

A PLANNER'S GUIDE TO THE DEVELOPMENT OF ENVIRONMENTAL PERCEPTIONS AND APPRAISALS

*A LITERATURE REVIEW AND CASE STUDIES SHOWCASING THEORIES AND CONCEPTS
FROM ENVIRONMENTAL PSYCHOLOGY USED IN ENTERTAINMENT DESTINATION
PLANNING*

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1. INTRODUCTION AND STATEMENT OF OBJECTIVES

There exists much insight as to what and why specific aspects within an environment can make people develop a positive experience. However, planners fail all too often to consider the psychological role that environments play in shaping the experience for a user. This paper focuses on the development of an individual's unique perceptions and appraisals of an environment as a result of both personal experiences and environmental influences within that environment. In order to better understand the role that these influential factors play, an array of psychological theories will be introduced and described within the Literature Review section. These theories and concepts facilitate an understanding of the psychological effects upon individuals that enhance their unique experiences within an environment, and, thus, are relevant for planners involved in the design of physical environments. Theories and concepts from environmental psychology allow planners to approach planning through using a psychological framework. In doing so, planners can better understand the psychological affects that their designs have upon people. This understanding will permit us, in turn, to plan with sensitivity to human responses. To provide specific examples of the application of theories and concepts of environmental psychology in planning physical environments, this paper concludes with an analysis of two popular entertainment destinations—Las Vegas, Nevada, and Disneyland in Anaheim California.

When successfully planned, entertainment destinations hold the capability of being international landmarks. Whether in the form of a hotel, a resort, an amusement park, or any other form of entertainment, this type of environment carries the potential for serving as an economic powerhouse for not only the area it resides in, but also for developers, investors, and job-seekers alike. Looking more closely at this specific type of environment, it is not only relevant to consider how aesthetically-pleasing an environment can be, but also the ways in which it can

successfully provide function for a user. Successfully planned entertainment destination environments have the capability of arousing an emotional response that can then administer subsequent interactions. These types of environments can be intentionally designed to operate on the subliminal level, affecting visitor's emotional states and therefore inducing high affective and low cognitive involvement with the environment. At this subconscious level, users will be more likely to spend more time within the environment without even knowing, which could also potentially result in an increase in the overall consumer spending as well.

There is a recognized need to connect the studies of environmental psychology and entertainment destination planning. It is vital to comprehend the parallelism between the two areas of study and to understand how certain theories within the study of environmental psychology can easily be considered and subsequently be applied to increase the likeliness for a successfully planned entertainment destination. More specifically, there are five areas of particular interest within the field of environmental psychology that are further explored in this report. These areas of interest are: 1. *environmental perceptions*; 2. *environmental appraisals*; 3. *Spatial cognition*; 4. *Sensory stimulation*; and 5. *User control, constraints, and crowding*.

Understanding how these five psychological components can fit within the planning framework for entertainment destination environments would be useful for destination planners.

The first section in the Literature Review chapter introduces the concepts of *environmental perception* (the initial gathering of information that people engage in within a setting) and *environmental appraisals* (personal impressions of an environment). These concepts and the relationship between them will be defined and clarified. Theories of *environmental perception* and *environmental appraisals* explain the process that people use to develop their own unique perceptions and appraisals of the environment based upon personal experiences and surrounding

environmental influences. Whether consciously aware of it or not, an individual is constantly surrounded by environmental stimuli that will inevitably facilitate in the development of their overall environmental perception, and appraisal,. There remains debate however as to whether personal factors, or the environment itself plays a bigger role in the development of perception and appraisals. For the purpose of showcasing both sides of the argument, several theorists are included within this paper to represent the supporting ideas behind both sides.

The second section of the Literature Review Chapter introduces and discusses *spatial cognition* (how individuals acquire, organize, and recall information while in their environment). This section includes concepts such as *action plans*, *wayfinding*, *cognitive maps*, and the *landscape layout*, to explaining the process whereby individuals acquire, organize, and recall information in regards to their spatial surroundings. numerous components in order to more accurately understand the process for how a person chooses to ultimately travel from one place to another.

Individuals are constantly reacting to environmental stimuli information from the subliminal level. Without even acknowledging it, individuals are continually relying on their senses in order to assist in processing the given stimuli that they are receiving. The third section of the Literature Review chapter, titled, *Sensory Stimulation*, is included to facilitate in the comprehension of how individuals respond to their environments based upon how they take in the information through their senses. This section explains how different senses such as the sense of sight, sound, and smell, can psychologically affect humans. Entertainment destination planners use an understanding of *sensory stimulation* to design environments that enhance the user's sensory experiences, whether the user is consciously aware of it or not.

The final section of the Literature Review chapter covers theories and concepts related to *user control, constraints, and crowding*. These theories and concepts address ways to make an environment functional and accessible for a user while still maintaining the planners' desired control of the user within the environment. If planners are able to comprehend users' needs for successfully functioning and accessible environments, they can design environments that lead to a better overall experience for users.

Because humans respond to their environment in a complex manner, no one theory or concept provides a comprehensive explanation of positive human responses to specific environmental designs. It is, instead, necessary to use numerous theories and concepts to better understand the unique environmental perceptions and experiences of individuals. As noted previously, several useful theories and concepts are reviewed in the Literature Review chapter. The report concludes with a case analysis—the application of these theories and concepts to two entertainment destinations. The purpose of the analysis of Las Vegas and Disneyland is to document ways that planners used the theories and concepts discussed in this paper to influence peoples' experiences of two popular entertainment destinations. Furthermore, the analysis is offered so that planners may use any number of these theories and concepts to further understand how individuals acquire, organize, and recall information while in their environment.

2. Literature Review

2.1. ENVIRONMENTAL PERCEPTIONS AND ENVIRONMENTAL APPRAISALS

Environmental perception consists of the initial gathering of information that people engage in within a setting. People become so actively involved with the act of perceiving that the complexity behind the process of it becomes irrelevant to the user. Environmental perception can be seen as a broader way to include aspects of how individuals develop their environmental appraisal for different settings. The section of *environmental appraisals* will focus more specifically on the personal factors of individuals in order to access how each individual develops their overall unique impressions of their environment.

