

**VISUAL IDENTITY AND EXPERIENCE DIMENSIONS IN THE  
INTERNATIONAL LUXURY HOTEL INDUSTRY**

by

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## **ABSTRACT**

Product and service parity in terms of physical facilities are widespread in the international luxury hotel industry. Visual identity and a focus on customer experiences present a new opportunity for differentiation. Presenting five empirical studies, the present research focuses on the following key issues of visual identity and experience in an international context. First, what are the impressions that customers form and the perceptual dimensions that they use when they perceive and evaluate the wide variety of visual output of hotel? Second, do these customer impressions predict attitudes and likelihood of staying in a hotel? Third, are there cross-cultural differences in perceptual dimensions, attitudes and likelihood of staying between Western and East-Asian cultures? Managerial recommendations are presented with respect to overall visual identity positioning and the consistency issue examined in this research. It is suggested that managers use identity and experiential dimensions for identifying market opportunities, for product differentiation and for repositioning existing brands.

"Oh Those Greeks! They knew how to live. What is required for that is to stop courageously at the surface, the fold, the skin, to adore appearances, to believe in forms, tones, words, in the whole Olympus of appearance. Those Greeks were superficial--out of profundity."

Friedrich Nietzsche, *Die fröhliche Wissenschaft*

## **OVERALL BACKGROUND**

Nietzsche's dictum--"superficial--out of profundity"--neatly encapsulates the basic thinking behind visual identity and experiential marketing, which forms the basis of the present research project: To win customers' hearts and their loyalty, marketers must appeal to customers' senses and provide them with gratifying, lasting experiences. And, to provide customers with attractive experiences, managers need to understand how customers' experiences are formed based on a multitude of visual and other sensory stimuli.

Unfortunately, most marketing is guided by a paradigm that focuses very little on experiences. Models and methodology in marketing postulate that customers are seeking functional benefits based on tangible, physical product features (Kotler, 1997). These models also assume that customers engage in comparison shopping and decision-making by selecting among different products that offer the best value (i.e., quality at a given price). Indeed, all major attitude models and concepts for understanding consumer decision-making (e.g., multi-attribute models, choice models, and decision models) and methodologies for product positioning (e.g., conjoint analysis and multi-dimensional

scaling) are based on the notion of a rational trade-off process of individual, physical features including price (Urban and Star 1991).

Even the traditional branding literature does little justice to customer experiences and “intangibles” (Aaker 1991, 1996; see Kapferer 1992 for a notable exception). Most of the branding literature is strategic marketing in disguise, replacing the term "product" with the term "brand" and focusing on the identification and labeling function of names and logos (Keller 1997). Empirical research on branding examines names and verbal slogans at the exclusion of visual stimuli, thus drastically diminishing opportunities to identify and measure experiential aspects of a brand (Shocker, Srivastava, and Ruekert 1994).

Focusing on visual identity and customer experiences represents a new way of thinking that supplements the “attributes-and-benefits” traditional view (Schmitt and Simonson 1997; Schmitt 1999; Schmitt 2003). The focus of this new approach is on the management of visual (and other sensory) corporate output that results in all kinds of experiences – sensory, affective, cognitive, behavioral and relational -- for the customer (Schmitt 1999). Following this view, visual corporate output—in the form of logos, brochures, uniforms, advertisements, buildings, interiors and so on—is not just there for the purpose of identifying a brand, labeling a product, or distinguishing the service personnel from the customers. These brand identity elements are projection devices that trigger or enrich experiences with a brand. In short, experiential marketing proposes that we must perceive

the world of services literally through customers' eyes in order to understand how we can successfully market to them (Schmitt 1999; Schmitt 2003).

## **VISUAL IDENTITY AND EXPERIENCES IN THE LUXURY HOTEL INDUSTRY**

Product and service parity have become the norm in the international luxury hotel industry. Four-star and five-star establishments are offered at comparable price points as a result of adopting “yield management” type of pricing schemes. The hotel properties of major luxury chains are located at similar locations (e.g., in the business districts of major cities) due to city planning in developing regions or zoning laws in major established cities. Luxury hotels offer comparable facilities and overall services: they have the same type of business-center, check-in, valet and concierge services; the same type of fitness equipment at their fitness clubs; similar drinks at their lobby bars; and similar restaurant facilities (e.g., one 24-hour casual coffee-house-style restaurant; one formal French, Chinese or Japanese restaurant; and one for local cuisine) with often look-alike menus. What differs, however, is the specific look, touch, and feel—the overall visual and sensory appearance—of the hotel property, and the appeal and experience that is created for the luxury-hotel customer.

Differentiation via visual corporate identity may therefore provide a major business opportunity. Compared to physical goods (such as industrial products or consumer-package goods) as well as many other services (such as financial services, consulting, or insurance services, for example), hotel environments can easily create appeals to customer

experiences. As other goods and services, hotels have names, logos, advertisements, brochures, and, most recently, web sites, which increasingly become a key element for visual identity management in the industry (Murphy, Forrest, Wotring, and Brymer 1996). Yet, in addition, during a guest's stay at a hotel, there are the core experience-creating elements of the hotel building as such, the lobby, and the guest room as well as restaurant and bar facilities, business centers, fitness and health clubs etc.

Indeed, recently many international luxury hotels have paid attention to visual identity and experience management. Hotel chains, for example, have changed their names (Philippidis, A. 1996), have repositioned the identity of a brand by revamping by redesigning certain flagship properties on a regular basis and, from time to time, have changed the visual identity, look and appearance of the entire chain (Financial Times 1996). Moreover, visual identity management is also of increasing importance for stand-alone hotels (Hales, 1997).

An attractive visual identity has been shown to cut through information clutter; attract customers to products and communications; to justify premium (above-category) pricing and to motivate employees (Schmitt and Simonson 1997). Thus, similar to other industries, the luxury hotel industry may benefit from increased customer loyalty, attracting new customers and inducing switching behavior by fine-tuning a visual identity to evolving tastes of current and potential customers, and by differentiating it from competition (Napoles 1988; Olins 1990).

Deriving value from visual identity management, however, requires that a management structure and intelligence system is in place that provides for the systematic and strategic acquisition, analysis and dissemination of information pertinent to visual-identity management. Importantly, this requires that visual identity is analyzed and planned based on customer input.

### **OBJECTIVES OF THE RESEARCH**

The present research focused on several issues of key importance for managing visual identity and customer impressions in the international luxury hotel industry.

