, 9/10 students chose number ten because the hallway showed history on display, appeared to be like a university, was classic, and organized.

iii. Chinese international student preferred and entranceway that had interesting design, openness, and seemed new.

- For example, 7/10 students chose number fourteen because of the design, openness, and newness. The other photo was too open, looked dirty, old, and not in the best condition.

iv. Chinese students preferred the shape of round lights rather than rectangular lights because it is round, special, cuter, not sharp, and felt like home.

- For example, 10/10 students chose the round light, rather than the rectangular one.
APPENDIX G (Continued)

3. To help students in the future, and knowing what you know now about the visual environment, what suggestions would you make to universities to help Chinese international students adjust to studying abroad in the United States?

4. Is there anything else that you would like to add to our discussion of students studying abroad and visual cues in the new environment?

Thank you for your participation in this focus group.