In order to comprehend why people feel the way they do within their environment, it is relevant to understand the different processes by which people come to know and understand their physical environment. There remains a variety of theories and explanations that attempt to justify how people act and feel within their everyday environment based upon the constant stimuli that are present within an area. An individual's response to their setting, or their *environmental appraisal*, to these stimuli cues will be the result of how that person perceives his or her environment. This section will explore concepts and theories that will suggest ways that environmental perception is influenced, and subsequently, how perception develops unique personal appraisals for individuals within their respective environments.

After obtaining a sturdy understanding of these concepts, they will then be more specifically applied to entertainment destinations in order to evaluate how these theories can correspond with the users of these specific types of environments. This will better our understanding of how the public's perception of entertainment destination are formed via their surrounding environmental stimuli, as well as enable us to understand how these perception factors influence the differing and unique overall experiences within destinations.

2.1.1. ENVIRONMENTAL PERCEPTION

Environmental perception presents us with an image of the present state of the environment around us. Of course, environmental perception, among every other type of perception, will vary from person to person. Environmental perception, analyzes larger-scale scenes by seeing them as whole entities, as opposed to object perception, where emphasis is on the properties of simple stimuli, such as their brightness, color, depth, form and apparent movement (Gifford, 2007). This section will focus on how people gather environmental information from their surrounding stimuli and how it is processed in order to contribute to the development of differing environmental perceptions. This section will also offer competing theories for understanding whether or not environmental perception is more so influenced by personal factors, or predominately by environmental factors.

As stated before, environmental perception allows for individuals to develop a mental picture of the present state of their environment. The perception input varies for each individual as different people receive information input differently. Even if people are experiencing the same environmental cues, the way they translate that information to develop their personal perspective can be unique to each person. This idea will be further analyzed later on under the Environmental Appraisal section.

This *environmental perception* section of the report will first introduce a variety of applicable concepts and ideas in order to explain how environmental perceptions are influenced. These concepts will include: *adaption, perceptual illusions, and personal influential factors*. The works of *Gestalt psychology, Gibson, Brunswik*, as well as others will also be considered as. These specific theories and theorists were particularly chosen due to their significant impact within the field of environmental psychology, and also, the applicability for relating most of these ideas

towards the environments of entertainment destinations.

2.1.1.1. ADAPTION AND THE PERCEPTION OF CHANGE

The environment constantly offers more pieces of information than we can possibly handle.

Humans are always selecting for their attention a relatively small, manageable portion of the available information. Depending on the types of stimuli that individuals are surrounded in and their ability to intake and process information, they may focus intensely or minimally on different environmental displays ranging in size from architectural details to vast panoramic landscapes and that may range in distance from very near to very distant.

The idea of *adaption* or *habituation*, refers to the human response becoming weaker over time due to a stimulus remaining in a constant state. Many people who live near railroad tracks for example, may find it difficult at first to get used to the constant intervals of trains passing by their home, but will find that with time, they become habituated to the noise. A vital factor in adaption is the regularity of the stimulus. For example, people are more likely to adapt to a constant humming noise in the background than to the irregular noise of a basketball being dribbled. Even if the noise is emitting high-pitched intervals, as long as it is predictable, it will be easier to adapt to compared to unpredictable high-pitched sounds.

Psychologist Robert Sommer is credited for developing the *Weber-Fechner Law*, a theory that explains how environmental stimuli can affect human perception, and how humans will then change or adapt to these environmental stimuli factors. This function is based on the amount of increment in intensity of a stimulus that is required before a difference is detected between the new and old intensities. This function can be applied to all forms of stimulation, which can

include light, sound, pressure, smell, and forms of urban pollution. For example, Sommer pointed out that as the amount of air pollution increases, larger increments of new air pollution is needed before people notice that pollution is becoming worse. This identical amount of smoke that would have caused an annoyance in a community when it had minimal air pollution is barely noticed after the community becomes heavily polluted, therefore resulting in the community members developing a sense of numbness to the occurrence.

Environmental Numbness refers to an individuals' lack of awareness to their physical surroundings. Environmental numbness can cause individuals to overlook major problems such as air pollution, or expose them to minor hazards such as bumping into an object. However despite this potential lack of awareness to certain aspects of the environment, there are possibilities for enhancing the awareness and appreciation for that particular environment. Herbert Leff provided an elaborate description for ways people might consciously direct their perceptions and cognitions to obtain richer environmental experiences. These "mental gymnastics" as they are referred to, have been known to produce very positive feelings while also increasing environmental awareness. They include: Rapidly switching your visual focus from one point in the scene to another while forming a vivid impression of each view; looking for views in the scene that would make personally relevant photographs; imagining what it would be like to be one of the objects in the scene, and to see inanimate objects as if they were alive.

2.1.1.2. PERSONAL-BASED INFLUENCES

Personal Influences that have the power of affecting environmental perception can include characteristics such as gender, education, and previous experiences in a setting. For example, the difference in the types of jobs people have will affect the *way of seeing* in a single environmental setting. Gifford notes how within the same place, architects see form, light, and color where others may see walls, floors, and doors. Numerous studies have concluded differences between the appraisals made by design professionals versus nonprofessionals, and even between different groups of design professionals such as planners versus landscape architects. Although there wasn't a highly noted difference between the perception of *quantitative* features (e.g., how many different types of plants are present) for landscape architects versus other design groups, there was however a noticeable difference for the perception of *qualitative* features, (e.g., the types of plants).

One's previous experience with an environment can also affect environmental perception. Even small differences in familiarity can affect perception in varying ways. For example, people who had been in a room for only half an hour saw it as smaller than those who had just entered it. This idea can also be applied to larger scale environments within the entertainment destination realm. Previous experience that one has within a destination has the effect of altering that person's preferences to be more specific since that person now has more acute expectations for that specific environment. This can mean that it will be more difficult to satisfy that individual if they are continually experiencing repetitive situations within that environment. For example, during an individual's first trip to an amusement park, simply riding a rollercoaster will bring initial satisfaction. However, one's tenth trip to that same amusement park may not be as satisfying unless more particular events occur, such as riding that rollercoaster with a significant

other. This in mind, destinations have a better chance of striking excitement upon visitors that have little experience with that place. Aside from this however, these types of environments are continually seeking out innovative ways to update their venues with new or improved attractions in order to keep appealing to both new and returning visitors alike.