First, what are the impressions that customers form and the perceptual dimensions that they use when they perceive and evaluate the wide variety of visual output of hotel? Without doubt, hotel managers as well as architects and designers have an intuitive, experience-based understanding of the impressions that are critical for managing visual identity. This experience and knowledge is applied in the design and redesign of various hotel projects. However, there is often disagreement about what these core dimensions are and which ones are core drivers of perceptions in a specified settings. That is, when hotel guests view a lobby, do they—consciously or subconsciously--pay attention to the color scheme, the shapes, the overall complexity of the lobby, or its realist symbolism? Do they behave differently when they are in their guest rooms, in the restaurants, in the business centers, fitness clubs, or when they view the hotel from the outside? Therefore, it

seems worthwhile to step back, take the customers' perspectives and ask potential hotel guests how they perceive the visual output of a given part of a hotel or the hotel as a whole. Once key perceptual dimensions have been identified, hotel properties may be placed into this dimensional space and hotel managers will have a tool for making more systematic visual-identity decisions, similar to the positioning decisions based on perceptual maps.

Second, it was investigated whether customer impressions predict attitudes and likelihood of staying in a hotel. In other words, do impressions really matter? It may be possible that sensory perceptions are mere epiphenomena, i.e., pleasant experiences that arise without any consequences for behavior. Hotel guests may enjoy a certain look but not base their decision of staying or not staying in a certain property on the visual identity of a property or hotel chain. Alternatively, given the parity in service offers and facilities described earlier, visual identity may be a differentiator and predictor of attitudes and likelihood of staying in a hotel.

Third, are there any cross-cultural differences in perceptual dimensions, attitudes and likelihood of staying between western and East-Asian cultures? This question is of critical importance given the increased trend toward globalization which results in (1) increased exposure of a customer segment to a variety of different hotel properties of the same hotel chain; (2) new target markets (e.g., East Asian travelers); and (3) new cultural, aesthetic trends which may necessitate a change in style.

Finally, to what degree should a company strive for consistency, and to what degree for variety, across its visual output? An answer to this question is of key importance from a strategic branding perspective. The issue of consistency/variety arises both across properties and within a given property. That is, should a given hotel chain try to maximize consistency across its properties or strive for “individual styles” for each property to provide the customer with sensory and experiential variety? Or consider a given hotel property. Should there be consistency (i.e., a similar look and feel in the lobby and the guest room, and even in the interior, e.g., a simple, stark high-tech look) or is it preferable to create attractive variety (e.g., combine a cozy guest room with a “hip” lobby)? The focus of the present empirical research is on within-property consistency only; however, consistency will be discussed again from a broader perspective in the final section of this report.

## **LITERATURE REVIEW**

The relevant field for the study of perceptions and judgments regarding visual output is experimental and cognitive psychology. Most research in psychology has focused, however, on relatively isolated phenomena in visual perception (e.g., perceptions of movements, colors and color combinations, spatial perception etc.). A somewhat broader approach can be found in the early work of the so-called Gestalt psychologists who were concerned with structures and patterns of the entire visual field and how a Gestalt may be more than the sum of individual impressions of its components. This approach has been

applied to the study of the visual arts by Arnheim (1996). However, even Arnheim approach focuses on the static display of one particular depicted scene (e.g., in a painting) and does not consider how individuals may perceive and think about a variety of visual output in a dynamic environment such as a hotel. In sum, there has been no systematic empirical research on the broader question of perceptions across a variety of stimulus domains, and perhaps even across modalities.

A more promising approach may be found in the arts literature. Historians of art, design and architecture, musicologists, as well as theater and literary critics, for a long time, have presented categorizations of literary, architectural, and musical styles in order to isolate and describe specific periods or genres. Although this approach has been succinctly nonempirical, it may serve as a useful starting point for proposing perceptual dimensions that individuals may use in judging visual output. However, concerning most approaches, an important shortcoming remains: most critics have proposed styles for specific art forms (e.g., painting, design, architecture, music) but rarely unifying styles across art forms. As argued earlier, managing across visual output, however, is the core of visual identity in the hotel industry where managers deal with using furniture, space, graphics, etc. to create an impression.

One notable exception has been the work by the renown art historian Wölfflin. Influenced by Hegel's idea of a *Zeitgeist*, Wölfflin distinguished between two general opposite aesthetic styles--the "classical" and "the baroque"--which may be used to analyze the

products of the various arts. By the classical and the baroque, he meant not specific historical periods but general style dimensions.

Schmitt and Simonson (1997) expanded Wölfflin's categories into several other overall impressions dimensions: a time representation (traditional, contemporary, futuristic), a time movement dimension ("retro," avant-garde, classic), a space dimension (city/country, east/west), a technology (man-made, natural), authenticity (original vs. derived) and sophistication dimension (cheap vs. refined).

It is an empirical question which dimensional structure best describes the visual output in hotels. Based on prior literature and research, I would expect, however, to find most of the dimensions previously described as well as perhaps additional ones that are specific to the luxury hotel industry.

As described earlier, cross-cultural differences between a U.S. and Chinese sample were investigated as well. As Schmitt and Pan (1994) suggested, perceptions of brands and visual identity differ between East Asian and Westerners based on cultural traditions and taste preferences. These differences not only matter for individual design components (e.g., the meanings of colors) but also for entire styles. Chinese, for example, prefer an ornamentalist/realist look whereas Europeans like minimalist/abstract designs.

Moreover, once the key impression dimensions for international luxury hotels had been

identified (for U.S. and Asian travelers), there were two additional issues: (1) Are individuals' impressions predictive of guests' attitudes and intentions to stay in a hotel? (2) Is consistency or variety in design preferable?

The first question is an empirical issue that was addressed via regression analyses. That is, the key impression dimensions were used as predictors of attitudes both for individual components of a hotel (e.g., selecting a guest room or hotel restaurant for entertaining) or for predicting the hotel choice in general based on a general impression. The second question concerns decision-making across visual elements. Most corporate identity consultants and practitioners seem to assume that maximum consistency across visual elements is best. Clearly, certain elements should remain constant (e.g., the logo). But how about the key elements of a given property? Should there be consistency in style and design across the building exterior, the lobby and the guest room, for example? Also, how important is consistency? Does it predict attitudes?

The pertinent marketing and consumer-behavior literature is divided on the issue of whether consistency or some degree of variety is optimal. Semantic network theory and some research suggests that consistency is preferably, especially in terms of its impact on memory. Consistent information seems to be easier to be recalled and recognized (Schmitt, Tavassoli and Millard, 1993).

