#### AN ABSTRACT OF THE THESIS OF

<u>Lily Clara Fidzani</u> for the degree of <u>Master of Science</u> in <u>Apparel, Interiors, Housing and Merchandising</u> presented on <u>October 14, 2002.</u>

Title: First Impressions of the Interiors of Hotel Lobbies as Influences on Perceptions of Hotels.

Abstract approved:

Redacted for Privacy

Carol C. Caughey

The purpose of this study was to examine whether participants can form impressions and make inferences about a hotel based only on the physical environment or design of the hotel lobby. The study investigated how the interior arrangement, furnishings and other aspects of hotel lobbies influenced participants' first impressions and their inferences about the hotel as a whole. The lobby was selected because this is the first area inside the hotel that consumers see and therefore it is important for creating impressions.

The specific objectives of this study were: to determine if the physical environment of the hotel lobbies could influence participants' overall perception of the hotels, to investigate what holistic perception participants reported about the hotels based on the design of their lobbies, and to investigate whether the physical environment of hotel lobbies is important in impression formation and in communicating the image of the hotels.

In the present study, impression formation theory provided a theoretical framework for understanding how impressions were formed and how extended inferences were made. The theory provided the basis of understanding how people use physical environment cues to form impressions and make inferences about their environment.

The participants of the study consisted of eight (8) males and 43 female undergraduate students enrolled during Spring Term, 2002, at Oregon State University. Instead of experiencing the real situation, participants were shown four (4) pictures of actual hotel lobbies and asked to form their impressions and make their extended inferences about the whole hotels based on the lobbies. The pictures selected showed variation in the interior space and components of the hotel lobbies, such as lighting, ceiling, floor, walls, architectural style, and furniture arrangement.

The participants were shown one picture at a time projected on a screen in the front of the room. The order in which the participants saw the pictures was varied with each group to account for order effect. The pictures were shown in the following order; ABCD, DCBA, CADB and BDAC, one group at a time. Each picture was shown for approximately three minutes. After explaining the procedure to the participants, the researcher asked them to record their first impressions and make extended inferences about the hotel by responding to open-ended questions. They wrote statements about the first things that came to their minds when seeing the pictures of the hotel lobbies. Data collection took about 10-15 minutes for each session. The responses from the open-ended questionnaire were content analyzed according to themes that emerged from the responses for each slide. The emergent themes were reported and discussed based on the objectives of the study.

Most of the impressions formed were shared by the participants regardless of their class standing, number of times they had stayed in a hotel recently, and their current major. Even though gender comparison was not made due to few male participants, the researcher observed that the males' impressions were more physical, whereas female's impressions were more emotional. That is, the males looked more at the design, available amenities and facilities, whereas females also commented on the friendliness, warmth and coziness of the hotel.

When asked to, participants were able to form impressions about the entire hotels based on ambient factors in the lobbies such as lighting and cleanliness, and on design factors such as style and layout, space, color, architecture and other factors. Impressions were also made with regard to social factors, such as clientele and service personnel. Responses about the characteristics of the clientele ranged from families to business people, rich people and others.

Participants were able to make inferences about the general atmosphere, cleanliness, type of customer service, available amenities and facilities, price of hotel rooms, possible location of the hotel, clientele, the size and décor of the guest rooms, and comfort and spaciousness, based only on their impressions of the hotel lobbies when prompted. They were also able to attach emotional, economic and physical feelings to their impressions.

The findings of the study indicated that the environment of the hotel lobby might be rich in cues that are important in communicating image and suggesting impressions of the hotel. The study concluded that the design of the lobby might very well determine the approach or avoidance behavior of guests and potential guests. The quality of the environmental cues may also be important in communicating the quality and nature of service the hotel offers and the image it intends to portray. Therefore, in order to increase business, the environments of hotel lobbies should be designed to elicit approach behavior from guests or potential guests.

©Copyright by Lily Clara Fidzani October 14, 2002 All Rights Reserved

# First Impressions of the Interiors of Hotel Lobbies as Influences on Perceptions of Hotels

by Lily Clara Fidzani

# A THESIS

submitted to

Oregon State University

in partial fulfillment of the requirements for the degree of

Master of Science

Presented October 14, 2002 Commencement June 2003

Master of Science thesis of Lily Clara Fidzani presented on October 14, 2002.
APPROVED:
Redacted for Privacy  Major Professor, representing Apparel, Interiors, Housing and Merchandising
Redacted for Privacy
Head of the Department of Apparel, Interiors, Housing and Merchandising  Redacted for Privacy
Dean of the Graduate School
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.
Redacted for Privacy  Lily Clara Fidzani, Author

#### **ACKNOWLEDGEMENTS**

I would like to express my deepest gratitude to Carol Caughey, my major professor and mentor, for her valuable time and suggestions, guidance, commitment, friendship, encouragement, patience and understanding throughout the course of my study and writing of my thesis. Thanks a lot Carol for always being available when I needed your assistance.

My gratitude also goes to Dr. Leslie Burns, my minor professor, for her valuable and insightful suggestions and feedback. Also my gratitude goes to the rest of my graduate committee members, Dr. Carmen Steggell and Dr. Lizbeth Gray, for their helpful input. I would also like to thank the staff and students of AIHM and HDFS Department, and Dr. Leslie Richards for their valuable time and suggestions.

My deepest appreciation goes to my husband, Boga Baisana Fidzani for the support, love, encouragement and patience you showed throughout my study. You saw me through the bad and good times. All the thanks to my baby boy Wedu, who was with me throughout the long journey, before and after his arrival. You were my inspiration and this one is for you.

I would like to thank my family in Botswana, Fidzanis and Molefes, for all the love, support and encouragement. Special thanks go to my mother for her unconditional love and support. Special thanks to my sisters Pearl and Thuli and my brother Kagiso for their support and taking care of things. Last but not least, I would like to thank Griff, Ben and Corey Jay, and Kerry McFall for their warm welcome when I arrived in Corvallis and their continued love and support throughout my studies. I thank the Lord for being with me and guiding me throughout my study. I made it because of you. Thank You Lord!!

# TABLE OF CONTENTS

	<u>Page</u>
I. Introduction	1
Background Information	1
The Effect and Significance of the Physical Environment  Implications for the Physical Environment as a Marketing Tool	2 3
Statement of the Problem	5
Conceptual Framework	6
What is Social Cognition?. Impression Formation. Continuum Model of Impression Formation. The Process of Forming Inference and Potential Sources of Bias. Context.	6 7 11 11 12
Purpose of the Study	13
Objectives of the Study	14
Assumptions	14
Context of the Study	14
Definition of terms	15

# TABLE OF CONTENTS (Continued)

	<u>Page</u>
II. Literature Review.	17
Components of the Physical Environment.	19
Ambient Factors	19 19 20
Internal Responses to the Servicescape	22
Environment and Cognition  Environment and Emotion  Environment and Physiology	22 22 23
Influences of the Physical Environment	23
Spatial Layout	23 24 25
Summary	27
III. Methodology	28
Sample	29
Research Design	30
Stimulus Material	31
Data Collection Instrument	32
Data Collection Procedure	33
Data Interpretation	34
Reflexivity and Personal Biases	35
Credibility	36

# TABLE OF CONTENTS (Continued)

	<u>Page</u>
V. Results	37
Emergent Themes of Impressions Formed and Extended Inferences Made	39
Slide A	39
General Atmosphere, Appearance and Style	39
Cleanliness	40
Costs of the Hotel	41
Customer Service and Staff	41
Comfort and Spaciousness	42
Location and Type of Clientele	42
Architectural Features, Color and Furniture	43
Slide B	44
General Atmosphere, Appearance and Style	44
Cleanliness	. 45
Customer Service and Available Amenities and Facilities	. 46
Costs of the Hotel	46
Location and Type of Clientele	47
Comfort and Spaciousness	48
Architectural Features, Color and Furniture	48
Slide C	49
General Atmosphere, Appearance and Style	
Cleanliness	. 50
Customer Service and Available Amenities	
Costs of the Hotel	
Location and Type of Clientele	
Comfort and Spaciousness	
Architectural Features, Color and Furniture	. 53
Slide D.	54
General Atmosphere, Appearance and Style	54
Cleanliness	
Customer Service and Amenities	
Costs of the Hotel	
Location and Type of Clientele	
Comfort and Spaciousness	57
Architectural Features, Color and Furniture	58

# TABLE OF CONTENTS (Continued)

	<u>Page</u>
Summary of the Results	. 59
Objective 1 Objective 2 Objective 3	61
V. Discussion	. 63
Context, Limitations and Future Research Recommendations	. 67
Implications and Conclusions	. 69
Bibliography	. 70
Appendices	74
Appendix A Questionnaire  Appendix B Informed Consent Form  Appendix C Recruitment Form - Class Announcement  Appendix D Approval from Institutional Review Board (IRB)	78 80 81
Appendix E Hotel Lobby Pictures	02

# First Impressions of the Interiors of Hotel Lobbies as Influences on Perceptions of Hotels

#### CHAPTER I

#### INTRODUCTION

#### **BACKGROUND INFORMATION**

The physical environment of a service firm can serve as an important marketing tool. Previous research suggests that the service environment has a major influence on consumer responses and behavior (Bitner, 1986; Ward, Bitner & Barnes, 1992). Theories of services marketing and environmental psychology suggest that the physical environment can be used as a marketing tool. Restaurateurs and hoteliers are using physical environments of their establishments as marketing strategies to attract clients and establish their images (Booms & Bitner, 1982).

Research has demonstrated that evaluation of the physical environments is based on the impression formation process. Past research has suggested the importance of the physical environment in formation of impressions of retail stores (Zimmer & Golden, 1988), restaurants (Burns & Caughey, 1992), offices (Campbell, 1979; Davis, 1984; Ornstein, 1992), residential environments, entertainment environments and institutional environments such as hospitals and schools and other services (Bitner, 1992; Donovan & Rossiter, 1982). The physical environment of such service businesses influences consumers and creates an image for them (Bitner, 1992).

According to Bitner (1986) the effects of the physical environment of businesses such as restaurants, banks, hotels, airlines, offices, retail stores and others are important because the consumer experiences the service in the firm's environment. In such situations the consumer pays attention to the design details. Thus understanding their effects from the consumer's point of view is a strategic advantage for the firm.

Initial impressions of retail businesses are based on both the exterior and interior appearance. The decision to enter the business relies mostly on initial impressions based on the exterior. These impressions are likely to prompt the consumer to make both positive and negative inferences about service, prices and other aspects of the business. In general, the impressions create expectations about what the consumer is going to experience (Ward, Bitner & Barnes, 1992). This study, therefore was carried out to investigate how the interior arrangement, furnishings and other aspects of hotel lobbies affect consumers' first impressions and their inferences about the hotels as whole.

# The Effect and Significance of the Physical Environment

The two basic reaction behaviors toward an environment are approach and avoidance (Booms & Bitner, 1982). Approach behavior includes physically moving toward an environment and making an attempt to interact, explore and perform tasks within that environment. Avoidance behavior involves the opposite response. Business or institutional environments should therefore be designed to elicit approach behavior from consumers (Booms & Bitner, 1982).