2.1.1.3. THE ROLE OF PERCEPTUAL ILLUSIONS INFLUENCING ENVIRONMENTAL PERCEPTION

There are several *perceptual illusions* that occur in environments that may facilitate in shaping the perspective of the users of the site. Fog for example, has the power of making features of the environment such as trees or hills appear to be farther away and larger than they actually are.

These environmental illusions are also present when objects are viewed under water, especially the dirtier the water. Another environmental illusion is how people tend to overestimate the length of a path when it is being traveled either uphill or downhill on; and when a path is windy, people slip-up on directional perception and may choose to believe that it is taking them in favor of whatever direction the vanishing point is located.

Forced perspective is a design technique in which the designer modifies the scale of an object in order to affect the viewer's perception of the object's size. The manipulation of scale allows for the visitor's experience to be heightened due to the exploitation of the sizes, shapes, colors and sounds of the architectural styles. Time and space have continually played a role in achieving forced perspectives for the designers of themed environments. Combined, they have the power of achieving larger than life attractions, taking into consideration the size of the point of interest in relation to its surrounding context. This particular design strategy has noticeably been

implemented within the Disneyland destination and will be further described under the Case Study section.

2.1.1.4. THEORIES FROM EGON BRUNSWIK

Egon Brunswik puts forth his primary idea that both the perceiver and the environment are important for influencing perception: “Both the organism and the environment will have to be seen as systems, each with properties of their own...As much as psychology must be concerned with the texture of the organism...it must also be concerned with the texture of the environment” (Gifford, 2007). However, despite this conclusion, he goes on to place a higher emphasis on the idea of the perceiver acting as the predominant force for perception development.

Brunswik believed that perception is an active attempt to extract a useful image of the environment from the mass of potentially confusing cues. Some people may find themselves becoming confused and overwhelmed with cues due to the fact that they have not yet learned to tell the difference between the important cues from the unimportant ones. He viewed the main role of the perceivers as seeking useful images of the environment in order to assist them to better understand their setting as they make their way through the world.

Egon Brunswik’s concept of the *lens model* has been known as being an influential approach to the understanding of environmental perception, including how individuals differ in learning based on the environmental information they receive within their setting. This theory establishes that environmental stimuli becomes focused and perceived through individual perceptual efforts. He declares that whether aware of it or not, the environment offers a multitude of cues however only a small number of cues in a given scene are useful to the perceiver. Brunswik believed that

the perceiver is responsible for making sense of the most important ones in order to function effectively in a setting; this suggestion explains the reason why Brunswik is known as a functionalist. Therefore, the difference in the amount of attention that certain cues receive over others is dependent upon the importance of those cues within a given setting for each individual. In order to illustrate this concept, suppose that you are hiking on a mountain trail. You suddenly notice movement in the bushes next to you and so your perceptual processes become focused on gathering information from the environment so that you are able to identify the stimulus and decide on your appropriate behavioral reaction to the brisk bush movement. Your instant reaction is to quickly move away from what you perceive to be a potential threat from within the bush. Within seconds you realize that your inclination of a possible threat is actually a small bird that is innocently rummaging around. How were you able to make such a mistake? Brunswik makes note that not all stimuli presented by an environment are equally useful in forming accurate perceptions. Some of the information present can serve as being insufficient and misleading for the perceiver. Those noises that came from the bush provided useful, yet insufficient information in order to decide on an appropriate perceptual decision.

Consciously or not, Brunswik states that a person is influenced by a number of different stimuli within their setting. These cues can be more personal-influenced or environmental-influenced. The fact that no single cue is either completely reliable or completely unreliable, it is therefore up to the responsibility of the individual to determine which cues are the most important ones in order to function effectively. These transactions between person and environment often have important outcomes for the person's actions, thoughts, and well-being. Outcomes can either be immediate ones, or more so delayed ones. The goals of most environmental psychologists are to understand these transactions and to improve outcomes for both person and the environment.

2.1.1.5. GESTALT PSYCHOLOGY

Like Brunswik, *Gestalt psychology* places a greater emphasis on the perceiver as serving as the primary influence for the development of environmental perception. Gestalt, meaning shape or form, is based on the idea of *pragnanz*, or “wholeness.” Therefore, visual images tend to be structured and organized in a way that optimizes the upmost clarity and spatial comprehension for the user. Gestalt psychology puts forward the idea that humans organize visual data using principles such as similarity (grouping by like kind), continuity (overall structure), form constancy (the complete perception of a partially suggested shape), and the reading of figure against ground to impose visual order (Malnar & Vodvarka, 2004). Two important conclusions were drawn by Gestalt psychology. First, that perception is a response not to individual bits of information but to a field of interrelated data; and second, that human perception plays an active role in structuring its environment, as opposed to just simply reacting to it. In Gestalt psychology, German-American psychologist, Wolfgang Köhler argues that “instead of reacting to local stimuli by local and mutually independent events, the organism responds to the pattern of stimuli to which it is exposed; and that this is a unitary process, a functional whole, which gives, in experiences, a sensory scene rather than a mosaic of local sensations.” This quote portrays how Gestalt psychology rejects the mechanics of spatial perception, and thereafter replaces it with a more elastic idea.

2.1.1.6. JAMES GIBSON: AFFORDANCES

American psychologist, *James Gibson* believed certain arrangements of environmental cues give the perceiver direct, and immediate perceptions of the environment. He believed that the world could be usefully conceptualized as being composed of substances (such as clay, steel, glass) and

surfaces (such as floors, walls, ceilings). The arrangements of these substances and surfaces (called layouts) combine to form what Gibson called *affordances*, or instantly detectable functions. The perception of such affordances, differs from Brunswik's theory in that it does not require us to interpret sensory information, construct reality, or place values on stimuli cues.

Although Gibson's perspective stands alone against a powerful tradition that assigns an important role to the processing of information after it is gathered, Gibson's ideas have served to help refocus attention on the environment itself, particularly on the everyday environment, as a crucial element in perception development. He emphasizes the notion that perception is not constructed of elemental building blocks such as color, form, and shape. For this reason, Gibson concludes that the users of the built environment do not see form and shape when in a setting; instead, people perceive affordances—what the place can *do* for them; it allows the users to form their environmental perception and subsequently form preferences based upon the function of the setting.