However, other prior theory and research in psychology and consumer research, suggests otherwise: a medium level of consistency (or congruity) seems to be optimal, especially for interest and attitudes (Meyers-Levy and Tybout 1989). The issue is at this point not fully resolved and will be addressed empirically in this research for the luxury hotel industry.

### **PARTICIPANTS IN THE STUDIES**

Participants in all five studies were executive MBA students at Columbia Business School for the U.S. sample. Executive MBA students at the China Europe International Business School (CEIBS) in Shanghai served as participants for the China studies.

As Table 1 shows, the profile of the U.S. sample was impressive in terms of experience (mean = 11 years), age (with a range from 26 to 52), type of occupation (e.g., 8 % of the participants hold the title of president, CEO, General Manager or Chairman; 75% hold title of Vice President), and average salary was \$125,000 with the range from \$65,000 to \$500,000. Participants had extensive travel experience from at least 2 weeks a year to a total of 8 months. One typical respondent stated on the questionnaire: “I travel about 8 months out of the year consistently. Sunday or Monday through Thursday in both the U.S., Latin America and Europe. Mostly big cities. I have seen many hotels from posh to foul/rough hotels in Eastern Europe.”

The Chinese sample’s profile is highly comparable to the U.S. sample except for type of

industry, with 60% of participants from manufacturing firms and 20% from government. Travel experience was more limited than in the U.S. sample, in particular, regarding international travel. Most international travel was within Asia (e.g., to Thailand, Singapore, Malaysia or Japan).

### **PREPARATION OF HOTEL STIMULI, MATERIALS AND PRETESTS**

First, we contacted hotel chains and asked them for visual materials (e.g., slides) for the following types of visual elements: (1) logos, (2) signage, (3) exterior pictures, (4) lobby pictures, (5) guest rooms designs, (5) company uniform pictures, (6) restaurants and business centers, and (7) advertisements.

Pictures of various parts of the hotel were provided by several hotel chains at request. However, due to the nature of the study, it was also important to find pictures of different categories for the same hotel property. Based on the material provided, this was the case primarily for (1) exteriors; (2) lobby pictures; and (3) guest room pictures. As a result, pictures of these three types of hotel elements were the primary focus of the empirical studies reported here. Examples are shown in Appendix B. (In studies 1 and 2, however, some other categories of visual elements such as signage, business centers and uniforms were included as well.)

Although the focus on hotel exteriors, lobbies and guest rooms may seem to be a limitation of the empirical studies reported here, the edifice of a hotel property, the lobby and the

guest room clearly are the most important elements of customer impressions and experiences at the point of contact and “consumption” of the hotel service. The exterior and lobby are the key first impression elements when a hotel guest arrives at the property (Andorka 1996). Moreover, the guest room and lobby (and accompanying F & B outlets) are the places where the typical customer spends most of his or her time during a hotel stay. Therefore, the selection seems to be appropriate given the focus of the project on visual identity elements that impact customer experiences.

Moreover, in studies 3-5 the objective was to select representative/prototypical pictures of a hotel chain’s visual style and appearance. Therefore, a research assistant with a degree from the Cornell School of Hotel Administration was asked to select the most prototypical examples (in terms of visual style, look, feel and appearance) for each visual element, i.e., the pictures of exteriors, lobbies, and guest rooms that best represent a given hotel chain’s visual style.

As a result of this selection procedure, pictures of exteriors, lobbies and guest rooms of the following hotel brands were included in studies 3-5: Four Seasons + Regent Hotels and Resorts, Westin, Hyatt brands (Grand Hyatt, Park Hyatt, Hyatt Regency), Marriott, Swissôtel, Sheraton and Kempinski Hotels. The hotel properties from which pictures were taken were located in the U.S., Europe and Asia.

## PROCEDURE

In each study, participants were shown color slides of various parts of a hotel (exteriors, lobbies, restaurants, guest rooms, fitness facilities, outdoor recreational facilities, and business centers). Different slides were shown in different studies based on the objective of each study. Hotels were described as international luxury hotel chains and participants were asked to give their first impression of the hotels in terms of how the “look and feel” of each hotel and how they would imagine the experience. Pictures were typically shown for 30 seconds. Depending on the type of study, participants responded either in an open-ended format by writing down words that described their responses or on nine-point rating scales (either semantic differential or Likert-type scales).

## STUDY 1

### Overview

Study 1 was an exploratory study whose purpose was to identify the key categories along which individuals perceive visual elements in the international hotel industry. To do this, participants were shown slides and asked to write down their responses to the hotel pictures. The pictures had been pre-selected by a research assistant with a degree from the Cornell School of Hotel Administration to ensure a wide variety of stimuli.

Respondents wrote down between one to five terms for each picture (median = 3) or short phrases such as “hotel where romance could blossom - I like it.” There were no statistically significant differences in terms of the overall number of items generated ( $ps > .12$ ),

although some respondents wrote several terms for one hotel and few for another one.

The descriptive vocabulary used by respondents was broad. Examples are given in Table 2.

Cognitive psychologists and consumer researchers distinguish between process and content of perceptions and mental representations. Process refers to the way individuals arrive at a response (an opinion or a perception); content refers to meaning. The data were coded for both process and meaning.

#### Process coding

Discrepancies between coders were resolved by discussion. Inter-coder agreement—a measure of coding reliability—was 86%.

The terms and phrases were coded by two assistants into the following four categories.

1. *Factually descriptive* (“sticking with the information in the picture”)

4% of the data were descriptive. Examples include: red wall colors, conference center, garden, city hotel.

2. *Inferential* (“going beyond the information provided”, i.e. by drawing inferences, conclusions, and generating general impressions)

The large majority of data (a total of 66%) was inferential. Examples include: upscale, warm, feminine, relaxed, stylish, ornate, traditional.

3. *Evaluative* (“judging the information positively or negatively”)

24% were evaluative. Examples include: nice, I like it, ugly, boring, unimpressive, sterile, unimpressive, needs a new decor.

4. *Other* (responses that were difficult to categorize)

6% were difficult to categorize. One example is “office building” when it is not clear whether the respondent meant it as a description, as an inference (“could serve as an office building”) or as evaluative (“looks like an office building”).

### Content coding

The data were also coded for content by the same coders. An iterative procedure was used. Coders first created as many categories as they wished. Both generated 17 and 19 categories each. They were then asked to further aggregate in a joint procedure and to generate at most 10 categories. The following eight categories emerged (and one miscellaneous category). Percentages of data that fall into each category are in parentheses.

- Overall feeling (32%)

Examples: comfortable, pretty, welcoming, inviting, relaxing.