Ward, Bitner and Barnes (1992), suggest that managers need to consider the importance of environmental cues in communicating the image of the business or service. This should be done from the consumer's point of view rather than from that of the manager or architect. Elements of the physical environment help to establish and reinforce consumers' perceptions and image of the service, even influencing their satisfaction and dissatisfaction with the service. The environment can also be designed to influence consumer behavior and interaction with other consumers (Booms & Bitner, 1982). Booms & Bitner (1982) maintain that a service firm can also project and establish a new image by changing the physical environment.

# Implications for the Physical Environment as a Marketing Tool

Unlike businesses that sell products, service business is less tangible; and therefore the physical environment is important in selling the service (Booms & Bitner, 1982). Booms and Bitner (1982) make the following suggestions regarding using the physical environment as a marketing tool:

- 1) Environment as a critical marketing tool environmental design will have an impact on consumer's attitudes, feelings and behaviors.
- 2) Perception of the environment and its elements as a whole by customers environmental elements must be consistent with business image. The effect of minor environmental changes on customer's perception must be recognized.

- 3) Environment must bring out approach behavior in potential customers the environment must be used to reinforce pleasure and reduce any potential negative responses.
- 4) Recognition of the customer's emotional needs the environment must be designed to motivate approach behavior and meet emotional needs of the clientele.
- 5) Use of environment to influence customer satisfaction and dissatisfaction resulting in purchasing and repurchasing behavior this can be tested by investigating how customer expectations are formed about the service including the role the environment plays and the standards they use to judge it (p.38).

Impression formation theory is rarely used in studying consumer behavior and formation of inferences about service based on the physical environment. Most of the previous research used the Mehrabian-Russell model (Donovan & Rossiter, 1982) and other environmental psychology models to study the effects of the physical environment on consumer behavior.

#### STATEMENT OF THE PROBLEM

Previous studies have been conducted on the effect of physical environments of residential areas, retail stores, offices, restaurants and banks (Bitner, 1992; Donovan & Rossiter, 1982). However, little attention has been devoted to exploring how first impressions of the physical environment of hotels, specifically of the lobbies of hotels, are important in influencing perceptions and selection of hotels.

For marketing purposes, it is important to understand the influence of the physical environment, in this case the lobby, has on consumers' inferences about the hotel as a whole. Bitner (1986) suggests that the physical environment or atmosphere is more important in service businesses such as hotels, restaurants, transportation, and professions than it is in retail businesses.

Bitner (1990) suggests that a consumer's evaluation of the service depends on the time period in which the consumer interacts with the service, which is known as the service encounter. This includes encounters with service personnel, the physical environment, and any other tangible or intangible elements during this time period. Service satisfaction and quality decisions can be determined when the consumer evaluates the service encounter versus expectations (Bitner, 1990).

## CONCEPTUAL FRAMEWORK

In the present study, impression formation theory provided a theoretical framework for understanding how impressions are formed in specific cases. The theory provided the basis of understanding how people use the physical environment cues to form impressions and make inferences about their environment. In order to understand the theory, one must explore the social cognition perspective/ framework.

# What is Social Cognition?

Social cognition involves the study of how people make sense of themselves and other people, which includes cognitive processes. The cognitive processes are used by the perceivers to make assessments and judgments based on appearances. The theory focuses on how people learn about the social world and form associations among ideas. Social cognition cuts across various disciplines such as cognitive psychology (Fiske & Taylor, 1984). It generally includes how people classify and perceive things, and helps in understanding why they behave the way they do. These are perceptions and cognitions which people use to make judgments (Lennon & Davis, 1989). The key ingredient in social cognition is "situation" or "context". People make sense of what is happening based on the situation they are in.

There are several research areas that fall under the umbrella of social cognition (Damhorst, 1991). These include:

- person perception
- impression formation
- categorization
- attributions
- social comparison
- symbolic interaction
- presentation of self
- interpersonal attraction and others

The present research looked at the impression formation theory.

# **Impression Formation**

The impression formation theory was pioneered by Solomon Asch (1946). He considered the process of impression formation as an organized process. In his investigations, Asch found that adjective traits are important in the process of impression formation. He demonstrated that people do not use single traits. Instead they form a unified impression about the person perceived (Burns & Lennon, 1993; Livesley & Bromley, 1973).

He proposed two models of impression formation: the configural model and the algebraic model. The configural model assumes change in the meaning of traits as a function of the other traits present in that context. This means that each trait will affect the meaning of the other, and they are viewed as part of a unified whole. The model suggests that impressions are made up of traits and the relationship between them. The algebraic model takes and evaluates each trait in isolation from others and combines them into a summary of judgments (Fiske & Taylor, 1984).

Asch's work was followed by various studies and experimental research based on his theory. Impression formation was extended from understanding the personality of people to forming impressions about objects, including apparel, and the environment (Burns & Lennon, 1993; Livesley & Bromley, 1973).

The theory addresses how people use bits of information and selected cues to form general impressions. Impression formation involves the cognitive, perceptual and affective processes of making judgments and drawing conclusions about a person, an object or an environment. The presence or absence of cues may also affect impression formation (Lennon & Davis, 1989; Livesley & Bromley, 1973). Impressions are a function of both the perceiver (expectations) and the perceived (initial cues) (Grossack, 1953). Hampson (1988) defines impression formation as an interpretation of behavioral events in order to make inferences.

In forming impressions, perceivers tend to make categories in order to describe and simplify things. The stimulus information is weighted and averaged to form impressions (Lennon & Davis, 1989). According to Shrauger (1967), impression formation involves four stages:

- 1. Cue selection It is the first stage of impression formation that involves the collection of information by the perceiver, or what he/she notices about a person or an environment. This can be something that has personal relevance or significance to the perceiver. The perceiver may select and focus on parts of the whole without necessarily being aware of what he/she selects (Shrauger, 1967). However, perceivers also frequently perceive the person or environment holistically (Livesley & Bromley, 1973). The perceiver sees the others as a *Gestalt*, so that the traits are not seen in isolation but in relation to other qualities.
- 2. Interpretive inference This is the second stage, in which the perceiver interprets and uses the collected information to attribute general traits and other characteristics to the object or person perceived. The perceiver interprets the meaning of the cues selected using cognitive structures and associates the cues with primary characteristics (Livesley & Bromley, 1973).

- 3. Extended inferences After interpretations are made, conclusions are drawn as to what additional qualities or characteristics are expected of the person, object or environment perceived. Quality traits may be assigned based on the information selected. Through extended inferences individuals further categorize and organizing information in order to predict new information and make simplified interpretations and impressions. Categorization or grouping of traits contributes to further prediction of behavior, characteristics and traits. Categorization refers to people's tendency to group objects into categories in order to simplify and reduce any complexities associated with the stimulus world (Lennon & Davis, 1989). This means that additional characteristics and qualities, beyond what is seen, can be derived based on the information collected (Livesley & Bromley, 1973).
- 4. Anticipatory set or verbal report this is the final stage of impression formation. It involves organization, grouping, and integration of characteristics assigned by the perceiver. It forms a basis for responding to the situation or person perceived based on inferred traits. It is a process of giving a verbal account, which may be modified when communicated to others (Livesley & Bromley, 1973). This can be done implicitly or explicitly (Kaiser, 1990).

Impression formation may be affected by a) a person's objective stimulus characteristics; b) the nature of stimuli and the context in which they are presented c) perceiver variables and d) social interaction. In conclusion, in forming impressions, people use a variety of cues to make inferences about the quality and characteristics of people, objects and environment. These are then combined and presented as organized and holistic impressions (Livesley & Bromley, 1973).

# **Continuum Model of Impression Formation**

In extending the work of Asch (1946) on impression formation process, Fiske and Neuberg (1986) developed a Continuum Model of Impression Formation. The model addressed whether "people form impressions based on the overall *Gestalt* of the person or based on attributes as isolated elements" (Fiske, 1988, p. 65). Their model proposes that people do both. It also integrates social schema theories with algebraic models of impression formation and proposes that people are engaged in both holistic and elemental processing, and therefore it proposes a continuum between them. They also suggest that each type of processing occurs under specific motivational and informational conditions (Fiske, 1988).

The model suggests that regardless of the perceiver's intent, rapid initial categorization occurs. Obvious physical cues, overt labels, and any other information encountered by the perceiver are the basis of initial categorization. In situations where the target is uninteresting and irrelevant, that might be the only impression formation that occurs. For interesting and relevant targets, available attribute information is given attention, mediating possible responses along the rest of the continuum.

The model also suggests that "more category-based processes have priority over more attribute-based processes along the continuum" (Fiske, 1988, p.67).

# The Process of Forming Inferences and Potential Sources of Bias

In making judgments and inferences, the process starts by the perceiver deciding on relevant information and sampling whatever information is available. The perceiver will then weigh all the relevant information to form conclusions. The process of selecting and interpreting relevant information, however, is influenced heavily by preexistent expectations, theories or mental schemata. However, in making judgments, insufficient information may be used to form impressions. This may result in judgment being recorded using unfamiliar categories. People can use biased information even though the sources of the bias are very clear. This can result from using wrong cues, too few cues, or irregular or improper weighing of cues (Fiske & Taylor, 1984).

#### Context

Asch (1946) emphasized the importance in the impression formation process of the context in which cues are presented because this can influence meanings, interpretations and inferences. Context affects the perception of physical stimuli upon the impression the perceiver forms, and the meaning will vary with the situation. It guides, constrains and dictates the interpretations made about the stimulus including what the perceiver attends to or expects (Livesley & Bromley, 1973).

#### PURPOSE OF STUDY

Studies have demonstrated that the physical environment influences consumer responses and behavior (Bitner 1992). Ward, Bitner and Barnes (1992), suggest that managers need to consider the importance of environmental cues in communicating the image of the service business.

However, no studies have been done on impression formation of hotels. The purpose of the present study was to examine whether participants could form impressions and make inferences about a hotel based on the physical environment or design of hotel lobby. The findings of the study may make a contribution to impression formation theory, especially in relation to interior design.

This study specifically investigated how the interior arrangement, furnishings and other interior aspects of hotel lobby affect participants' first impressions and their inferences about the hotel as whole. The lobby was selected because this is the first area inside the hotel that consumers see, and therefore it is important for creating impressions.

For the purpose of the study the term "environment" includes elements of interior architecture and decoration such as space planning, colors, furniture arrangement, and lighting (Baker, 1987). These were the cues that participants used to form impressions of the lobby and make inferences about the hotel. According to Bitner (1992), people perceive the environment holistically, rather than isolating the elements. In forming impressions, the present study focused on several of these components and environmental cues in hotel lobbies.

#### **OBJECTIVES OF THE STUDY**

The specific objectives of the study were:

- 1 to determine if the physical environment of the hotel lobbies could influence participants' overall perception of the hotels.
- 2 to investigate what holistic perception categories participants formed about the hotels based on the design of their lobbies.
- 3 to investigate whether the physical environment of hotel lobbies is important in impression formation and in communicating the image of the hotels.

#### **ASSUMPTIONS**

The present study made the following assumptions:

- 1. Participants had some previous experience with hotels.
- 2. Participants were able to imagine that a photograph is a real hotel.
- 3. Environmental cues in the photographs were sufficient for the participants to form impressions of the hotel.