2.1.1.7. DANIEL BERLYNE

Daniel Berlyne has contributed important insights regarding the development of environmental aesthetic models. Berlyne stated that environmental scenes have several collative properties, that is, characteristics that cause the perceiver to pay attention, investigate further, and compare. These collative properties include *novelty*, the idea that an environment contains new or previously unnoticed characteristics to the perceiver; *incongruity*, the perception that something is out of place; *complexity*, a large variety of elements that compose the environment; and *surprisingness*, unexpected elements (Gifford, 2007). For images of moderate complexity,

novelty, incongruity, and surprisingness are perceived as more beautiful than those images that are either very high or very low on these collative properties. Berlyne believed that these collative properties influence the perceiver's aesthetic judgments and also the desire to explore.

2.1.1.8. THE KAPLAN AND KAPLAN PREFERENCE MODEL

Steven Kaplan and *Rachel Kaplan* described the process for constructing their model of environmental preference through a series of procedures. They first collected a large number of visual images of various landscapes and asked respondents to classify the pictures according to certain schemes. These schemes included what they found to be similar—dissimilar, like—dislike, and so forth. The Kaplan team then statistically identified the specific elements in the scenes that resulted in the respondents classifying the images the way they did. This allowed the Kaplan team to derive several factors that would be used to predict preferences for various types of environments.

From the data collected and analyzed, Kaplan and Kaplan concluded with the notion that humans will like or prefer those landscapes in which certain traits are most useful for humans, or in other words, people will generally be attracted to scenes in which they are likely to function most effectively. From this, it was suggested that humans are inevitably attracted to environments that are deemed survivable.

From a more cognitive perspective, the Kaplans concluded that humans have a fondness for environments that provide rapid, comprehensible information. Environments that offer both have more of an opportunity for providing both prospect and refuge. Prospect can be classified as the

ability to gain an open, unobstructed view of the environment, while refuge provides a safe, sheltered place where a person might hide.

Within a more psychological context, people will like scenes that make sense and are easy to comprehend. People will also prefer scenes that are not too simple or dull and are engaging and involving. Kaplan and Kaplan used the gathered data to evaluate and to formulate a preference matrix consisting of four main components. They are: *coherence*, *legibility*, *complexity*, and *mystery*.

Coherence: The degree to which a scene makes sense to the perceiver immediately or has organization—the more coherence, the greater the preference for the scene.

Legibility: The degree of distinctiveness that enables the viewer to understand or categorize the contents of a scene; An environment that can be explored without getting lost in—the greater the legibility, the greater the preference.

Complexity: The number and variety of elements in a scene; the scene's capacity to keep an individual busy without becoming bored or over-stimulated—the greater the complexity (at least for natural scenes), the greater the preference.

Mystery: The degree to which a scene contains hidden information so that one is drawn into the scene to try to find out this information (e.g., a roadway bending out of sight on the horizon); the environment suggests that one might learn more, interact more, or be further occupied—the more mystery, the greater the preference (BGFB, 2001).

Referencing the Kaplans' Preference Framework, coherence and legibility aspects relate to the comprehending or “making sense” out of the environment (being able to understand what is

going on in it). Complexity and mystery can be considered as being more aspects of “involvement” within the environment. The distinction of the dimensions can be seen as “Understanding” versus “Exploration,” respectively, or even taking place in the “Present (immediate),” versus occurring in the “Future (promised).”

According to Kaplan and Kaplan, scenes with more mystery are often more preferred (Gifford 2007). This was especially apparent for nature scenes as opposed to more urban scenes. Perhaps mysterious scenes are preferable as long as they are not dangerous, as urban street scenes often are. Within a more urban context, more complexity also seems to be associated with greater preference.

These four main cognitive affordances may not be entirely independent of each other; coherent scenes are often perceived as legible scenes, for example. Generally, preference should increase as each of these qualities increases, but there are limits. For example, too much legibility in a setting may reduce mystery, therefore meaning that although the setting would be clear, it would lack interest and would consequently be boring. Mystery, complexity, coherence, and legibility are differently related to preference in different kinds of environments, rather than having the same relation to preference in all environments.

2.1.1.9. ENVIRONMENTAL PERCEPTION + THE ENTERTAINMENT DESTINATION

Environmental perception can play a crucial role when understanding how visitors within an entertainment destination gather and process information that they are presented with in an environment. The theories listed above begin to make apparent how they can be applied to further explain how environmental perceptions are influenced and shaped for users within the

entertainment destination environments. More specifically, reflecting upon the theory of adaption, it is vital for designers of entertainment destinations to provide enough stimulation within the setting as to not cause the visitor to develop a sense of habituation for the area. Since the idea of adaption or habituation, refers to the human response becoming weaker over time due to a stimulus remaining in a constant state, developing a sense of habituation may result in a visitor becoming bored within the environment.

Applying the theory of forced perspective to destination environments, physical structures are constructed so that even though they have been scaled-down in size, there are still specific design attributes about them that make it appear as if they were actually as tall as their grander inspirations. By creating this altered illusion of increased height, destinations are able to create larger-than-life structures at a smaller cost. It is safe to conclude that as an object recedes in the distance, it appears that they get smaller. Thus, by applying forced perspective within an object, designers are able to make those distant objects appear even further away by constructing specific areas to be smaller in scale within its overall context. The strategy of forced perspective will be further assessed within the case studies in order to portray more specifically how these entertainment destinations are applying this illusion technique within their environments in order to alter the perception of their visitors.

In reference to a conclusion from Gestalt psychology, it has been addressed that perception is a response not to individual bits of information but to a field of interrelated data. Correlating this idea to the entertainment destination environment, it is clear how important it is for this type of environment to provide a field of interrelated environmental information for the visitor in order to provide an easier opportunity for them to process the information, which may increase the likeliness for them to develop a positive perception of their environment. Gestalt places an

emphasis on the overall shape or form within an environmental context, rather than single objects in order to develop a sense of “wholeness” for the user. Therefore, the visual images within an entertainment destination landscape should be structured and organized in a way that upholds the upmost clarity and spatial comprehension for the user.