- Time dimension (12%)

Examples include: old, traditional, old fashioned, modern, baroque, art deco, modern, Victorian, space-age, futuristic, “retro.”

- Location dimension (14%)

Examples include: rustic, country-style, urban, tropical, grand/showy.

- Sophistication/price dimension (9%)

Examples include: references to elegance, luxury, expensive, upscale, sleek, formal, regal.

Also references to price are very prominent here.

- Color references (6%)

Either explicitly by naming a certain color or in terms of the atmosphere created by color such as “feminine color scheme”

- References to light (8%)

References to the lighting primarily of interior spaces such as light, dark, bright, warm.

- Overall sense of space (7%)

A reference to the space itself and its felt quality such as open, airy, small, big and impersonal, crowded.

- Sound environment (4%)

A reference to the inferred sound environment such as quiet, noisy, busy, sedate.

8% of responses fell into a miscellaneous category.

### Summary and discussion of findings

As study 1 shows, customer perceptions of the visual identity of a hotel are rich, conceptually complex, yet can be differentiated into several distinct categories. They include some “objective” descriptions, and a large number of inferences and evaluations.

The most important category in terms of sheer mention of items are feelings. That is, customers do not “objectively” look at a visual design like an “art critic.” It seems that they do not necessarily rationally analyze a hotel design. Instead, they respond in terms of how a design or visual output makes them feel. These affective and emotional responses are key in designing and understanding the right look and will be explored further in study 2.

In addition to overall feelings, individuals’ responses also indicate frequent references to time. Some of the impressions falling into this category refer to specific time periods (e.g., art deco); others refer to a general orientation to the past, present or future; and others refer to time movements (e.g., “retro” and futuristic). While some references to time are descriptive, many are evaluative (such as “old fashioned”). Another frequently mentioned category is location, i.e., the “location look” reflected in the visual identity. Most references seem to be related to a bipolar dimension that contrasts “urban” with “country,” or “resort.” Again, some are descriptive; others are evaluative (e.g., “showy”). A final,

frequently mentioned category refers to monetary value. However, interestingly, in perceptions of luxury hotels this dimension is intertwined with perceptions of “sophistication.” As a result, it seems to be entirely possible to have an “expensive” visual display that nonetheless may be judged as “unsophisticated.”

Finally, not all impressions seem to be “overall impressions”; some are linked to specific design elements such as color, light, space and sound. But even for these specific categories, the highly inferential nature of impressions is noteworthy, i.e., colors are seen as “feminine,” lights as “warm,” space as “personal,” and sounds as “sedate,” for example. In other words, from a management perspective it is important to assess the impact of design elements on feelings, inferences, overall perceptions.

## **STUDY 2**

### Overview

Study 2 was a follow-up to study 1, with a specific focus on further understanding and subdividing the large feeling category identified in study 1. That is, because the majority of descriptions in study 1 related to the categories of “feelings,” it seemed necessary to get a better understanding in terms of which visual design aspects generated these feelings. In study 2 participants were specifically instructed to not only list their feelings but to describe what made them feel the way it did or why they perceived a picture the way they did.

The data were again coded and the following categories emerged. Note that some of these categories had also emerged in study 1, thus confirming that they are important dimensions in perceiving the visual appearance of hotels. Others are new, and they are all design-related.

Categories also found in study 1 and thus replicated included:

- Time dimension (see above)
- Location dimension (see above)
- Overall sense of space (see above)
- Sophistication/price dimension (see above)
- Color/light-reference dimension (see above)
- Sound-environment dimension (see above)

New categories included the following:

- Complexity (26%). Descriptions of the simplicity or complexity of the design.  
Examples include: simple, minimal, overloaded, ornamental, complex
- Material or surface (8%). Explicit references to the material or its nature, texture etc.  
Descriptions included: marble, nice wood, hard, rough, smooth, would feel tender, like rock or granite
- Shape (5%). References to the shape of objects (e.g., a bed in a guest room) or of a

room or space such as round, square, oval etc.

5% of responses fell into a miscellaneous category.

### Summary and discussion of findings

Major representational impression dimension of study 1 were replicated in study 2 and thus give us confidence that they are important customer impressions. They included: Time, location, overall sense of space, color and light, and the sound environment. Most importantly, when customers experience visual elements of a hotel, they can be related to certain design factors such as complexity, material/surface and shape, and it seems that by manipulating these design elements, managers and designers can critically influence people's feelings.

In sum, in studies 1 and 2, key categories underlying impressions and experiences were successfully identified. However, it is not clear from studies 1 and 2 to what degree they are related and what the key independent dimensions of customer impressions of luxury hotels are. That is, analogously to a process from (isolated) attributes to (interrelated) benefits to general independent customer value dimensions that we may distinguish for physical product aspects, one may distinguish a hierarchy of generality for experiences ranging from (small-scale) design elements to (interrelated) customer impressions categories to overall impression dimensions. Study 1 has focused on the level of customer impressions, linked those impressions to some degree to design elements. The next study

focuses on the interrelations of impressions (through correlational analyses) and on identifying independent dimensions (via factor analyses).

### STUDY 3

#### Overview

In study 3, interrelations among impressions and the overall dimensional structure underlying the impressions was determined. In addition, I addressed the question whether impression dimensions predict attitudes toward the hotels and likelihood of staying in the hotel.

The study was conducted in the summer of 1997 in New York. Respondents were shown color slides of the exteriors, lobbies and guest rooms of six international luxury hotels. They were asked to give their impression of each stimulus on 10 impression scales and their attitudes on four attitude scales. Different orders of presentation were used but participants first saw all the stimuli in one group (exterior, lobby or guest rooms) before pictures of the next group were shown. There were no matching exteriors, lobbies and guest rooms from the same property. That is, from one given hotel property only one element (exterior, lobby or guest room) would be included. Respondents provided ratings on nine-point bipolar, semantic differential scales and on nine-point standard Likert scales for the attitudes. The impression scales were selected such that the categories that emerged in studies 1 and 2 were all represented by one scale. Impression scales and attitude scales are shown in Table 3.

#### Correlation analysis

Table 4 shows the Pearson inter-correlations among the ten impression scales across all

hotels and stimuli. 8 correlations were above  $r > .3$ , suggesting meaningful interrelations between the variables.

Next, the inter-correlations among the ten impression scales across all hotels, separately for the exteriors, lobbies, and guest rooms were calculated. Interestingly enough, there are more relatively high correlations for exterior and guest rooms than for lobbies. If we use  $r > .3$  as a criterion, there are 7 for exteriors, 10 for guest rooms but only 3 for lobbies (see Table 5).