#### CONTEXT OF THE STUDY

The following situations might affect the results of the study. However, the researcher did not consider them to be limitations. These are further elaborated and discussed in the discussion chapter.

- 1. Photographs of lobbies may change the context and influence impressions in a different way than the actual experience of the hotel.
- 2. The tastes and hotel preferences of participants were not measured.

#### **DEFINITION OF TERMS**

<u>Cues</u> – refers to "tangible clues such as architecture, lighting, temperature, furnishings, layout and color". "They communicate information to the consumer about how the service firm perceives itself and how it wishes its customers behave". They are important in forming first impressions (Baker, 1987, p. 79; Booms & Bitner, 1982, p. 36).

<u>First impressions</u> – "the initial judgments made about another person based upon observable characteristics and behaviors as well as inferences made about the person's personality, behavior, and characteristics" (Burns & Lennon, 1993, p.1).

<u>Image</u> – "refers to a global or overall impression" (Zimmer, 1988, p. 266).

*Impressions* – refers to the "collected knowledge one person possesses about another. It contains information about directly observable behavior of the target, knowledge of background and history, as well as inferences generated by the perceivers with regard to the personality, attributes, goals, and ideals of the individual" (Burns & Lennon, 1993, p. 1).

<u>Physical environment</u> – applies to the physical facilities where the service is delivered. Elements included are exterior architecture, interior architecture and decoration and atmospheric conditions (temperature, lighting etc.) (Baker, 1987, p. 79; Bitner, 1986, p. 89). The physical environment affects beliefs, attitudes, satisfaction, and actual physical movement of consumers (Bitner, 1986, p. 89).

<u>Service encounter</u> – is a "period of time during which a consumer directly interacts with a service" (Bitner, 1990, p.70).

<u>Service firm</u> – broadly includes all firms that primarily perform tasks for their customers, rather than deliver or produce physical goods. It includes such service firms as banks, insurance companies, and educational institutions, as well as restaurants, hotels and some retailers (Booms & Bitner, 1982, p. 35).

<u>Service satisfaction</u> – is defined based on the disconfirmation of expectation paradigm.

"Consumers reach satisfaction decisions by comparing product or service performance with prior expectations about how the product or service should perform. If expectations exceed performance, dissatisfaction results. When expectations are met satisfaction results" (Bitner 1990, p. 70).

<u>Social Cognition</u> – cognitive processes which are the bases for the perceptions and cognitions individuals use to make judgments about people (Burns & Lennon, 1993, p.1). This includes how people perceive, classify and stereotype others (Damhorst, 1991, p. 191).

#### CHAPTER II

#### LITERATURE REVIEW

Many studies have reported the effects on consumer behavior of various exterior and interior environments of residential and commercial buildings. Different theoretical frameworks have been used in those studies. However there is limited research on the use of the impression formation theory to study the effects of the interior environment on consumer behavior.

Burns and Caughey (1992) investigated category use in first impressions of restaurant interior spaces. The study was based on the notion that when perceiving objects perceivers tend to identify and group things into categories. They found that first impressions focused on the holistic impressions of the general atmosphere and function of restaurant interiors.

Ornstein (1992) examined formation of first impressions of various firms by perceivers. The study examined whether the design of the reception area serves as a symbolic meaning for forming impressions of the firm. He suggested that the reception area of an organization is important in conveying meaning used by individuals in forming impressions about the firm. Cues such as style and arrangement of furnishings, and the presence of flags, logos, artwork, plants, and flowers communicate that meaning to individuals.

Few studies investigated the impression formation processes as it relates to the exterior or interior environments of service businesses. Most of the previous studies used the Mehrabian-Russell model (Donovan & Rossiter, 1982) and measurement tools such as semantic differential scale (Zimmer & Golden, 1988) and environmental psychology models to study the effects of physical environment on consumer behavior.

According to the Mehrabian - Russell Model (1974), there are two basic reaction behaviors towards an environment; approach and avoidance. Approach behavior includes physically moving towards and environment and making an attempt to interact, explore and perform tasks within that environment. Avoidance behavior involves an opposite response. The environment should be designed to elicit approach behavior from consumers.

Four aspects are considered in the approach-avoidance behaviors (Baker, 1987; Donovan & Rossiter, 1982):

- 1. A desire to physically stay in (approach) or to get out of (avoidance) the environment.
- 2. A desire to explore the environment (approach) or to avoid moving through or interacting with the environment (avoidance).
- 3. A willingness to communicate with others in the environment (approach) versus a tendency to shun interaction and communication (avoidance).
- 4. The degree of enhancement (approach) or hindrance (avoidance) of task performance and satisfaction.

## COMPONENTS OF THE PHYSICAL ENVIRONMENT

Much of environmental psychology literature divides concepts of the environment into three basic components (Baker, 1987) (see figure 1):

- 1) ambient factors
- 2) design factors
- 3) social factors

#### **Ambient Factors**

Ambient factors include background conditions that have an impact upon the subconscious. These are ventilation, heating and air conditioning. Lighting, acoustics, scent and cleanliness are also considered to be ambient factors. Consumers expect such factors to reach a certain level, even though they may not be consciously aware of their existence unless the factors are absent or exist at an unpleasant level.

# **Design Factors**

Design factors are the visual cues of which the consumer is aware. There are two dimensions of design factors: functional dimensions such as layout or space arrangement and comfort, and aesthetic dimensions such as style, color, architecture, materials and others. Because these factors are easier to perceive than are ambient factors, they are generally considered to be important in motivating the behavior of consumers.

# **Social Factors**

These factors include people in the environment. These can be broken down into two dimensions: audience and service personnel. The appearance, number and behavior of the customers and personnel can also affect how the consumers perceive the environment of the service firm. The size, nature, behavior and characteristics such as age, income and social class of the audience (consumers) can affect consumer's perception of the environment.

Ambient Factors	Background conditions that exist below the level of our immediate awareness	<ul> <li>air quality</li> <li>temperature</li> <li>humidity</li> <li>circulation</li> <li>ventilation</li> <li>noise</li> <li>(level, pitch)</li> <li>scent</li> <li>cleanliness</li> </ul>
Design Factors (Interior and Exterior)	Stimuli that exist at the forefront of our awareness	1) Aesthetic - architecture - color - scale - materials -texture, pattern - shape - style - accessories  2) Functional - layout - comfort - signage
Social Factors	People in the environment	1)Audience (other customers) - number - appearance - behavior  2)Service Personnel - number - appearance - behavior

Figure 1. From "Components of the Physical Environment", The Role of the Environment in Marketing Services: The Consumer Perspective, by J. Baker, 1987, p. 80.

#### INTERNAL RESPONSES TO THE SERVICESCAPE

Environmental psychology literature indicates that consumers and employees in service firms respond to the physical surroundings in three ways: emotionally, cognitively and physiologically. These responses eventually influence their behavior in the environment. These perceptions and internal responses lead to certain emotions, beliefs and physiological sensations influencing consumer behavior. These internal responses are interdependent (Bitner, 1992).

# **Environment and Cognition**

The physical environment of a perceived service site may elicit cognitive responses. These responses influence people's beliefs about the place and the people in it. The environment is viewed as a form of nonverbal communication through available and visible environmental cues such as the furniture and decor. The perceptions influence how the firm is categorized. Such perception helps the perceivers categorize the firm mentally. Consumers use extrinsic cues (physical surroundings) to form impressions and infer quality and other attributes of the service (Bitner, 1992).

#### **Environment and Emotion**

In addition to influencing cognition, the environment may also elicit emotional responses that can influence the behavior of consumers. These responses can be measured in two ways. People are more likely to stay or spend money in places that elicit feelings of pleasure and to avoid places that cause unpleasant responses. Environments can also be viewed as aesthetically stimulating by eliciting affect (Bitner, 1992).

## **Environment and Physiology**

The perceived environment can also affect consumers in a physiological ways. Factors such as noise, temperature, air quality and lighting can elicit responses such as discomfort, shivering or perspiring, difficulty in breathing, poor visibility, and other problems. These physical responses may eventually influence whether or not people will stay in the space (Bitner, 1992).

## INFLUENCES OF THE PHYSICAL ENVIRONMENT

# Spatial Layout

The spatial layout of the physical environment is important in influencing salient behavior. Layout refers to the arrangement and style, size and shape of equipment and furnishings, and the spatial relationship between them. It also influences how consumers interact with each other and with the employees (Bitner, 1992). The physical layout and design of workplaces are important in influencing consumers' impressions of the firm (Ornstein, 1992). Kaye (1982) suggests that furniture orientation and density is also important in influencing perceptions and evaluating architectural spaces.

Bitner (1992) developed a conceptual framework, which explains the role of the physical environment in service organizations. The model helps explain environmental factors that are perceived by both consumers and employees and some possible cognitive, emotional and physiological responses. The framework first considers the behaviors that may be influenced by the servicescape, that is, the physical environment, and then it addresses internal responses and the controllable dimensions.

#### Consumer Satisfaction and the Physical Environment

According to Bitner (1986), the physical environment is likely to influence consumer satisfaction. Consumer satisfaction is usually considered to be a post consumption evaluation after direct interaction and experience with the service. However, the effects of the environment can influence consumer satisfaction based on prior expectations and perceived performance. This means that satisfaction and/or dissatisfaction can be thought of as depending on both prior expectations about the service and evaluation after encountering the service, which is known as the expectations paradigm.

Consumer expectations are affected in part by non-verbal signals and the meaning of environmental cues found in the physical environment of the service (Bitner, 1986). The perceived performance of the product or service is affected by elements of the environment, which can affect the consumer both physiologically and psychologically.

Bitner (1990) suggests that the physical environment can cause consumer attributions in situations where the service fails to deliver. The consumer blames the firm less in situations where he or she experiences service failure in an organized and professional looking environment than in disorganized one (Bitner, 1990). Cues in an "organized" environment are associated with positive attributes such as competence, efficiency and care. In such situations the consumer attributes the cause of the poor service to something unintentional or relatively temporary.

The opposite happens in a "disorganized" environment. If service failure occurs in a disorganized environment the consumer blames the firm and is likely to expect the same to happen again in future. The physical cues in such an environment may suggest inefficiency, poor service and incompetence. This suggests how the cues in the physical environment are important in evaluation of, and customer satisfaction/dissatisfaction with, the service (Bitner, 1990).

#### **Environmental Cues**

When no other information is available to the perceiver, first impressions of interior spaces, and of people, are formed using visible cues. First impressions of a service firm are formed by evaluating the environmental cues. When consumers have little or no previous information or experience with a service, tangible clues help to indicate the quality and nature of service (Baker, 1987; Booms & Bitner, 1982).

Style, service and image are important qualities, which differentiate hotels. These are often evident in the physical facilities of the hotel (Zive, 1982). Because impression formation is a cognitive process of making judgments based upon appearance and cues, it is therefore important to identify which cues are important in the design of a hotel.

To help ensure positive first impressions in the built environment, the business owner or designer must consider furniture placement, suitability and attractiveness of the furnishings, the fixtures, the wall and floor coverings, lighting and other interior elements (Bitner, 1992; Zive, 1982). The physical environment is rich in cues that are important in communicating image and purpose of the firm to its consumers (Bitner, 1992). Such design elements cause consumers to form impressions and make inferences about the environment. The quality of such cues in the environment creates an overall impression and communicates to the consumer the quality and nature of the service (Bitner, 1992). The cues are especially important to consumers who have little or no experience with the service (Baker, 1987).