The Kaplan preference matrix can serve as a beneficial framework when in the beginning design process of any entertainment destination. The four components that make up the matrix are: coherence, legibility, complexity, and mystery. These four aspects can be applied to the entertainment destination to assess how user preference can be increased in accordance to the built environment within the setting. Coherence and Mystery can function as crucial aspects within a larger entertainment context. Coherence refers to the degree to which a scene entails a sense of organization. The more organization that is present, the increased likeliness for a person establishing a preference for that environment. Mystery refers to the degree to which a scene contains hidden information so that one is drawn into the scene to try to find out this information. The Kaplans assert that the more mystery, the greater the preference for that particular setting. According to Kaplan’s conclusions, the functioning of these two components within existing destinations hold the capability for invoking a higher degree of environmental preference from a visitor.

2.1.2. ENVIRONMENTAL APPRAISALS

Any attempt to define a definite explanation of beauty within an environment will only result in failure. For this reason, this section will primarily focus on environmental appraisals and how individual's differing ideas of beauty facilitates in the development of their unique appraisals.

Environmental appraisal refers to an individual's personal impressions of an environment. Since this type of reaction to an environment is based off of emotional response (how a person feels within a setting), environmental appraisals remain ambiguous. It has been noted that this appraisal approach can be influenced by individual differences or psychological factors in the judgment of environmental beauty.

It is nearly impossible to say that an environment holds beauty without understanding that physical beauty is a flexible viewpoint that every person defines differently. Accepting the thought that the concept of beauty is universally inconsistent, to give one, definite definition for beauty would be unjust. For the purpose of better understanding how the concept of beauty is used within the context of this paper, the aesthetic standpoint from both Plato as well as Vedanta will be given to provide a better comprehension for this concept. These perspectives on beauty will later be supported by influential concepts within the following sections of *environmental appraisals* to show how both environmental and personal factors can serve as influential factors for the development of an individual's environmental appraisal.

As noted above, the concept of environmental beauty is an entirely subjective notion that implies that any single object or environment can be viewed by individuals in any number of ways.

Because of this, the development of individual appraisals of an environment is vital in gaining a more accurate understanding for the value of beauty within any given environment. The aesthetic standpoints from both Plato and the Vedanta will both be considered to reinforce how individual

appraisals may be influenced. Both of these arguments will also showcase how the Greek interpretation of the meaning and value of beauty differs from that of the Indian view. Plato argues that both the objects in the environment as well as the perceiver themselves should be considered as influences of appraisal, while the Vedanta viewpoint states that beauty lies primarily within how it is perceived by the viewer.

Plato believed that both the environment as well as the perceiver can impact the overall assessment of an environment. Plato has stated that, "...beholding beauty with the eye of the mind, he will be enabled to bring forth, not images of beauty, but realities (for he has hold not of an image but of a reality)." From this statement, Plato suggests that for each individual, their interpretation, including their overall appraisal of environmental beauty helps to form their unique idea of reality within each one of their environments. If an environment as a whole is known for entirely consisting of beauty, then every observer would agree on the value of attractiveness a setting may carry. But since viewer perception remains variable, an Australian study found that: "Although beauty averaged across observers, was greatest for natural, green, open grasslands with some water and pathways, each individual observer favored scenes with different combinations of these qualities." This conforms to the idea that although single objects may be universally favored as carrying more beauty, individuals will combine different attributes in order to form their own and unique value for the judgment of environmental beauty.

Environments that users judge as having a higher degree of beauty are ones that are more prone for providing the user with good feelings and a sense of meaning (Gifford, 2007). This idea conforms to Plato's beliefs that both the perceiver as well as the environment are vital components for attributing to a clear understanding of beauty within an environment.

The Vedanta, or Indian viewpoint, signifies that although our environments that we interact within are without doubt, real, our perception of it is false. Because of their belief that truth is beauty, our perception of beauty can only go as far as what we consider to be truth based upon the information that our mind takes in. The Vedanta viewpoint believes that perceptions are imperfect and questions just how real people's interpretation of beauty is. Going off of this notion, Vedanta states that we ourselves, the "experiencers," are the main components of reality.

Now that these perspectives on environmental beauty have been offered, the remaining parts of this section will further discuss both personal and environmental factors that may play a role in influencing personal environmental appraisals. Providing the planner with the knowledge and understanding for why and how environmental beauty can affect the development of appraisals will serve as a benefit. It can serve as an advantage to be able to comprehend the idea that environmental appraisals can remain unique to different individuals and how these appraisals can contribute to the user either developing a preference for the environment or not. The issue of environmental appraisals remains relevant to the discussion, as it will later be taken into consideration in order to analyze how individual appraisals may be developed within entertainment destinations based upon an individual's assessment of environmental beauty. The idea of environmental appraisals remains a fundamental aspect to consider, as the success or failures of these types of environments are heavily influenced by the types of experiences their users develop while present within the setting.

2.1.2.1. THE CULTURAL INFLUENCE ON ENVIRONMENTAL APPRAISALS

It remains vital for planners to remain sensitive to the issue of differing cross-cultural needs in order to maintain the functionality of an environment. Culture can serve as a vital component for the deciphering of how appraisals remain inconsistent between some groups of people compared to others. In *The Influence of Culture on Visual Perception* by Segall, Capbell, and Herskovits, the role culture can play is dealt with and used to answer the question: Is this influence actual, or does it merely alter our reporting of perception? These authors conclude that their view “is essentially a ‘moderate’ empiricist position, one that hypothesizes that the pattern of visual experiences in the lifetime of the person can modify his perceptions of objects in space.” According to their studies, it was apparent how people classify and interpret experiences in accordance with preexisting traditions that are culturally specific to their background. The question is brought up as to whether or not organisms become more ‘selectively sensitized’ to certain groups of stimuli rather than others, due to status in a particular cultural group. This question has guided the authors to further formulate a series of hypotheses which includes: “if human groups differ in their visual inference tendencies, it is because their visual environments differ.” In conclusion, the impact that culture has on different groups can be profound to explain their unique and differing perceptions on environmental appraisals. Those that are innate to certain environments compared to others in differing environments will more than likely also develop a differing cultural perspective that will be unique to their specific conditions.

Cross-culturally, destination design has to remain sensitive to the fact of having to meet the different demands that are required from culture to culture. Some ‘American’ entertainment destination concepts for example were not widely accepted in Europe and Asia. The enclosed nature of the theme park and the lack of flexibility in terms of movement and behavior patterns

served as unattractive ideas within both regions. When the Disneyland Park was opened in Tokyo, their ‘Americanized’ designs were heavily based upon what the Japanese had requested: “Don’t Japanese us.” This could be translated as: “We came here for Disney. We came for America. Don’t give us Japan because we know Japan.” However in France, the Disney Imagineers faced a different stance from their oversea clients. The French requested: “We are very important. Therefore, don’t forget you have to pay attention to our culture” (Mitrasinovic, 2006).