#### Factor analysis

Factor analyses were performed using varimax rotations which results in orthogonal (i.e., independent) dimensions. Following standard procedures, the number of factors was determined by three criteria: (1) variance explained via the eigenvalue criterion; (2) a screen plot relating variance explained to number of factors for the sake of parsimony; and (3) interpretability after varimax rotation.

The analysis across all hotels and across exteriors, lobbies and guest rooms resulted in three factors. Analyses across hotels for exteriors and guest rooms resulted in easily interpretable, distinct 3 factors solutions; based on all three criteria, the analysis for lobbies revealed three factors as well. Table 6 shows the variables that loaded on factors with factor loadings  $> .4$  (a commonly used criterion for determining variable/factor relations) for the overall analysis and for the separate analyses by exterior, lobby and guest room. It

also provides relevant statistics regarding goodness of fit.

After inspecting the loadings on each factor, the factors can be interpreted as follows:

- Design
- Space
- “Location look”

As Table 6 shows, examining the factor loadings that define the factor, there are many similarities in the factors across the three types of hotel design elements but there are also some nuances to the factors for exteriors, lobbies and guest rooms.

#### Regression analyses

To examine whether overall independent dimensions predict attitudes and purchase (i.e., likelihood of staying) intentions, regression analyses were performed.

The factor scores on each factor were estimated and then used to predict the attitudes toward the hotels, separately for each hotel and for exterior, lobby and guest rooms (Hotel 6 was excluded because due to an error in distributing questionnaires; because of the error there were not enough respondents.)

The analyses resulted in 15 regression analyses (5 hotels x 3 types of visual-identity

categories) in total. The key information of these analyses is shown in Table 7 in the form of significant regression coefficients for each analysis. In more than half of the cases--a total of 26/45--regression coefficients were significant. This suggests that the overall perceptual dimensions are indeed an important influence on behavioral intentions.

### Summary of findings

For U.S. executive travelers, the three key perceptual dimensions in judging a hotel are: design, a sense of space and location look. And these dimensions are significantly related to their intentions to stay in a hotel. Therefore managers should manage design so that desirable impressions are created along these three dimensions. Moreover, in general U.S. executive travelers prefer the following visual identity in a hotel property: ornamental and complex (rather than simple) , round curved designs with dark lighting and an urban (rather than rural) look.

## **STUDY 4**

### Overview

The key objective of study 4 was to determine the similarities and differences between U.S. and Chinese respondents in impression interrelations, as well as to determine the dimensional structure and relation between impressions and attitudes/likelihood to stay. That is, the same type of analyses as for U.S. executive travelers were now conducted for a sample of Chinese travelers.

The study was conducted with executive MBA students in Shanghai in January 1997. The hotel pictures and procedures were identical to Study 3. Study 4 was an empirical replication of the design of study 3. As mentioned earlier, The Chinese sample's profile was very comparable to the U.S. sample. Managers were somewhat less experienced in travel (in particular, international) than the U.S. sample, and traveled primarily in Asia.

### Correlation analysis

Table 8 shows the inter-correlations among the ten impression scales across all hotels and stimuli. Only 2 correlations were above  $r > .3$ , suggesting interesting interrelations between the variables.

Next, the Pearson inter-correlations among the ten impression scales across all hotels, separately for the exteriors, lobbies, and guest rooms were calculated. If we use  $r > .3$  as a criterion, there are a total of 12 meaningful correlations. They are fairly equally distributed across exteriors, lobbies and guest rooms (see Table 9)

### Factor analysis

The number of factors was determined again by the following three criteria:

(1) variance explained; (2) a screen plot; and (3) interpretability.

The analysis across all hotels and across exteriors, lobbies and guest rooms resulted in four factors overall and for each of the three types of pictures: exteriors, lobbies and guest

rooms. Table 10 shows the variables that loaded on factors with loadings  $> .4$  for the overall analysis and for the separate analyses.

The factors can be interpreted as follows (the order is based on the overall analysis)

- Location look
- Space/Time
- Linearity
- Complexity

As in the U.S. sample, these factors emerge in every analysis but with additional nuances (see Table 10).

#### Regression analyses

The factor scores were again used to predict the attitudes toward the hotels, separately for each hotel and for exterior, lobby and guest rooms. Table 11 shows the significant regression coefficients. In more than half of the cases--a total of 38 out of 72-- regression coefficients were significant. Interestingly enough, the "linearity" factor that did not even emerge as a factor in the U.S. sample was a significant predictor of attitudes in every single analysis.

#### Summary and discussion of findings

The key perceptual dimensions of Chinese executive travelers include: “location look,” “space/time,” as well as the two design dimensions of linearity and complexity. These dimensions for Chinese executive travelers are more differentiated than for U.S. travelers. As in the U.S. sample, these dimensions are significantly related to attitudes and likelihood of staying in a hotel. Interestingly, the most predictive dimension overall is linearity, perhaps related to the “feng shui” and other cultural beliefs relevant for architecture and interior design in China. Finally, in contrast to U.S. executive travelers, Chinese prefer the following look: modern, specially striking design with an urban look, and the overall identity should be ornamentalist complex. The overall look should be soft, not harsh.

These findings are consistent with other findings. In the identity literature, the preference of Chinese and East Asians (except Japanese) for complex ornamentation as well as naturalism, balance and softness has been identified in several investigation. The more differentiated cognitive structure and attention to detail has also been found in another context--the project on service encounters led by Laurette Dubé, on which I have participated as a collaborator.

## **Study 5**

### Overview

Study 5 had three objectives: (1) to assess the effects of consistency in design, image, look and color scheme on attitudes and likelihood to stay across three parts of a hotel; (2) to examine relations between overall impressions of a hotel (not specific ones for exteriors,

lobbies and guest rooms) and attitudes/likelihood to stay; and (3) to examine again cross-cultural similarities and differences between U.S. respondents and Chinese.

In study 5, participants were shown three pictures each of five hotel properties, i.e., they saw first the exterior, then the lobby, then the guest room of a given hotel property and then the next hotel property was shown. Picture presentation matched the natural experience of entering a new hotel, i.e., one first sees the building, then walks into the lobby, and then sees the guest room. After seeing all three pictures, participants provided ratings in terms of consistency, overall impressions and attitudes.