Both external and internal physical environmental cues play an important role in helping consumers predict the quality of services offered. Consumers depend on environmental cues to make predictions and inferences about the service. They rely on the cues to form initial impressions of the service (Ward, Bitner & Barnes, 1992). Long before purchasing, consumers search for cues about the service to determine its capabilities and quality (Bitner, 1992).

Other elements include "atmospherics", which can be categorized in four environmental dimensions (Baker, 1987):

Visual perception – size, shapes, brightness, color

Aural perception – pitch, volume

Olfactory perceptions – freshness, scent

Tactile perceptions – temperature, smoothness and softness

# **SUMMARY**

Because service business is less tangible than product business, consumers search for evidence and cues, to help them form impressions and /or expectations, and determine capabilities of the firm. The physical environment gives cues that consumers need in order to form their expectations. This includes design, style, layout, architecture, lighting, signage, colors, textures, comfort of furniture, and other physical aspects such as temperature, noise level and odors (Baker, 1987; Bitner, 1990; Booms & Bitner, 1982). These cues are considered to be important in evaluating service and forming first impressions. They help to communicate to the consumer how the firm views itself, and the behavior pattern it expects of its consumers (Bitner, 1986; Booms & Bitner, 1982).

## CHAPTER III

#### **METHODOLOGY**

The purpose of the present study was to explore participants' impressions and inferences about hotels based on their perception of the physical environment or design of hotel lobbies. The study specifically investigated how the interior arrangement, furnishings, colors, and other interior space components in hotel lobbies are utilized by the participants as cues in forming impressions of the hotel as whole. A qualitative approach was used to carry out the study. Qualitative research investigates how people arrange themselves and their setting, and how they make sense of their surroundings through symbols, rituals, social roles and so forth. Qualitative techniques "allow researchers to share in the understandings and perceptions of others and to explore how people structure and give meaning to their daily lives" (Berg, 2001, p. 7). This type of research also examines how people learn about and make sense of themselves and their environment (Berg, 2001). The analysis of data in this study allowed the researcher to examine how hotel lobbies influences perception of the whole hotel.

#### SAMPLE

The participants of the study were 51 undergraduate students enrolled in a history of housing and interiors course during Spring Term, 2002, at Oregon State University. The sample consisted of eight (8) males and forty three (43) females. According to Denzin and Lincoln (2000), qualitative research is not concerned more about the sample size but to draw a purposive sample. The authors state that "potential to learn is a different and sometimes superior criterion to representativeness" (p. 446). It is best we select samples that give us the best opportunity to learn. "Balance and variety are important; opportunity to learn is of primary importance" (Denzin & Lincoln, 2000, p. 447). For the researcher, sample size selected was more purposive than to make any statistical generalizations. The researcher was more interested in the information and responses of the participants. For them to qualify being in the study, the following criteria were considered: a) design and merchandising students, b) male and female over 18 years, and c) with or without previous hotel experience.

According to Rapoport (1990), "people react to environments in terms of the meanings the environments have for them" (p. 13). Designers and users react differently to environments mainly due varying schemata. For the present study, design students were selected because of their different perception of the built environment, as compared to students who have not studied design. The researcher was also interested in the rich information the design students may give based on their experience.

Permission and approval to involve the participants in the study was obtained from Oregon State University Institutional Review Board (IRB) (see Appendix D). Recruitment of participants was done by means of a class announcement (see Appendix C). Participants for the study were 18 years or older. Although participation by respondents was voluntary, extra credit points were awarded to students who participated in the study. Students who did not participate in the study were given an alternative informal writing assignment to earn their extra points. The informal writing assignment was of an equal degree of difficulty. The signed Informed Consent forms were used as verification of participation in the study.

#### RESEARCH DESIGN

The present study utilized a survey to collect data. The survey was accomplished by asking participants to write their impressions of the hotel lobbies and to form extended inferences about the hotels in general based on what they were shown in slides. Instead of experiencing the real situation, participants were shown pictures of actual hotel lobbies and asked to record their impressions and make their inferences about the hotels as a whole. The names and locations of the hotels were not communicated to the participants, in order to avoid any influence on their impressions.

#### STIMULUS MATERIAL

The researcher collected several color pictures of different hotel lobbies from books and magazines resulting in a total of 15 pictures. Final selection of the four pictures was made. The criteria for the selection of the four hotel lobbies was: a) variation in design and diversity of architectural components and style, b) color pictures, c) no people in the pictures, d) showing large percentage of the lobby, and e) with or without registration desk. The four pictures of hotel lobbies were made into transparencies for the study (see Appendix E).

The pictures showed the interior space and components of the hotel lobbies, such as lighting, ceiling, floor, walls, architectural style, and furniture arrangement. According to Bitner (1992), people perceive the environment holistically, rather than isolating the elements. Therefore it was necessary to vary several of the environmental cues or dimensions by selecting pictures of different styles of hotel lobby. Choice of pictures was done in such a way that there are notable variations in general appearance and arrangement of cues. They varied in their design, furniture type and arrangements, lighting, colors, and architectural elements.

# DATA COLLECTION INSTRUMENT

According to Burns and Caughey (1992) and Burns and Lennon (1993), an instrument with open-ended responses is more effective in recording perceptions of interior spaces. Such an instrument elicits more meaningful, rich, accurate and useful responses on forming first impressions than do those instruments with fixed or closed-ended questions. Based on these findings, the present instrument was constructed consisting of open-ended questions in which participants recorded their first impressions of the hotel lobby and made extended inferences of the whole hotel.

A preliminary field study was conducted with one group of design students consisting of 14 participants. Its purpose was to identify if the instrument was able to elicit the required response and whether the instructions were clear enough for the participants to respond as required. It was conducted in a classroom, with participants shown pictures of hotel lobbies one at a time for approximately three minutes. The participants recorded the first things that came to their minds about the hotel in general. The results of the preliminary study indicated that the participants wrote more about their impressions of the hotel lobby than about their impressions of the whole hotel. Adjustments were therefore made in the oral instructions given to participants during the survey asking them to also record their impressions of the whole hotel.

# DATA COLLECTION PROCEDURE

Data were collected during Spring Term, 2002. The participants were divided into groups of four (4) with 13 participants in group 1, 13 participants in group 2, 13 participants in group 3 and 12 participants in group 4. Each group was seated in the same classroom one group at a time. This was the same classroom and set up used for the preliminary field study. At the beginning of data collection session, each participant was given an Informed Consent Form, briefly explaining the purpose of the study and their rights as participants (see Appendix B). The form was read aloud to the participants by the researcher. An opportunity for questions and answers was provided. Participants were also assured of confidentiality because the researcher stated that their names would not be associated with their responses.

Participants were also asked not to write their names or other identifiers on the survey forms. However, to enable the researcher to keep track of responses during data analysis, a number was assigned by the researcher to each response after they were all collected. The participants were then asked to read, sign and return the Informed Consent Forms before any data were collected. Participants kept copies of the signed informed consent forms for future reference.

The participants were shown one picture at a time projected on a screen in the front of the room. The order in which the participants saw the pictures was varied with each group to account for order effect. The pictures were shown in the following order: group 1 – ABCD; group2 – DCBA; group 3 – CADB; and group 4 - BDAC. Each picture was shown for approximately three minutes. After explaining the procedure to the participants, the researcher asked them to record their first impressions and make extended inferences about the hotel in general.

They were asked to write statements about the first thing that came to their minds about the hotels in general when they saw each picture. Based on the results of the preliminary field study, emphasis was made by the researcher on writing their impressions of the hotel as whole in addition to their impressions of the hotel lobby. Demographic data were also collected from each participant. Data collection took approximately 10-15 minutes for each session.

#### **DATA INTERPRETATION**

The responses from the open-ended questionnaire were content analyzed according to themes that emerged from the data for each slide. Content analysis of the data was used to retrieve and interpret the meaning of the themes that emerged. Before analyzing data, the responses were read and re-read slide by slide to identify themes. The researcher also analyzed impressions recorded about the hotel lobby in addition to impressions and inferences of the whole hotel. Codes were then assigned to the emerging themes for analysis. The responses were re-read before the final coding was done. The findings were reported and discussed based on the emerging themes. The emerging themes were reported and discussed based on the objectives of the study.

#### REFLEXIVITY AND PERSONAL BIASES

According to Berg (2001), reflexivity is an important factor that requires attention from the researcher. This means that "the researcher understands that he or she is part of the social world(s) that he or she investigates" (p.139). Reflexivity helps researchers to show that their personal background, historical and geographic situations, including research surprises and undoings may bring biases in the way in which they report their work. This demonstrates how ones characteristics may shape and influence interpretation of the results of the study (Denzin & Lincoln, 2000).

The researcher brings characteristics that may have implications on the collection and interpretation of the data. These include being a woman, a designer, including my personal and professional experience, my view of the world and near environment, and my Tswana culture background. These factors may result in intercoder biases. Therefore the themes that the researcher identified may differ from another coder's themes depending on their personal reflexivity.

#### **CREDIBILITY**

Qualitative research applies the principles of reliability and validity differently from quantitative research. In qualitative research, validity is concerned with description and explanation of things. It also looks at "whether or not the explanation fits the description" (Denzin & Lincoln, 2000, p. 393). Qualitative research does not claim that there is one correct way of interpreting an experience (Denzin & Lincoln, 2000). Qualitative researchers see data collection as an interactive and evolving process. It also "believes that the subject matter and a researcher's relationship to it should be a growing revolving process" (Neuman, 2000, p. 170). Qualitative research is also more concerned with authenticity than validity, that is, "giving fair, honest, and balanced accounts" of events (Neuman, 2000, p. 171). Since inter-coder reliability was not done, the interpretation of the data was based on how the researcher views her world, so her coding may be prejudiced and biased based on her reflexivity. This means the themes that emerged may differ if someone else had or would code the data. However, the researcher assures that the data interpretation is authentic. In interpreting data the researcher was also guided by the literature review and findings of previous studies.

# CHAPTER IV

#### RESULTS

The purpose of the study was to investigate how the interior arrangement, furnishings and other interior aspects of a hotel lobby affect first impressions of, and inferences about, the hotel as whole. The researcher expected to find emerging themes consistent with those found in previous studies. The findings of the study indicated more similarities than differences in impressions formed and extended inferences made by participants. There were more similarities on how they perceived the hotel(s) to be showing negative or positive impressions.

The characteristics of the participants are shown on Table 1. The ages of participants ranged from 20 to 42, with 48 participants in their 20s. Their majors included housing and interior design, a combination of both, and merchandising, with the largest group of participants in interior design. Fifty (50) participants had stayed in a hotel during the last year and only one had not. Most participants (28) had stayed in a hotel 2-5 times during the past year, 11 had stayed in a hotel once, and 11 had stayed in a hotel more than five times. Their class standings included first year, sophomore, junior and senior. Most of the participants (35) were seniors, and 14 were juniors.

Table 1.