2.1.2.2. THE LANDSCAPE INFLUENCE

The impact of landscape can serve as a vital environmental feature for influencing positive environment appraisals for that setting. The scenic environment provides users with an endless amount of information that will be processed differently by each person, causing an infinite amount of perspectives within a single setting to be developed. If a person were to close their eyes and visualize their idea of a beautiful landscape, chances are, it will differ compared to the person next to them, and even more so compared to someone on the other side of the world.

The planners of entertainment destinations have been known for their practice of abandoning any current landscaping on site and replacing it with a fictive landscape scene throughout. By erasing any trace of previous landscaping, a *meta-landscape* is therefore created through the flexibility of being able to create an ideal landscape without the constraints of existing ones. With this method, the landscaping therefore becomes more flexible in allowing for designers to meet specific needs depending on the desired thematic framework for each area within a destination.

Most of the widely applied principles for landscape assessment evolved from the design tradition of landscape architecture (BGFB, 2001). This embodies several approaches that have been successfully utilized in developing landscape designs that contribute to positive and memorable experiences for users. The *descriptive approach* for example emphasizes the importance of contrasts in lines, forms, and colors, or textures, all of which are likely to draw attention to the user. The human visual processing system is known for detecting these contrasts and is particularly “hard-wired” to distinguish between certain simple lines or shapes as well as to seek-out a focal point or other source of organization.

The *Physical-Perceptual Approach* to scenic evaluations can serve as a helpful reference for planners attempting to predict the potential negative or positive appraisal outcomes from within a setting. This approach is known for emphasizing certain characteristics of the physical environment based upon statistically judgments of preference from users. The naturalness of an environment such as the presence of mountains is a physical landscape characteristic that might be used to predict negative or positive appraisals for scenic quality. This strategy shows that judgments of preferences for a particular environment can show variability and individual differences, whereas judgments of quality or the value for that same setting, appears to carry more consistency and less individual variation. For example, a group of people may place a high value on images that contain water, however one person may prefer a desert or a forest scene.

Another applicable strategy that has the potential for serving as a strong force in successful landscaping is the *pre-existing land* for the site location itself. Environments that provide rare assets and unique characteristics, give that area a special competitive edge, in that it cannot be easily replicated elsewhere. This idea will be further developed within the *environmental appraisals* and the Entertainment Destination section below.

The *picturesque aesthetic* is a concept that serves as being the ideal landscaped environment within a themed setting. The concept of ‘picturesque’ can most visually be recognized as resembling the colonialism framework due to its foundations of both visual and spatial practice. The fact that the picturesque is ultimately a “staged” concept helps to set the context for entertainment destinations since landscaping within these settings are: “rendered as theater, spectacle, and performance, forming a pleasing backdrop for human desires” (Mitrasinovic, 2006).

2.1.2.3. ENVIRONMENTAL APPRAISALS + THE ENTERTAINMENT DESTINATION

Destinations that users define as beautiful, are places more likely to also make them feel pleasant. As each person is apt to having a unique experience within a destination environment, it is vital for designers to take an array of ideas and strategies into consideration in order to increase the likeliness for positive appraisals to be formed by their visitors. The understanding of differing culture paradigms can be beneficial when planning to meet the different needs and wants of different cultures. It is also crucial to take into consideration that one person’s definition of beauty can be completely different compared to another person’s opinion. Beauty within the landscape context has also served as an apparent attribute for influencing a positive or negative appraisal within an entertainment destination.

The cultural impact on entertainment destinations can be seen by the differing paradigms that are held by both the natives and locals within the context of the destination. Natives and tourists agreed on many aspects of what they found beautiful within the same environment. A study done in the villages of Bali concluded that the main differing point between the perceptions of locals

and tourists was due to the tourists' misunderstanding of the meaning of certain landscape features (Hall, 2006). Another study found that the beauty of landscaped water scenes can vary between cultures that hold different values on water consumption. This particular study concluded that the more observers realize that aquatic plant growth is one outcome of water pollution, rather than a natural phenomenon, the uglier the water scene appears.

Geographer Professor, Terrance Young was quoted as saying, "A theme parks landscape gives form and narrative to a myth, but it also gives it a place." Scenic Landscapes within an entertainment destination have the power of influencing visitor appraisals from an aesthetic approach. Although some destinations rely on man-made landscapes to help create their idealistic image for their settings, assets such as pre-existing land can also serve as a vital component for creating meaningful landscapes within a destination.

Pre-existing land can serve as a vital contributing factor for an increased likeliness of a positive landscape appraisal from the visitor. Environments that offer rare assets and unique characteristics provide the destination spot with a viable edge, in that it cannot be easily experienced elsewhere. For example, a nightclub in New York City can hire the best hula dancers, yet they will still have a hard time reenacting the authentic ambiance of the Hawaiian Islands. The challenge for the planner comes in the form of eliciting these unique landscaping opportunities in a way that meets the overall landscaping needs and desires of the entertainment destinations. This strategy can be combined with a number of other landscape design strategies to meet the overall aspirations for the landscaped atmosphere.

2.2. SPATIAL COGNITION

Spatial cognition explains how individuals acquire, organize, and recall information while in their environment. One of the primary components of *spatial cognition* is the process of how a person chooses to ultimately travel from one place to another. Understanding this process can serve as beneficial knowledge for the planner in terms of place making within a future developed environment. Without actually realizing it, a person is likely to form an *action plan* before they begin a journey. This strategic plan will consist of information about the potential location of places which will help them to structure a form of an itinerary for their anticipated movements. This process for a person's action plan includes *wayfinding*, the cognitive process that navigates them through an environment, and the development of a *cognitive map*, a pictorial image reference in an individual's head that allows them to recall the arrangement of specific places. Both wayfinding and cognitive mapping facilitates in the recalling of spatial relations among every place that can be recalled by an individual's memory. Understanding the strategic potentials that *spatial cognition* can offer, it makes sense to apply these approaches to the entertainment destination context in order to more appropriately identify the cognitive reasoning for how visitors to these areas maneuver around their environments.