### Analyses

The correlation of the aggregate consistency scale and the aggregate attitude scale was mildly negative ( $r = -.22$ ) and significant. This suggests that U.S. respondents prefer slight variety in look and design rather than consistency. It was  $r = 0.01$  and not statistically significant for the Chinese sample, i.e., degree of consistency as such did not predict attitudes. Overall, the result is interesting. Consistency as such does not predict attitudes very well. In a regression analysis with the impressions dimensions (conducted in addition to the ones reported in the next paragraph) consistency was neither a significant predictor in the U.S. nor Chinese sample.

Regression analyses (without the consistency variable) revealed three significant regression weights for the U.S. sample, namely: open/spacious; urban/city; expensive/rich,

suggesting that these three overall impressions determine liking and likelihood to stay in a hotel. In contrast, in the Chinese sample five out of six regression coefficients were significant. In addition to the ones mentioned for the U.S. sample, two design dimensions were significant: complexity of design and color scheme as well as the time dimension (“old/traditional vs. new/modern”).

### Summary of findings

One of the key findings of this study is that consistency did not matter as much as expected. That is, consistency as such is not a significant predictor of attitudes. Actual aspects of a design seem to be more important than consistency. Therefore, managers may create a variety of looks as long as they are liked by customers even for a given property. Note that this recommendation is, however, based on the lack of presence of real “clash” in the pictures that we presented. Moreover, again it was observed that Chinese have a more differentiated view (and perhaps pay more attention to visual look) than U.S. respondents.

### **MANAGERIAL RECOMMENDATION**

To gain competitive advantage in terms of visual identity, it is critical to understand how hotel guests perceive and respond to corporate visual output. The research identified, both for U.S. and Chinese executive travelers, the key visual impression dimensions that emerge when customers of international luxury chains judge pictures of the hotels’

exteriors, lobbies and guest rooms. Moreover, the research shows that these dimensions predict attitudes and likelihood to stay in a hotel both for both U.S. and Chinese customers.

Managerial recommendations are presented with respect to overall visual identity positioning and the consistency issue examined in this research.

### Visual identity positioning

Perceptual maps are one of the major tools of marketing for strategic positioning of product and services. Perceptual maps are typically based on perceived benefits on the basis of physical product attributes; out of these perceived benefits positioning dimensions are derived.

Similar to traditional positioning maps, hotel managers of luxury hotels may base their positioning decisions on “experiential maps” that use the dimensions identified in the present research as major dimensions. In other words, it is suggested that managers of a given chain, brand or property track customer perceptions of their chain, brand or property compared to competitors along the design, space and location dimensions identified for the U.S. sample or the space/time, linearity, complexity and location factor found in the East Asian sample. Based on these maps, managers may make a number of positioning decisions:

1. Managers may identify gaps in the experiential perceptual space and capitalize on the opportunity that a certain type of visual identity may be missing (such as a modern hotel with a complex aesthetic that makes the guest feel welcomed and comfortable, which may appeal, for example, to the segment of East Asian business travelers).
2. Managers may notice that their brand is poorly differentiated in terms of visual identity relative to competition or not in line with certain customers' aesthetic preferences.
3. Managers may use the map to reposition the brand along a certain dimension. Repositioning may be accomplished by changing the experience of various hotel spaces such as the lobby and the guest room and by changing certain design elements in these spaces.

#### Managing consistency

Another major identity management issue concerns consistency. Consistency was investigated in the present research as consistency among elements within one property, and the finding is that consumers prefer some degree of variety. The managerial implication of this finding is that as long as there is no clear clash among components and as long as each hotel component is attractive in its own right the issue of consistency is secondary.

Some degree of variety seems to provide the optimal psychological conditions for curiosity and arousal, adventure and intrigue (Sanbonmatsu and Kardes 1988). It protects against

boredom and saturation while providing a stable reference point and protection against the unexpected which may cause stress because it is too unfamiliar.

Going beyond the present research, from a broader image management perspective, there are several other consistency issues:

1. Which design elements (e.g., logo, corporate and tactical advertising, websites, properties) should be used consistently and which ones can vary?
2. Is it possible for a company to use an umbrella brand when it has a wide range of properties that differ quite drastically in their visual identity?
3. Should a company that is interested in creating a new luxury chain pay close attention to consistency or consciously plan for variety.

Based on the research, I recommend a “sensory variety” approach that uses an underlying theme to provide cognitive consistency for the customer. That is, with respect to individual identity elements, certain ones like the logo and name should remain constant while others may vary within the same style. Moreover, different visual style executions should be verbally summarized and structured for the customer using a verbal theme that expresses the visual identity (e.g., “The Hyatt Touch”). This underlying theme should be reinforced in individual properties or property components, in web sites and advertisements, and other visual identity executions through subtle allusion.

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# **APPENDIX A**

- 1. Demographic and Lifestyle Profile of U.S. Samples**
- 2. Examples of Impressions Generated by U.S. Sample**
- 3. Impression and Attitude Scales**
- 4. Correlations of Variables (U.S. Sample)**
- 5. Correlations by Type (U.S. Sample)**
- 6. Result of Factor Analyses (U.S. Sample)**
- 7. Regression Analysis (U.S. Sample)**
- 8. Correlations of Variables (Chinese Sample)**
- 9. Correlations by Type (Chinese Sample)**
- 10. Result of Factor Analysis (Chinese Sample)**
- 11. Regression Analysis (Chinese Sample)**

Table 1

**Demographic and Lifestyle Profile of U.S. Samples**

- Participants had an average of 11 years of experience.
- The average age was 34, with a range from 26 to 52.
- 8% of the participants hold the title of president, CEO, General Manager or Chairman; 75% hold title of Vice President, Controller or CFO; 17% hold a senior staff position such as analyst, researcher, engineer or scientist; 3% are entrepreneurs. 25% were female. Average salary was \$125,000 with the range from \$65,000 to \$500,000.
- In terms of industry breakdown, 48% were in financial services or accounting; 15% in manufacturing, 15% in information technology, 10% in healthcare; the remainder was in other sectors.
- Participants had extensive travel experience from at least 2 weeks a year to a total of 8 months.