<u>Characteristics of Participants</u>

		COUNTS (N)
1. Ever stayed in a hotel		
Yes	-	50
No	-	1
2. How often this past year		
1 time	-	11
2-5 times	-	28
More than 5 times	-	11
Other	-	1
3. You are:		
Male	-	8
Female	-	43
4. Age on your last birthday		
20's	-	48
30's	-	2
40's	-	1
5. Current major		
Housing	-	10
Interior Design	-	25
Merchandising	-	8
Housing and Interior Design	-	8
6. Class standing		
First Year	-	1
Sophomore	-	1
Junior	-	14
Senior	-	35

# EMERGENT THEMES OF IMPRESSIONS FORMED AND EXTENDED INFERENCES MADE

There was no difference by order of slides on the themes that emerged therefore data was combined for each slide.

## Slide A

The hotel is designed with sleek, modern black leather sofas and a low ceiling. The floor is tiled and carpeted, the lighting is recessed lighting, and dark and bold colors are used. There are also large indoor trees and artwork. The general themes that emerged from slide A in relation to impressions of the hotel lobby and inferences about the hotel in general included the subjects of cleanliness, service, cost, location, clientele, general atmosphere and appearance, comfort and spaciousness. The environmental cues used by participants in forming impressions included lighting, space, type of materials, color, and furniture style and type.

# General Atmosphere, Appearance and Style

The theme of general atmosphere and appearance commonly appeared in participants' responses. Several sub-categories emerged based on the theme. These included the décor, style, and design of the hotel, its size, available facilities and amenities, and the general feeling of the hotel. The inferences made about the hotel as a whole ranged from fancy or less fancy to classy, very sophisticated and modern. It was described as a classy, plush and trendy hotel.

Few participants described it as cheaply done and standard looking, or with moderately decorated but clean and neat rooms. Based on the hotel lobby design, some of the participants' perceptions were that the hotel looked more like a business place than a hotel. Participants also made extended inferences about the hotel having many facilities and amenities. Some of the participants expressed the following views of the general atmosphere of the hotel:

This seems like an average to rich hotel...

The hotel seems to be very sophisticated.

It is sparsely decorated which communicates to me that it is very cheaply done, and expect the rooms to be nothing special.

This looks like a more classy establishment.....

Professional feeling, very stable

Serious, business like atmosphere probably more professional for conferences.

#### Cleanliness

This was a theme noted by most of the participants. They perceived the hotel to be clean and neat. Several participants considered the rooms to be nicely decorated. One participant's impression was:

I would expect the rest of the hotel to be similarly clean, fresh.....

Some of the participants expressed the same views:

..... clean, nicely kept, nicely decorated rooms with artistic accents, sterile environment...

..... It looks very well maintained

# Costs of the Hotel

The perceived cost or affordability of the hotel was also a theme that emerged. A majority of the participants perceived the hotel to be moderately priced, with some participants perceiving it as expensive. The following impressions were recorded by some of the participants in relation to price:

The hotel appears to be moderately priced.

..... It looks as if it would be in a moderate price range because there aren't a lot of frills.....

There are probably more moderately priced rooms.

# Customer Service and Staff

Customer service by the hotel staff was one of the themes that emerged from the written impressions and the inferences formed about the hotel. The staff was perceived by some of the participants as providing friendly, warm and inviting service. The following are examples of some of the perceptions of the participants:

..... friendly looking.....

Inviting and friendly hotel.

# Comfort and Spaciousness

The comfort and spaciousness of the hotel was a common theme that emerged from the impressions formed and inferences made about the hotel. The spaciousness usually referred to the guest rooms. Most participants perceived the hotel to be comfortable, with few participants considering it to be spacious. Few participants considered the hotel to be luxurious. They also predicted the hotel to be restful and relaxing. Extended inferences were also made about the size of the guest rooms. They were predicted as not large. One participant said the following:

..... It looks warm, luxurious and welcoming too... very comfortable and attractive.

Other participants also expressed the following views:

..... Gathering area to socialize, openness, spacious.

A smaller size hotel.

The rooms are probably small.

Comfortable.....seems like it would relaxing.

# Location and Type of Clientele

Based only on the pictures of the hotel lobby, the participants made inferences about the type of clientele who would stay at the hotel, including the location of the hotel. Based on the design of the lobby, the hotel was perceived as having an institutional or business look, thus influencing the type of clientele who would be likely to use it. The predicted clientele included professional or business and upper class people. They perceived the hotel not to be suitable for family vacations. The perceived location of the hotel was a city and a tropical, hot environment.

Referring to expected clientele, one of the participants' comments was:

I would imagine that it is a hotel frequented by people staying on business. It looks very formal. Definitely not a hotel for children.

This is for very high-class people. I can see upper-class business men and women staying there.

Not really child welcoming, aimed more for adult stay.

Tropical atmosphere.

..... like a hotel set in a tropical place.

# Architectural Features, Color and Furniture

Most of the architectural features were used as environmental cues for forming impressions. These included color, lighting and ceiling. The participants used these environmental cues to predict the size, price, warmth, elegance and luxuriousness of the hotel. Participants used color to predict and make inferences about the comfort and warm feeling of the hotel. Purple sofas were perceived as warm. The colors of the hotel were considered to be bold and rich. The lighting of the hotel was perceived as nice looking. Based on the number of plants and the amount of art used, participants' impressions were that it was in a tropical location.

Some of participants said the following in relation to architectural features:

The low ceiling makes me think that there are many floors above.

Low ceiling make me to think this hotel is not high rise and it feels like home.

This seems like an average to rich hotel because the chairs are nice but not really nice. The trim (dark) with white walls looks kind of cheap. The lighting looks more high end. The usage of plants and choice of color seems tropical, like a hotel set in tropical place.

Purple chairs, warm feeling and good lighting.

I like the color scheme because it is relaxing.

Simple in design which makes one think that it could be moderately priced.

#### Slide B

Hotel B is designed with a high ceiling and Asian style lighting. It also has dark upholstered furniture with wooden backs and arms. The floor is tiled and carpeted, the lighting is recessed and the colors are dark and bold. There are many large indoor trees and flowers.

# General Atmosphere, Appearance and Style

The theme of general atmosphere and appearance emerged in the recorded impressions of this hotel. Several sub-categories emerged also, based the style and décor, design of the hotel, and general feeling of the hotel. The hotel was perceived to be nice and ornate and overdone. Some participants' impressions were that it was not nice or fancy. It was described as casual, stuffy and less formal.

The hotel was also described as old or not new. It was predicted to be from the 1960s to the 1980s. Many participants described it as large and upscale. Based on the interior environment of the hotel lobby, a majority of the participants considered it to have a tropical and Asian theme. One participant's impressions of the general atmosphere of the hotel were:

Older style, not very new building (older fashion style), well maintained.

Not too modern-need to be updated, 1980's.

Very luxurious.....

Upscale with elegant rooms for guests.

Hotel located in a tropical environment.

I would expect the rest of the hotel to be a bit overdone, too much décor, a little overwhelming.

#### Cleanliness

Cleanliness of the hotel appeared as an emerging theme. More participants considered the hotel to be clean, and few mentioned that it was unclean. Impressions formed about the guest rooms were that they would be well kept and clean. One participant's comment was:

Clean hotel with clean rooms, want customers to feel like the quarters are sanitary.

Some participants expressed the following views:

It probably has nice, well kept rooms.

The hotel looks very nice and clean.

## Customer Service and Available Amenities and Facilities

Customer service and available amenities of the hotel were one of the themes that emerged from impressions and inferences formed about the hotel. Participants perceived the hotel pictured in Slide B to have fair to good service. Participants also noted that it would probably have amenities such as a pool, hot tub and slot machines. Participant's impressions included:

..... friendly, cheerful service.

..... the interiors give an impression that the management wouldn't be as uptight.

Asian motif gives the impression of excellent service as the Asian people tend to be very courteous and polite.

It probably has a pool and a hot tub.

Has many options (services) for guests.

# Costs of the Hotel

The perceived cost or affordability of the hotel was a common impression formed by the participants. The perceived price ranged from moderately priced to expensive. Few participants considered it to be cheap. Participants made the following inferences about the prices of the hotel:

It looks like it would cost somewhere between moderate and high price range.

Exotic and moderate priced ranged hotel.

Classy and toward the upper price range.

The rooms are probably expensive.

# Location and Type of Clientele

Based on the hotel lobby, the participants made inferences about the type of clientele who would stay at the hotel. More participants predicted the clientele to be families than predicted them to be business people. They included both middle and upper class clients. The possible locations of the hotel suggested by the participants were big cities in a tropical or Asian countries. Referring to expected clientele and possible location, the participants' impressions were:

Hotel located in a tropical environment.

The hotel looks very exotic, like it is in a tropical warm area.

The Oriental theme makes me think it's in Japan or some Oriental country.

..... but it looks like a place families could stay ..... but more for sightseers.

Families and couples probably like it here.

# Comfort and Spaciousness

Impressions were also formed by the participants about the comfort and spaciousness of the hotel. Most of the participants' impressions about the hotel were that it was fairly elegant and luxurious. However, most participants also perceived it to be open, overdone (décor) and not inviting. Few participants perceived it as inviting and cheerful. They suggested that the rooms would be nice and spacious. The following impressions were recorded by participants:

Unpleasant, not comfortable, overdone.

Spacious, not very comfortable.

The open space is inviting.

The hotel would have simple charm, spacious.

Wouldn't feel uncomfortable hanging out here.

# Architectural Features, Color and Furniture

Architectural features were used as environmental cues for forming impressions. These included color, ceiling and lighting. Furniture and plants were also used as cues for forming impressions. The participants used these environmental cues to predict the hotel as warm, bright and open. These cues helped them in forming their own impressions. Participants perceived the lighting as pleasant. The comments about furniture included the type and style of chairs and tables used. The furniture style was perceived as similar to that of the 1970s. This probably influenced their perception of the hotel as old.

The colors of the hotel were considered to be bold and rich. The lighting of the hotel was perceived as nice looking. Based on the plants and artwork used, participants' impressions about the hotel were that it was in a nice, tropical location. Some of the impressions formed based on the environmental cues were:

Tall feeling gives formal feel.

Comfortable warmer atmosphere (plants, exotic furniture) cozy lighting.

I don't think I'd feel quite at home in this hotel as in the first one. Maybe it's because the light levels don't seem as soft and restful.

Relaxed looking because of the purple colors. The chandeliers make it look more expensive.

### Slide C

Hotel C has wooden floors, wall and high wooden ceiling. It also has bright red upholstery and an area rug. There is also a fireplace and a wooden balcony.

There are also large indoor trees, flowers, and artwork.

# General Atmosphere, Appearance and Style

Most of the participants perceived the hotel to be modern, classy and elegant, formal, upscale, and trendy. It was also considered to be new. Many of the participants' impressions of the hotel were that it was fun, romantic and had good energy. Their impressions were also that the rest of the hotel would have a home-like feeling and a "non-hotel" look. They predicted the hotel rooms to be cozy, spacious and quiet.

Participants recorded the following impressions about the general atmosphere of the hotel:

The lobby is warm and inviting, the hotel is probably grand and new. The home-like atmosphere makes me think of good food and a restful night's sleep.

This hotel looks very homey. It seems like a relaxing refuge from cold outdoors. It looks like a place where you would want to stay and relax in your room.

The hotel is very bright, colorful and fun.

Elegant and sophisticated..... peaceful on the inside.