This section will introduce the concept of *environmental cognition* and the differing roles it plays within the study of *spatial cognition*. The concept of environmental cognition is brought up in order to point out how the recollection of environments does not necessarily have to involve specific spatial relations. An environment that contains a sense of *legibility* is also discussed to portray how individuals use cognitive mapping which in turn, provides a sense of legibility for them within their environment. Establishing a sense of *enclosure* is also included to explain how it can serve as a crucial component within an environment by allowing for a sense of comfort

and security to be established. Consequently however, the idea of enclosure can also function as a deterrent if it produces a space that is so enclosed that it potentially becomes hazardous to the health of the users within that environment. The Enclosure section will further evaluate these two views from the context of an entertainment destination.

The general layout of an environment is pertinent to understanding the foundation for which each theory within this section is based off of. Spatial layouts specific to entertainment destinations will be evaluated at the end of this section to show how layouts can play a functioning role by not only containing strategic assets such as legibility and enclosure, but more broader aspects as well.

2.2.1. ENVIRONMENTAL COGNITION

Environmental cognition refers to an individual thinking about or recalling a place with no particular reference to its relative location or spatial context. This concept also consists of how the familiarity with or renovations to buildings affect the memory for those particular buildings. Although this theory explains our cognition reconnaissance for recalling a previously experienced environment, it is relevant to note that cognition processing can also vary from one person to the next. Since each person's cognitive processing is unique to their backgrounds, it is noted that cognitive processing in general is full of errors. This notion implies two ideas to be taken into consideration: First, that *spatial cognition* is influenced in part by differences within each individual's background, and second, because these images are uniquely formed by each individual, these imperfect images are ultimately created so that they would be useful to that specific individual and not for others. So although the recollection of information may serve

useful for that particular individual, they may find it challenging when attempting to explain that information, such as directions, to another person.

2.2.2. OPTIMAL LEVEL OF STIMULATION

How the environment influences environmental cognition can be explained by the concept of an *optimal level of stimulation*, developed by Joachim Wohlwill. His idea was that for any given environment, one may be either over or under-stimulated from the context of the setting, either resulting in an increase or decrease in their level of satisfaction. Each person has the capability of adapting to a certain level of stimulation depending on circumstances such as personal and environmental factors. As the level of stimulation experienced in a given setting moves away from the adaption level, the sense of pleasure is presumed to increase. However, as the level of stimulation changes further in the same direction, it may result in either too much or too little stimulation to enjoy, resulting in pleasure declining. Accordingly, when a setting is categorized as being too narrative, complex, or suspenseful for the standard adaption level, it is found to be over-stimulating or stressful; pleasure, and conceivably the level of user performance, may suffer. The same outcome may occur when a setting is considered to be under-stimulating—that is, too familiar, simple, or just plain boring. The concepts of overstimulation and under-stimulation of environmental settings may also function as factors for attributing to user stress and decline in overall well-being.

2.2.3. LEGIBILITY: COGNITIVE MAPPING

Kevin Lynch's concept of *cognitive mapping* helps to establish distinct features within an environment, with hopes of familiarizing people with the layout of the place. This allows the user of the site to develop a mental map of their specific features within the larger context of their environment. *Spatial characteristics* are also attributes that are comprised from each person's cognitive map. This can include the direction and distance between places and the inclusion of one room within another (a bedroom is inside of a house, which is within the boundaries of a city, and so forth). Understanding the ways that individuals think about their environments can serve as an advantage for planners when attempting to create an environment that can better serve user needs and wants. This concept of cognitive mapping consists of the five elements: *paths, edges, nodes, districts, and landmarks*.

Paths act as guides that allow for an established pedestrian flow. It makes possible for a structured pathway that will also alleviate user confusion regarding where to go next. Next, *edges*, consist of all of the other lines not included in the path group. This would include the walls of structures. The third element, *nodes*, are well-known areas or points of special interest that people can easily point out. Examples of nodes would be a busy intersection or a popular place for meeting. Next, the element of a *district* would be categorized as pertaining to different definable sections within a given environment. An example of a district would be a specialized area that contains distinct character such as San Francisco's Castro neighborhood. And lastly, the element of the *landmark* serves the purpose of being an identifiable and external physical object that acts as a reference point. An example of a type of landmark could be a restaurant, statue, a souvenir stand, or any other identifiable subject that aids in orientation when way-finding.

When applied to entertainment destinations, memorable features may be useful for maneuvering from one place to another and back again. Easily remembered settings are easier to travel through, and the opportunities they provide are more apparent. Simply being more comprehensible may make these types of environments more aesthetically pleasing, resulting in a more pleasurable appraisal from the site users. Each person's uniquely developed cognitive map of their environment will consist of an organized mental representation of their spatial arrangement for that physical environment. Subsequently, these maps can later on be used to communicate locations and directions to others who have not yet established their own cognitive map formation within that particular entertainment destination environment.

2.2.4. ENCLOSURE

Establishing a sense of *enclosure* within an environment should be accomplished so that people feel comfortable and safe, yet are not overwhelmed with the sense of feeling trapped. One way to achieve the sense of enclosure is by establishing a 'difficult-to-exit' space. By deferring the visibility of building exits, customers are assumed to be more likely to stay put and their need to exit will diminish (Lonsway, 2009). An example of this would be the Caesar's Palace casino in Las Vegas. They purposefully designed their interior so that exits are dimly lit, they are tucked away behind a corner, or are simply not recognizable and mistaken as being part of the themed décor. In doing so, it is believed that since guests are less able to see the exits, the idea of leaving becomes more irrelevant, ultimately resulting in more time and money being spent from staying put inside. However, the negative side of this design tactic is the apparent issue for potential safety hazards associated with not being able to easily locate an exit of a building. Also, enclosures can increase the likeliness of upsetting guests if they are more apt to feeling

constrained and not in control. Establishing enclosure however can be done through more subtle approaches as well. To keep patrons focused on residing inside rather than outside, lighting is dimmed, ceilings are commonly darkened, and the overall layout of the interior is designed so that it focuses one's attention inward rather than outward.