Table 2

**Examples of Impressions Generated by U.S. Sample**

futuristic, techno

classy, symmetric

drub, musty colors

commercial, business hotel

rigid, traditional

old, tradition, stuffy

formal, comfortable

regal, fancy

museum, old fashion, old

cave

amusement park

offbeat, different

big, institutional, cold

interesting, crowded

traditional, executive

commercial, impersonal

modern, no identity, cold

ugly, boring, utilitarian

fool gray box in the sky

gaudy, modern art

lots of activity, bright

cheap modern

modest, practical, affordable

generic hotel room, not warm

conference center--too large

too busy--nothing matches

Table 2 (cont'd)

tacky

plastic, fake

young

night-fun (provoking, curious)

gross!

beach, fun, vocation

harbor side, boat, rides

airport hotel/convention

cement/gross

sleek, black but generic cheesy coverlet

space age/futuristic--revolving restaurant

masculine/dark/heavy

feminine, pine

modern, flashy

artistic, elegance, cathedral

open, relaxed atmosphere, fresh air

floral, vocation, comfortable

apt building, dark, boring

marble-cool-luxury

clean, comfortable for overnight business stay

don't really care about outside--room and reception matter more

upright-...antebellum...southern

Table 3

## Impression and Attitude Scales

Impression Scales	Category
old/traditional---new/modern	time
square/straight---round/curved	shape
bright/full of light---dark/little light	color reference
hard/rough---soft/smooth	material/surface
complex color scheme---simple color scheme	complexity
simple design---complex design	complexity
open/spacious---closed/full	overall sense of space
urban/city---country/resort	location
loud/noisy---quiet/calm	sound
expensive/rich---inexpensive/value	sophistication/price

### Attitude Scales

do not like at all---like very much  
 not at all favorable---very favorable  
 very positive---very negative  
 would like to stay---would not like to stay

Table 4

### Correlations of Variables (U.S. Sample)

Correlations  $r > .3$  are shown.

Variable	Correlation
square/straight---round/curved with hard/rough---soft---smooth	0.42
square/straight---round/curved with complex color scheme---simple color scheme	-0.30
square/straight---round/curved with simple design---complex design	0.32
square/straight---round/curved with expensive/rich---inexpensive/value	-0.31
complex color scheme---simple color scheme with simple design---complex design	-0.35
urban/city---country/resort with loud/noisy---quiet/calm	0.38
simple design---complex design with expensive/rich---inexpensive/value	-0.36
open/spacious---closed/full with expensive/rich---inexpensive/value	0.38

Table 5

### Correlations by Type (U.S. Sample)

Correlations  $r > .3$  are shown

#### Exterior

Variable	Correlation
old/traditional---new modern with bright/full of light---dark/little light	-0.37
old/traditional---new modern with expensive/rich---inexpensive/value	-0.41
square/straight---round/curved with hard/rough---soft/smooth	0.46
square/straight---round/curved with complex color scheme---simple color scheme	-0.33
complex color scheme---simple color scheme with simple design---complex design	-0.32
urban/city---country/resort with loud/noisy---quiet/calm	0.55
open/spacious---closed/full with expensive/rich---inexpensive/value	0.41

#### Lobby

Variable	Correlation
complex color scheme---simple color scheme with simple design---complex design	-0.33
hard/rough---soft/smooth with loud/noisy---quiet/calm	0.35
open/spacious---closed/full with expensive/rich---inexpensive/value	0.35

## Guest Room

Variable	Correlation
square/straight---round/curved with hard/rough---soft/smooth	0.45
square/straight---round/curved with complex color scheme---simple color scheme	-0.30
square/straight---round/curved with simple design---complex design	0.39
square/straight---round/curved with expensive/rich---inexpensive/value	-0.38
hard/rough---soft/smooth with simple design---complex design	0.36
hard/rough---soft/smooth with loud/noisy---quiet/calm	0.31
hard/rough---soft/smooth with expensive/rich---inexpensive/value	-0.40
complex color scheme---simple color scheme with simple design---complex design	-0.39
complex color scheme---simple color scheme with expensive/rich---inexpensive/value	0.31
simple design---complex design with expensive/rich---inexpensive/value	-0.39

Table 6

### Results of Factor Analyses (U.S. Sample)

All factor analyses are based on a varimax rotation resulting in orthogonal factors. Eigenvalues and variance explained are different measures of degree of fit of the linear model with the original data.

Variables with loadings > .4 are listed.

\* means negative loading

#### Overall

<b>Factor 1</b> <b>"Design"</b> Eigenvalue: 1.9 Variance: 25%	square/straight---round/curved (0.66) complex color scheme---simple color scheme* (-0.72) simple design---complex design (0.75) expensive/rich---inexpensive/value* (-0.47)
<b>Factor 2</b> <b>"Space"</b> Eigenvalue: 1.5 Variance: 15%	old/traditional---new/modern* (-0.60) bright/full of light---dark/little light (0.72) open/spacious---closed/full (0.69)
<b>Factor 3</b> <b>"Location look"</b> Eigenvalue: 1.2 Variance: 13%	hard/rough---soft/smooth (0.60) urban/city---country/resort (0.68) loud/noisy---quiet/calm (0.80)

#### Exterior

<b>Factor 1</b> <b>"Space"</b> Eigenvalue: 2.97 Variance: 29%	old/tradition---new/modern* (-0.62) bright/full of light---dark/little light (0.71) open/spacious---closed/full (0.63) expensive/rich---inexpensive/value (0.72)
<b>Factor 2</b> <b>"Design"</b> Eigenvalue: 1.39 Variance: 14%	square/straight---round/curved (0.82) hard/rough---soft/smooth (0.67) complex color scheme---simple color scheme* (-0.58) simple design---complex design (0.41)
<b>Factor 3</b> <b>"Location look"</b> Eigenvalue: 1.11 Variance: 11%	urban/city---country/resort (0.81) loud/noisy---quiet/calm (0.88)

Table 6 (cont'd)

**Lobby**

<b>Factor 1</b> <b>"Location look"</b> Eigenvalue: 1.88 Variance: 19%	square/straight---round/curved (0.44) hard/rough---soft/smooth (0.74) urban/city---country/resort (0.48) loud/noisy---quiet/calm (0.73)
<b>Factor 2</b> <b>"Space"</b> Eigenvalue: 1.80 Variance: 18%	old/tradition---new/modern* (-0.57) bright/full of light---dark/little light (0.63) open/spacious---closed/full (0.71) expensive/rich---inexpensive/value (0.48)
<b>Factor 3</b> <b>"Design"</b> Eigenvalue: 1.43 Variance: 14%	complex color scheme---simple color scheme* (-0.69) simple design---complex design (0.75) expensive/rich---inexpensive/value* (-0.46)

**Guest Room**

<b>Factor 1</b> <b>"Design"</b> Eigenvalue: 2.68 Variance: 26%	square/straight---round/curved (0.69) hard/rough---soft/smooth (0.60) complex color scheme---simple color scheme* (-0.71) simple design---complex design (0.76) expensive/rich---inexpensive/value* (-0.60)
<b>Factor 2</b> <b>"Space"</b> Eigenvalue: 1.57 Variance: 15%	old/tradition---new/modern* (-0.49) hard/rough---soft/smooth (0.69) open/spacious---closed/full (0.73)
<b>Factor 3</b> <b>"Location look"</b> Eigenvalue: 1.26 Variance: 12%	old/tradition---new/modern* (-0.41) hard/rough---soft/smooth (0.41) urban/city---country/resort (0.63) loud/noisy---quiet/calm (0.79)

Table 7

### Regression Analysis (U.S. Sample)

Significant regression coefficients at  $p < .05$  are shown.