Looks quiet, quite luxurious.....

# Cleanliness

The theme of cleanliness also emerged. The hotel was perceived to be very clean. Some of the participants' impressions were:

Clean and sanitary so hotel looks presentable to guests.

It looks new and clean, the rest of the rooms are probably nice.

It seems very clean (shiny floors) and spacious (long hallways).

# Customer Service and Available Amenities

Customer service and available amenities were themes that emerged from impressions and inferences formed about this hotel. Most participants predicted the hotel would have friendly and warm service. It would also have lots of facilities and amenities such as a pool and recreational center. The following are the impressions recorded by participants:

Very warm and inviting atmosphere, very friendly service and personnel..... lots of things to do for recreation and free time.

Clean and brightness impressions, gives happy and friendly service is expected from this hotel.

Looks like they will take care of their customers. It probably has many amenities such as a pool and recreational center.

# Costs of the Hotel

The perceived cost of this hotel ranged from moderate to expensive. However, more participants found it to be expensive. Most participants regarded it as very welcoming and cozy, despite the perceived high prices. The following were the perceptions of some participants:

Looks expensive to stay, but very cozy.

..... probably not overly expensive to stay in because it looks pretty plain, but not a cheap hotel because it looks very well-maintained.

This is a nicer hotel, probably more expensive.

Moderate to high end price hotel.

# Location and Type of Clientele

Based on the picture of this lobby, the participants made inferences about the location and type of clientele who would stay at the hotel. The predicted clientele by majority of the participants was families and rich people. A few participants mentioned business people and elderly people as the type to stay here. Based on the extensive use of wood in this hotel and the fireplace, most of the participants perceived the location of the hotel to be in a cool climate or in the mountains. Some mentioned that it maybe a ski lodge. Few participants guessed the location as a sunny, tropical, warm climate. When speculating about clientele, some of the participants' impressions were:

Hotel has lodge appeal, which would lead one to believe it is set in the mountains.

..... some kind of ski lodge, cold climate, very cozy and home-like.

A contemporary hotel maybe in the mountains. It looks warm and cozy. Like it would be a nice place to stay. Very inviting. Again upper class but not snobby.....

### Comfort and Spaciousness

The comfort and spaciousness of the hotel was also a theme that emerged from impressions formed and inferences made about the hotel. The spaciousness was addressed with reference to the rooms. Several participants predicted the hotel rooms to be large, simple and spacious. The rooms were also considered to be comfortable. Most of the participants' impressions were also that the hotel would be inviting, warm, welcoming and relaxing. The hotel is also described as bright and open.

The following were impressions recorded by participants:

A feeling of comfort and relaxation.

It is warm and inviting, but I get a sense (probably from symmetry) that you should get too comfortable here.

Comfortable space to relax in.

Comfortable feeling like your own home.

.....comfortable environment for them to stay in lots of space, not too cluttered.

Big hotel, very spacious.

# Architectural Features, Color and Furniture

As with the lobbies pictured in Slides A and B, the several themes that emerged were used as cues used in forming impressions and making extended inferences. These cues included lighting, type of materials, color, and furniture style. The fireplace, wood paneling and stairs were also important in forming impressions. Most of the participants mentioned that the hotel was bright, warm and home-like. In making these assessments, they mentioned the fireplace, and the extensive use of wood in the walls, floor and furniture. These architectural features contributed to the elegance or luxuriousness of the hotel, as they perceived it.

Based on the cues, the impressions of the participants were:

Lots of wood and natural material make the interior very cozy and inviting.

Brightness in colors is welcoming.

Looks like it is a hotel in a colder climate, mostly due to the fire place.

The red colors make it feel warm and comfortable.

The hotel has a cozy atmosphere with the fireplace. The hotel gives off a warm feeling with the light oak, light floors and balcony.

#### Slide D

The hotel has high steel and glass atrium-type ceiling. Most of the walls are also made from glass. The floor is tiled with area rugs used. It also has modern black leather sofas and glass tables. There are large indoor trees and flowers. There is also pendant and track lighting.

# General Atmosphere, Appearance and Style

The theme of general atmosphere also emerged for slide of the hotel lobby D. Most of the participants perceived the hotel as upscale, sophisticated and elegant. They predicted a great view from the rooms. The rooms would also have lots of glass with lots of natural light coming in. Few participants considered the hotel to be exciting or interesting. Also few considered it to be warm. They also considered the hotel to be unwelcoming and uninviting. This assessment appeared to be based mainly on the large amounts of glass and steel used.

Most of the participants considered that it appeared more like a professional or industrial building than a hotel. Others described it as a shopping mall and others as a conference center. Most participants described the hotel as new and modern with large rooms. Participants expressed the following views of the perceived general atmosphere of the whole hotel:

Larger upscale hotel, larger rooms.

The hotel is very industrial looking.....

It looks very modern and classy.

New, industrial... clean cut/streamline. Not too cozy but nice.

Almost looks like a conference center with all the glass.

#### Cleanliness

The theme of cleanliness also emerged. Several participants perceived the hotel as very clean and neat. One participant's comment was:

It also looks very clean and upscale.

# Customer Service and Amenities

Customer service and amenities of the hotel were themes that emerged from impressions and inferences formed about this hotel. Based only on the picture of the lobby, some of the participants considered that the hotel had lots of amenities such as a pool and a hot tub. They also guessed that the guest rooms in this hotel were technologically advanced. Some participants estimated that the service would not be warm and friendly.

On these subjects, examples of participant comments are:

Probably a lot of services as the clientele would be wealthy.

Less outgoing and more reserved personnel (less helpful)..... good service but non personal relationships with clients staying there.

It's very modern which would imply a modern hotel with computer hook-ups and a pool and work out room etc.

# Costs of the Hotel

The type of rooms and their cost was one of the themes addressed by participants. They estimated that the rooms would be large and spacious. A majority of the participants considered the hotel to be very expensive. In their descriptions they used terms like classy and luxurious. Participants' perceptions of costs were:

An uptown sophisticated feel to this lobby makes me think the rooms are expensive.

I would say that this is an expensive place to stay.....

# Location and Type of Clientele

The participants made inferences about the type of clientele who would stay at the hotels, and about the location. Many predicted that this hotel is located in a city with lots of sun and a warm climate. Perhaps because of their perception that the hotel looked like a business place, most participants predicted the clientele to be wealthy and to be business people. They considered that it was not intended for vacationers or families. This inference may also be related to their perception that it is an expensive hotel. They considered the hotel to be very busy with lots of clients.

Referring to the expected clientele, participant views were:

This looks like it is in a big city.

This looks like a place where business people would stay.

Very business oriented, not vacation, very arty and upper class.

Expensive to stay there – upper class, people in business.

No families or children, only business clients, city center.....

I don't think families come to stay here.

### Comfort and Spaciousness

Another theme that emerged was the comfort and spaciousness of the hotel. In relation to spaciousness, a majority of the participants perceived this hotel as large, spacious, open, airy and very bright. This was probably based on the extensive use of glass, and the high ceiling in this lobby. However, the hotel is also described as not cozy. They also assessed the hotel to be uncomfortable for guests, and not relaxing. The following comments were noted:

Lots of space and natural light, I would expect to see the modern look consistently .

It seems very cold. It is inspiring, but not comforting. It doesn't look like some place you would want to stay for long.

Very large and spacious hotel.

Doesn't feel very cozy and warm. It's very industrial.

## Architectural Features, Color and Furniture

Most of the cues identified as architectural features included ceiling height, glass, and lighting. The type of materials used for this lobby also emerged. The high ceiling of the lobby created impressions of a spacious hotel. The glass atrium-type ceiling contributed to impressions about the openness, brightness and spaciousness of this lobby. The materials used were seen by some to determine the elegance or luxuriousness of the hotel. The participants mentioned that the steel and glass used made it look cold, unwelcoming and not cozy. However, the glass was useful in providing good natural light, making the hotel brighter. Some participants suggested that the hotel was in a sunny location. Participants mentioned the following in relation to architectural features:

Because of the glass it makes it feel extremely open.

It looks stiff and uncomfortable because of all the hard angles.

I love the feeling of the glass ceiling. It lets the outdoors in. It seems to include nature.....

Atmosphere seems very bright because of many windows.

From the design standpoint, it is very interesting and modern. However it feels cold with use of metal, glass and cool blues and grays. It doesn't seem very welcoming or comfortable. I think I'd feel on edge staying here.

The color of upholstery, walls, floors, and other design elements was also mentioned. Participants appeared to use color to make inferences about the comfort and warm feeling of the hotel. Based on color they assessed the hotel to be very cold, due to the cool colors used. This impression was also influenced by the use of glass and steel. Some participants interpreted this use of color to be calming. Some of the comments included:

The colors are calming.

Somewhat cool – as in the colors.

#### SUMMARY OF THE RESULTS

The researcher anticipated that participants might form impressions of atmospheric factors such as noise, freshness or smells, and temperature. Baker (1987) categorized these atmospheric factors as aural perceptions (pitch, volume), olfactory perceptions (freshness, scent) and tactile perceptions (temperature). This was not the case. This may be due to the fact that participants did not experience the actual hotel but instead were shown pictures of hotel lobbies, which may limit certain types of perceptions. However, some participants made some comments about the cold feeling of hotel D with reference to its colors and use of steel. Participants were also expected to make inferences about food (if served), security and safety, other architectural features such as floor and finishes, and to speculate more about guest rooms.

Most of the impressions formed were shared by the respondents regardless of their class standing, number of times they have stayed in a hotel recently, and their current major. A comparison based on gender was not made because there were more female participants (43) than males (8). However the researcher noted differences in their impressions. Males' impressions were more physical, whereas female's impressions were more emotional. That is, the males looked more at the design, available amenities and facilities whereas females also commented upon the friendliness, warmth and coziness of the hotel. Comparisons based on whether they had ever stayed in a hotel were not made and irrelevant because only one participant had never stayed in a hotel.

Similarities in impressions formed about all four hotel lobbies helped in identifying the hotel most and least favored by the respondents. The hotel lobby depicted in Slide C elicited the most favorable comments. The respondents considered it to be warmer, and cozier, relaxing and inviting than the other hotels. This could be because of its home-like appearance and atmosphere. The least popular hotel lobby was that in Slide D. It was considered to be cold, unwelcoming and industrial or professional.

The findings of the study are summarized based on the three objectives of this study. The emergent themes addressed the objectives of the study.

## Objective 1

One objective of the study was to investigate whether the physical environment of hotel lobbies could influence participants' perception of the hotels in general. Based on the physical environment of the hotel lobby, the participants did form impressions and make extended inferences about the whole hotel when prompted to. The participants were able to identify environmental cues from the pictures of the hotel lobbies, which they used in forming their impressions and making extended inferences about the entire hotels. The most common environmental cues used included color, ceiling height, furniture style, lighting, space, type of materials used and general décor of the lobbies. Cues used less frequently included the artwork and plants used in the design of the lobby.

## Objective 2

Another objective of this study was to investigate whether holistic perception categories could be formed from comments made by participants about the hotels based on the design of their lobbies. Based on the results, impressions were grouped by the researcher into holistic perception categories. The set of categories used in forming impressions and making extended inferences were similar and consistent among all four slides. The fact that the design and characteristics of the four lobbies differed considerably did not appear to influence the categories used by participants.

Research had shown that, when forming their first impressions, people use similar categories for different examples and situations (Burns & Caughey, 1992). When asked to, participants were able to make inferences about the general atmosphere, cleanliness, type of customer service, available amenities and facilities, price of hotel rooms, possible location of the hotel, clientele, the size and décor of the guest rooms, and comfort and spaciousness, architectural features, color and furniture, based only on their impressions of the hotel lobbies.

## Objective 3

The third objective of the study was to investigate whether the physical environment of hotel lobbies is important in impression formation and in communicating the image of the hotels. The findings of the present study indicated that the design and other cues in the hotel lobby were important to the participants in forming impressions and making extended inferences about the entire hotel. These findings emphasize the importance of designing the hotel lobby in a way that will communicate the specific purpose and image of the hotel. The design of the lobby may well determine the approach or avoidance behavior of guests and potential guests. Participants were also able to attach emotional, economic and physical feelings to their impressions, which might be important to owners of hotel in conveying the image of hotels to the public.

#### **CHAPTER V**

## DISCUSSION

The purpose of the study was to examine whether participants could form impressions and make inferences about a hotel based on the physical environment or design of the lobby. The study investigated how the interior arrangement, furnishings, architectural features and other aspects of hotel lobbies could affect first impressions and could aid in making extended inferences about the hotel as a whole.

The themes developed showed a relationship to the theoretical perspective of the study and to previous studies. The results of the study indicated that when asked, participants were able to form impressions and make inferences about an entire hotel based on the design and environmental cues of hotel lobby.

In forming impressions, people use information and selected cues, which the participants observed in the slides of hotel lobbies (Livesley & Bromley, 1973). Baker (1987) divides perception of the environment into three basic components. These include ambient factors, design factors and social factors. The findings of the present study indicated that the participants were able to form impressions based on ambient factors such as lighting and cleanliness, and on design factors such as style and layout, space, color, architecture and other factors.

Comments were also made with regard to social factors. These included their impressions about the possible clientele and service personnel. The characteristics and appearance of the clientele and hotel personnel were predicted. The service of the hotel ranged from friendly to unfriendly. The characteristics of the clientele ranged from families to business people, rich people and others. These inferences may have depended upon whether the subjects perceived the hotel as business-like or home-like.

The results of the study are consistent with similar research on first impressions of restaurants. Specifically, the results corroborate the findings of Burns and Caughey (1992) about first impressions of restaurants. These researchers found that common perceptions could be grouped into the following categories: holistic impressions (architectural style, atmosphere and space planning); room components (ceiling, windows, lighting, floor, walls and other structural elements); color and pattern; and furniture and accessories (furniture, mirrors art, plants). They also included other categories, which were addressed less often, such as type and cost of food, clientele and geographic context. In the present study, the lobbies displayed many of the same components despite their variation in the interior environment. When asked to, participants were able to form impressions of the entire hotels based upon many of these components. The results of the present study revealed similar categories to the study of Burns and Caughey (1992).

The researcher organized the themes that emerged in the findings of the present study using the components discussed by Burns and Caughey (1992). In the category of holistic impressions, the themes included architectural style and space planning (spatial layout). They focused on furniture orientation, physical layout and design, and furniture orientation and density. For room components, the themes included ceiling, windows, lighting, and other structural elements. Color and materials such as wood, glass and steel were mentioned by the participants and apparently contributed to their impressions about the mood and atmosphere of the hotel. They used these impressions to help them determine whether the hotel was inviting, warm and cozy or not.

The other component in the Burns and Caughey (1992) study was furniture and accessories, which included themes of furniture, mirrors, art and plants. In the present study, participants mentioned the use of artwork, mirrors and plants. In the study conducted by Ornstein (1992) on the use of reception area design in forming impressions about organizations, the presence of artwork and plants was commonly used to convey warmth and comfort. They were also important in forming impressions. In the study, some participants used the presence of plants to speculate as to the possible location of the hotel.

The furniture and accessories appeared to aid in forming impressions about the luxuriousness and elegance of the hotel. Most impressions were formed based on the style of furniture used in the interior environment. Some participants used style of furniture to determine the age the hotel. Inferences about the perceived prices of rooms were also made. The hotel that was perceived to be expensive was also considered to be more elegant and luxurious. Geographic context was speculated upon for all the hotels. Inferences about the type of facilities and amenities available in the hotels were also made. The size of the hotel lobbies also apparently influenced the participants' impressions of the size of the hotel rooms. Larger lobbies with high ceilings were considered to be associated with larger rooms.

According to Mehrabian and Russell (1974), the physical environment can also elicit an approach or avoidance behavior. Therefore, in order to increase business, the environments of hotel lobbies could be designed to elicit approach behavior from guests or potential guests. The results of the present study indicated that the positive comments about cleanliness, design and comfort of the hotel lobby were common factors that might elicit approach behavior of the participants.

An interesting issue addressed by some of the participants was their apparent emotional attachment to the environment as an important component in forming impressions. This is supported by environmental psychology literature (Donovan & Rossiter, 1982), which suggests that one of the ways people respond to the environment is emotionally. This means that people prefer environments that elicit feelings of pleasure and are viewed as aesthetically stimulating (Bitner, 1992). Participants were able to form impressions about the warmth and coziness of the hotel. The findings also indicated that participants were more favorably impressed by hotels that had a home-like look, especially for vacationing, than by those which appeared to be business-like.

# CONTEXT, LIMITATIONS AND FUTURE RESEARCH RECOMMENDATIONS

The results of this study indicated the important role that the hotel lobbies might play in forming impressions of the entire hotels. Several contexts that may affect or influence the results of the study exist. However, the researcher did not consider them to be limitations. The major context was that participants formed their impressions and recorded them based on pictures of hotel lobbies rather than upon actual hotel lobbies. It is possible that the use of pictures may influence impressions in ways that are different from real experience. This was not considered a limitation because from the researchers point of view, in the real world people select hotels based on the pictures and the little information provided in the web and brochures.

For comparisons and argument sake, future research may examine first impressions in real world hotel experience. Because the exterior of hotels is almost always the first part of hotels seen by guests, an interesting study would be to examine whether participants make similar assumptions and extended inferences about hotels as a whole when they see only the exterior front of the hotels. Future research could explore participants' predicted level of satisfaction with hotels, based only upon seeing the lobbies or pictures of lobbies.

Future studies could also look at participants who are not design oriented and see whether they may make similar impressions or not. Rapoport (1990) indicated that designers and users react differently to environments mainly due varying schemata. He also emphasizes the need to consider the users meaning than the designers for everyday environments. It will be interesting for future research to find how different the impressions of designers are from users.

The present study also poses questions that might be answered by future research. What aspects would be different if not using designer students? What attributes of hotel lobbies result in specific impressions? What are the questions which might explain contradictions in impressions formed? What is it about the appearance of hotel lobbies which makes consumers form impressions about the hotel as whole? The researcher does not claim that the study had answered all the questions. Whatever results and questions that still remains to be answered, the study has definitely changed the worldviews of the researcher. The researcher hopes the study will prompt for more investigations.

## IMPLICATIONS AND CONCLUSIONS

The findings of the study indicate that the environment of hotel lobby might be rich in cues that may be important in communicating image and suggesting impressions of the hotel. To ensure positive first impressions, furniture placement, suitability and attractiveness, room components such as lighting, ceiling and other interior elements should be considered in designing hotel lobbies. Such design elements might help clients in forming impressions and making extended inferences about the hotel as whole. The quality of the environmental cues could also be important in communicating the quality and nature of service the hotel offers and the image it intends to portray.

## **BIBLIOGRAPHY**

- Asch, S. E. (1946). Forming impressions of personality. *Journal of Abnormal and Social Psychology*, 41, 259-290.
- Baker, J. (1987). The role of the environment in marketing services: The consumer perspective. In J. A. Czepiel, C. A. Congram, & J. Shanahan (Eds.), *The service challenge: Integration for competitive advantage* (pp. 79-84). Chicago: American Marketing Association.
- Berg, B. L. (2001). *Qualitative research methods for the social sciences* (4th ed.). Boston: Allyn and Bacon.
- Bitner, M. J. (1986). Consumer responses to the physical environment in service settings. In M. Venkatesan, D. M. Schmalensee, & C. Marshall (Eds.), *Creativity in services marketing* (pp. 89-93). Chicago: American Marketing Association.
- Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing*, 54, 69-82.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing*, 56, 57-71.
- Bitner, M. J., Booms, B. H., & Tetreault, M. S. (1990). The service encounter: Diagnosing favorable and unfavorable incidents. *Journal of Marketing*, 54, 71-84.
- Booms, B. H., & Bitner, M. J. (1982). Marketing services by managing the environment. *The Cornell Hotel and Restaurant Administration Quarterly*, 23(1), 35-40.
- Briscoe, M. E., Woodyard, H. D., & Shaw, M. E. (1965). Personality impression change as a function of the favorableness of first impressions. *Journal of Personality*, 35, 343-357.
- Bromley, D. B. (1993). Reputation, image and impression management. Chichester: John Wiley & Sons.
- Brown, P. L., (2001, August). Tokyo's Disney Ambassador. *Architectural Digest*, p. 34.
- Burns, L. D., & Caughey, C. C. (1992). Category use in first impressions of restaurant interiors. *Perceptual and Motor Skills*, 75, 107-110.

- Burns, L. D., & Lennon, S. J. (1993). Effect of clothing on the use of person information categories in first impressions. *Clothing and Textiles Research Journal*, 12(1), 9-15.
- Cadotte, E. R, & Turgeon, N. (1988). Key factors in guest satisfaction. The Cornell Hotel and Restaurant Administration Quarterly, 28 (4), 45-51.
- Campbell, D. E. (1979). Interior office design and visitor response. *Journal of Applied Psychology*, 64 (6), 648-653.
- Caughey, C. C., Francis, S. K., & Kolodziej, A. E. (1998). Effect of expectations on user satisfaction with a remodeled university dining facility. *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior, 11,* 180-185.
- Cheever, S. (2001, December). Four Season Resort Nevis: Cosmopolitan comfort combines with breezy carribean charm. *Architectural Digest*, p.179.
- Damhorst, M. L. (1991). Relation of textiles and clothing research to scientific inquiry in social cognition. In S. B. Kaiser, & M. L. Damhorst (Eds.), Critical linkages in textiles and clothing subject matter: Theory, method and practice (pp.191-202). Monument, CO: International Textiles and Apparel Association.
- Davis, T. R. V. (1984). The influence of the physical environment in offices. *Academy of Management Review*, 9(2), 271-283.
- Denzin, N. K., & Lincoln, Y. S. (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks: Sage Publications, Inc.
- Donovan, R. J., & Rossiter, J. R. (1982). Store atmosphere: An environmental psychology approach. *Journal of Retailing*, 58(1), 34-57.
- Fiske, S. T. (1988). Compare and Contrast: Brewer's Dual Process Model and et al's Continuum Model. In T. K. Srull & R. S. Wyer, Jr. (Eds.), *Advances in Social Cognition (vol. 1): A Dual Process Model of Impression Formation* (pp 65-76). Hillsdale, New Jersey: Lawrence Erlbaum Associates Publishers.
- Fiske, S. T., & Taylor, S. E. (1984). *Social Cognition*. London: Addison-Wesley Publishing Company.
- Grossack, M. (1953). Cues, expectations, and first impressions. *The Journal of Psychology*, 35, 245-252.
- Guerin, D. A., Park, Y., & Yang, S. (1995). Development of an instrument to study the meaning of color in interior environments. *Journal of Interior Design*, 20(2), 31-41.