Hotel	Exterior			Lobby			Guest Room		
	F1	F2	F3	F1	F2	F3	F1	F2	F3
1	x	x	x	x	x	x	x		x
2				x		x		x	x
3		x	x	x		x			x
4						x		x	x
5	x	x	x	x		x			x

Table 8

**Correlations of Variables (Chinese Sample)**

Correlations  $r > .3$  are shown

Variable	Correlation
square/straight---round/curved with hard/rough---soft/smooth	0.40
complex color scheme---simple color scheme with simple design---complex design	-0.32

Table 9

### Correlations by Type (Chinese Sample)

Correlations  $r > .3$  are shown.

#### Exterior

Variable	Correlation
old/tradition---new/modern with square/straight---round/curved	0.42
old/tradition---new/modern with expensive/rich---inexpensive/value	-0.38
square/straight---round/curved with hard/rough---soft/smooth	0.45
urban/city---country/resort with loud/noisy---quiet/calm	0.58

#### Lobby

Variable	Correlation
complex color scheme---simple color scheme with simple design---complex design	-0.49
complex color scheme---simple color scheme with expensive/rich---inexpensive/value	0.33
simple design---complex design with expensive/rich---inexpensive/value	-0.44
hard/rough---soft/smooth with loud/noisy---quiet/calm	0.36
urban/city---country/resort with loud/noisy---quiet/calm	0.42

#### Guest Room

Variable	Correlation
old/tradition---new/modern with bright/full of light---dark/little light	-0.43
bright/full of light---dark/little light with open/spacious---closed/full	-0.31

hard/rough---soft/smooth with loud/noisy---quiet/calm	0.31
--	------

Table 10

### Results of Factor Analysis (Chinese Sample)

All factor analyses are based on a varimax rotation resulting in orthogonal factors. Eigenvalues and variance explained are different measures of degree of fit of the linear model with the original data.

Variables with loadings > .4 are listed.

\* means negative loading

#### Overall

<b>Factor 1</b> <b>"Location look"</b> Eigenvalue: 1.99 Variance: 20%	urban/city---country/resort (0.79) loud/noisy---quiet/calm (0.84)
<b>Factor 2</b> <b>"Space/Time"</b> Eigenvalue: 1.87 Variance: 19%	old/tradition---new/modern* (-0.59) bright/full of light---dark/little light (0.70) open/spacious---closed/full* (-0.65) expensive/rich---inexpensive/value (0.56)
<b>Factor 3</b> <b>"Linearity"</b> Eigenvalue: 1.45 Variance: 14%	square/straight---round/curved (0.80) hard/rough---soft/smooth (0.79)
<b>Factor 4</b> <b>"Complexity"</b> Eigenvalue: 1.00 Variance: 10%	complex color scheme---simple color scheme* (0.76) simple design---complex design (0.76)

Table 10 (cont'd)

**Exterior**

<b>Factor 1</b> <b>"Linearity"</b> Eigenvalue: 2.27 Variance: 23%	old/tradition---new/modern (0.53) square/straight---round/curved (0.77) bright/full of light---dark/little light (0.76)
<b>Factor 2</b> <b>"Location look"</b> Eigenvalue: 1.90 Variance: 19%	urban/city---country/resort (0.86) loud/noisy---quiet/calm (0.89)
<b>Factor 3</b> <b>"Space/Time"</b> Eigenvalue: 1.34 Variance: 13%	old/tradition---new/modern* (-0.49) open/spacious---closed/full (-0.77) expensive/rich---inexpensive/value (0.50)
<b>Factor 4</b> <b>"Complexity"</b> Eigenvalue: 1.06 Variance: 10%	complex color scheme---simple color scheme (0.88) simple design---complex design (0.48)

**Lobby**

<b>Factor 1</b> <b>"Complexity"</b> Eigenvalue: 2.14 Variance: 21%	complex color scheme---simple color scheme (0.80) simple design---complex design (0.80)
<b>Factor 2</b> <b>"Location look"</b> Eigenvalue: 1.96 Variance: 19%	urban/city---country/resort (0.75) loud/noisy---quiet/calm (0.82)
<b>Factor 3</b> <b>"Linearity"</b> Eigenvalue: 1.31 Variance: 13%	square/straight---round/curved (0.81) hard/rough---soft/smooth (0.83)
<b>Factor 4</b> <b>"Space/Time"</b> Eigenvalue: 1.18 Variance: 11%	old/tradition---new/modern* (-0.40) bright/full of light---dark/little light (0.84) open/spacious---closed/full (0.64)

Table 10 (cont'd)

**Guest Room**

<b>Factor 1</b> <b>"Space/Time"</b> Eigenvalue: 2.47 Variance: 24%	old/tradition---new/modern* (-0.64) bright/full of light---dark/little light (0.54) open/spacious---closed/full* (-0.72) expensive/rich---inexpensive/value (0.71)
<b>Factor 2</b> <b>"Linearity"</b> Eigenvalue: 1.40 Variance: 14%	square/straight---round/curved (0.68) hard/rough---soft/smooth (0.81) loud/noisy---quiet/calm 0.41)
<b>Factor 3</b> <b>"Complexity"</b> Eigenvalue: 1.31 Variance: 13%	complex color scheme---simple color scheme (0.53) loud/noisy---quiet/calm*(-0.52)
<b>Factor 4</b> <b>"Location look"</b> Eigenvalue: 1.03 Variance: 10%	urban/city---country/resort (0.87)

Table 11

### Regression Analysis (Chinese Sample)

Significant regression coefficients at  $p < .05$  are shown.

Hotel	Exterior				Lobby				Guest Room			
	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4
1	x		x	x	x		x				x	
2	x		x	x	x		x		x		x	
3		x	x			x	x			x	x	
4			x		x	x	x		x	x	x	
5	x		x		x		x	x	x		x	
6			x		x		x		x		x	