- Hampson, S. E. (1988). The Dynamics of Categorization and Impression Formation. In T. K. Srull & R. S. Wyer, Jr. (Eds.), *Advances in Social Cognition (vol. 1): A Dual Process Model of Impression Formation* (pp.77-82). Hillsdale, New Jersey: Lawrence Erlbaum Associates Publishers.
- Kaiser, S. B. (1990). The Social Psychology of Clothing: Symbolic Appearances in Context (2nd ed.). New York: Macmillan Publishing Company.
- Kaye, S. M., & Murray, M. A. (1982). Evaluation of an architectural space as a function of variations in furniture arrangement, furniture density, and windows. *Human Factors*, 24(5), 609-618.
- Lennon, S. J., & Davis, L. L. (1989). Categorization in first impressions. *The Journal of Psychology*, 123(5), 439-446.
- Lennon, S. J., & Davis, L. L. (1989). Clothing and human behavior from a social cognitive framework Part 1: Theoretical Perspectives. *Clothing and Textiles Research Journal*, 7(4), 41-48.
- Levy, L. H. (1967). The effects of variance on personality impression formation. *Journal of Personality*, 35, 179-193
- Leyens, J., & Fiske, S. T. (1994). Impression formation: From recitals to symphonie fantastique. In P. G. Devine, D. L. Hamilton, & T. M. Ostrom (Eds.), *Social Cognition: Impact on Social Psychology* (pp. 40-66). San Diego: Academic Press.
- Livesly, W., & Bromley, D. (1973). *Person perception in childhood and adolescence*. New York: John Wiley and Sons.
- Lofland, J., & Lofland, L. H. (1995). Analyzing social settings A guide to qualitative observation and analysis. Belmont: Wadsworth Publishing Company.
- Neuman, W. L. (1995). Social research methods: Qualitative and quantitative approaches (4th ed.). Boston: Allyn and Bacon.
- Ornstein, S. (1992). First impressions of the symbolic meanings connoted by reception area design. *Environment and Behavior*, 24(1), 85-100.
- Rapoport, A. (1990). The meaning of the built environment: A nonverbal communication approach. Tucson: The University of Arizona Press.
- Schmid, A. M., & Scoviak-Lerner, M. (1988). *International hotel and resort design*. New York: PBC International Inc.

- Shrauger, S. (1967). Cognitive differentiation and the impression formation process. *Journal of Personality*, 35, 402-414.
- Ward, J. C., Bitner, M. J., & Barnes, J. (1992). Measuring the prototypicality and meaning of retail environments. *Journal of Retailing*, 68(2), 194-220.
- Whitehead, R. (1995). Commercial lighting: Creating dynamic public spaces. Rockport, Massachusetts: Rockport Publishers Inc.
- Zimmer, M. R., & Golden, L. L. (1988). Impressions of retailing stores: A content analysis of consumer images. *Journal of Retailing*, 64(3), 265-291.
- Zive, J. D. (1982). Interior construction at hotels. *The Cornell Hotel and Restaurant Administration Quarterly*, 23(1), 41-45.

## **APPENDICES**

### APPENDIX A

## Questionnaire

## Instructions

This is a study about how we form impressions. I will show you pictures of four (4) hotel lobbies. I will show each picture for 3 minutes. Please write what each picture communicates to you about the hotel, in general. Please write at least three (3) sentences about each slide / hotel. Remember that there are no right or wrong answers.

1. In a few sentences, write about the first things that come to your mind about the hotel, in general.

Slide 1

Slide 2

Please go on to the second page.

Slide 3

Slide 4

## Please answer the following:

1.	Have you ever stayed in a hotel? (circle one)
	1. No 2. Yes
2.	If yes, how often did you stay in a hotel this past year? (Circle one)
	1. 1 time
	2. 2-5 times
	3. more than 5 times
	4. Other (please specify)
3.	You are: (circle one)
	1. Male 2. Female
4.	Age (on your last birthday)
5.	What is your current major?
6.	What is your class standing this term? (circle one)
	1. First Year
	2. Sophomore
	3. Junior
	4. Senior
	5. Graduate student
	6. Other (please indicate)

#### APPENDIX B

#### **Informed Consent Form**

Project Title: First Impressions of the Interiors of Hotel Lobbies as Influences on

Perceptions of Hotels

To: Participants in the survey

Investigators: Professor Carol Caughey and Lily Fidzani

This study investigates whether people can form impressions and make inferences about hotels based on the physical environment or design of hotel lobbies. The results will benefit designers and students in understanding how the interior environment is perceived and influenced by environmental cues present.

Responding to the questionnaire will take about 10-15 minutes. There are no foreseeable risks to the subjects by participating in the study. The possible benefits might include learning how people perceive the interior environment and also learn the importance of environmental cues in an interior environment. As future designers the study may help you realize how people perceive an interior environment, which will be important in your decision making when designing spaces.

You will be shown pictures of four (4) hotel lobbies, one at a time, for approximately three minutes. Each time you will be asked to write the first things that come into your mind about the hotel. You may decline to answer any questions if you choose.

For confidentiality, your name or identification number will not be associated with your responses and findings of the study. Please do not put your name or any type of personal identification on the response sheets. A number will be assigned to each response by the researcher to keep track of the responses. Participants for the study should be 18 years or older.

Participation in this study is voluntary and confidential. However, the course professor will assign 5 points to students who participate in the study. You may discontinue participation at any time without any penalty. Participants who withdraw from the study early or who do not want to participate in the study will be given an alternative informal writing assignment to earn 5 points, which will also take approximately 10-15 minutes to complete.

Your signature below indicates that you have read and understood the procedures described above and that you give informed and voluntary consent to participate in this study.

Thank you very much for your cooperation and participation. Please retain one copy of the provided informed consent form for future reference.
Name of participant (please print)
Signature of Participant Date
Any questions about the research study or specific procedures should be directed to Professor Carol Caughey, AIHM, (541) 737-0992.
If you have any questions about your rights as a research subject, you should contact the IRB Coordinator, OSU Research Office, (541) 737-3437 or via e-mail at IRB@orst.edu

## APPENDIX C

## **Recruitment Form**

## Recruitment of Participants - Class Announcement

## AIHM 464 Contemporary History of Housing and Interiors Spring, 2002

There are eight (8) informal writing assignments in this class, worth 5 points each, for a total of 40 points.

One of these 8 assignments, however, is participation in a study conducted by Carol Caughey and Lily Fidzani.

Participation in the study is voluntary, however. If you do not choose to participate or do not complete the study, you will be given an alternative informal writing assignment worth 5 points, which will take approximately as long as the study (10-15 minutes).

#### APPENDIX D

INSTITUTIONAL REVIEW BOARD

April 10, 2002

Principal Investigator:

The following project has been approved for exemption under the guidelines of Oregon State University's Institutional Review Board (IRB) and the U.S. Department of Health and Human Services.



OREGON
STATE
UNIVERSITY

312 Kerr Administration Building

Corvallis, Oregon 97331-2140 Principal Investigator(s):

Carol Caughey

Student's Name (if any):

Lily Fidzani

Department:

Apparel, Interiors, Housing and Merchandising

Source of Funding:

None

Project Title:

First Impressions of the Interiors of Hotel Lobbies

as Influences on Perception of Hotels

Protocol Number:

1869

Comments:

This approval expires on 4/9/03. A copy of this information will be provided to the Institutional Review Board. If questions arise, you may be contacted further. Please use the included forms as needed.

- The original stamped informed consent document is to be used to enroll new participants in this study. Please make copies of this original as needed.
- The ADVERSE EVENT FORM is to be used to report any happening not connected with routine expected outcomes that result in bodily injury and/or psychological, emotional, or physical harm or stress.
- The MODIFICATION REQUEST FORM must be submitted for review and approval prior to implementation of any changes to the approved protocol.

Sincerely.

JOUNG K. (Jinselm Laura K. Lincoln IRB Coordinator

Telephone 541-737-3437 Fax 541-737-3093

IRB@oregonstate.edu

## APPENDIX E: HOTEL LOBBY PICTURES



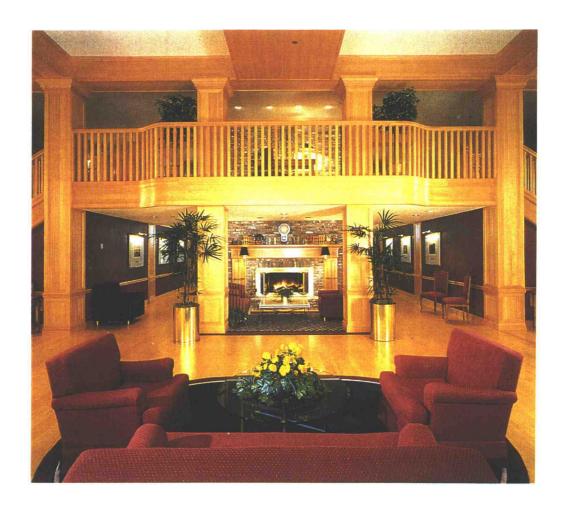
## **HOTEL LOBBY A**

From "International hotel and resort design" (p. 60) by A. M. Schmid, & M. Scoviak-Lerner, 1988, New York: PBC International Inc.



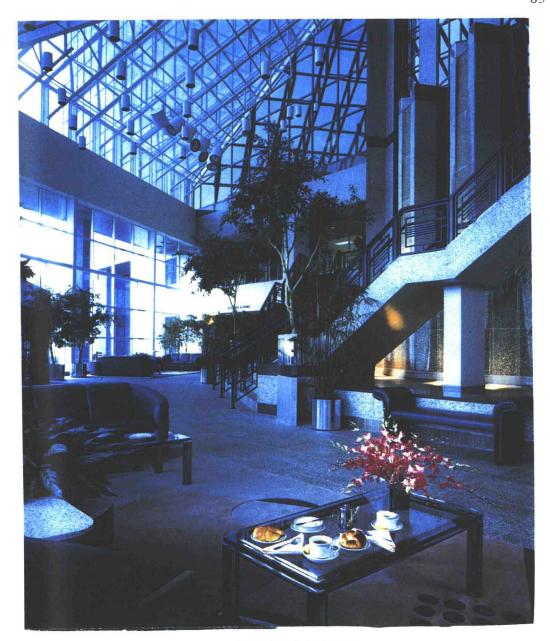
## **HOTEL LOBBY B**

From "International hotel and resort design" (p. 67) by A. M. Schmid, & M. Scoviak-Lerner, 1988, New York: PBC International Inc.



## HOTEL LOBBY C

From "International hotel and resort design" (p. 245) by A. M. Schmid, & M. Scoviak-Lerner, 1988, New York: PBC International Inc.



HOTEL LOBBY D

From "International hotel and resort design" (p.81) by A. M. Schmid, & M. Scoviak-Lerner, 1988, New York: PBC International Inc.