2.2.5. THE SPATIAL LAYOUT + THE ENTERTAINMENT DESTINATION

For the purpose of emphasizing a more general aspect of *spatial cognition* within the context of the entertainment destination, the overall layout of the environment will be explored to show how it serves as a backbone for incorporating other aspects such as the development of individual cognitive maps and providing a sense of enclosure. Different layout types will be introduced and detailed to display how each one can specifically function within the context of an entertainment destination.

The internal layout within entertainment destinations such as a theme park environment can vary depending on such factors as characteristics of the project site, the type and scale of the anticipated project, budget, and the expected pedestrian impact within the park. The layout pattern of a theme park will also correlate to the kind of physical control of motion that is desired within the environment. The three types of interior patterns that are employed by theme parks are: *the magic wand* pattern, *the loop* pattern, and *the grid* pattern. Certain theme parks have also been known to combine more than one pattern, creating a variety of specialized modifications that conform to specific needs for each environment.

The interior magic wand pattern is composed of two elements that can be combined to form several design outcomes: the stick-like handle that works as a funnel, and the star at the top of it

that work as numerous ‘hubs.’ Disneyland parks are notorious for the implementation of this interior pattern. The Main Street, USA in this example serves as the wand section that then tunnels visitors to the center of the ‘star’ which is represented by Sleeping Beauty’s castle. The Central Plaza, which is located just in front of the castle, serves as a ‘hub’ for decision-making by giving visitors view sheds into many possible directions. This ‘hub’ facilitates in putting the sense of control into the hands of patrons as they are now able to visually see and understand the different options that they have to choose from. At the end of each of the four vistas that visitors have to choose from, clusters of attractions are centrally located around the pre-planned paths. The layout was also strategically designed so that Main Street, USA, or ‘the wand’ part of the interior layout, served primarily as a commercial corridor. It served this purpose since guests are forced to take this path upon entering the park and before exiting the park, increasing the chances for consumer expenditure.

The grid pattern as an internal layout was first introduced by the merging of movie-making and the theme park business, which resulted in the creation of the Disney-MGM Studios theme park. A benefit of the grid pattern is that it offers a clear distinction between different theme segments. This layout also allows equal accessibility to all areas without damaging the homogeneity of the greater area. The popularity of this pattern however has been declining, or is used only as a combination with either the wand or loop patterns. This was due to the fact that within this kind of internal pattern, the commonality of suspension, surprise, and contrapuntal experiences are likely to result in devastating emotional impacts if not designed or operated properly (Mitrasinovic, 2006).

The idea of the loop pattern was first recognized in the Eighteenth Century Picturesque Gardens along the idea of organizing attractions along a one-way path. The most famous noted example

of the loop pattern is at the EPCOT Park at Walt Disney World Resort, where they are specifically known for their usage of the double loop. A common feature of the loop pattern is having a centrally located body of water making up the center of the loop, usually in the form of a lagoon or a lake. The loop pattern is an ideal example for the design concept of a 'path of optimum time' since it has no detours. It also has the ability of linking separate areas of a theme park into a sequential experience. This also takes the control out of the hands of visitors as they are forced to experience all areas in an ordered and pre-programmed manner. Visitors however will have a greater sense of orientation and comfort knowing that they will have a greater chance of being able to experience all attractions by simply following a single path.

2.3. SENSORY STIMULATION

The human senses can be referred to as our “avenues to the world.” This is a reminder that the only way people have of responding to their environment is dependent upon the information received, and functioned on, by their sensory capabilities. The Sensory Environment section analyzes how people take in the environmental information through their senses. This section begins to illustrate the different kinds of ways entertainment destination planners have played into the sensory environment by applying certain attributes to personalize settings to make them adhere more so to multiple senses of the users. These design-related attributes will be revealed for the purpose of evaluating how visitors to these settings are using their senses (whether realized or not) which in turn, may result in an enhanced experience, and therefore, a more positive appraisal for that setting. Since the processing of sensory information remains unique to each individual, the effect that environmental information plays within each person is dependent upon how that person is able to process the information. The Stimulation Theories section will introduce five explanations for how people respond, or how they are affected by the environmental stimulation that they retrieve and process within their setting.

Prior to The Stimulation Theories section, the idea of how sensory processing differs cross-culturally will be discussed in order to investigate whether or not society as a larger entity, plays a part in reference to how people process their sensory information. These ideas and concepts, including others, will be introduced and discussed within this section and be referenced once again later on within the case study analysis.

2.3.1. THE SENSORY ENVIRONMENT

How a visitor identifies and remembers a particular place can be greatly influenced by the combined multisensory *stimulation* that is offered within that environment. The user's experience within each environment is unique to how that individual processes and interprets the given stimuli through the respective senses. The Piaget's theory on sensory response concludes that human perception is essentially "processed" sensation (Malnar & Vodvarka, 2004). The end product of a person's perception and cognition is a mental representation of the objective environment, in which information is filtered and effectively restructured. Accordingly, people do not respond directly to the actual environment they are in, but rather to their mental image representation of it. Knowing and understanding this concept allows planners to play into the idea of designing while keeping the senses in mind, seeing as the individual's filtered mental image is ultimately how they will perceive their environment in the end (Malnar & Vodvarka, 2004).

Looking more specifically at entertainment destinations, sensory stimuli coming from within the environment have the power of affecting individuals' behavior from the subliminal level, meaning that it is not necessary for them to be consciously aware of these cues in order to be affected by them. Brunswik has been credited for his acceptance of the fact that sensory cues from an environment can affect people without their knowing. For example, 'pleasant' background music might increase a tourists' satisfaction with the environment even though the tourist is unaware of the music. By placing emphasis upon three of the senses, we are able to understand how each one of these senses function within the user as a way for them to filter and ultimately interpret the information they receive from their immediate environment. The three

senses that will be evaluated are: sight (with an emphasis on the impact of color), sound, and smell.

2.3.1.1. VISUALSCAPE (THE SIGHT SENSE)

Serving as the most dominant human sense, *the sense of sight* allows people to intake more information than all of the other senses combined. This great dependence on vision however has its downfalls. We do not have eyes in the back of our heads; our scope of vision involves only what lies before us, with steadily diminishing acuity to the sides by means of our peripheral vision. Due to the fact that what we see is ‘out there,’ and we are physically unable to see what is ‘right under our noses,’ there is inescapably a physical and psychological distance between ourselves and what we observe within an environment.

Vision adversely also has the ability of recording ‘errors’ into the brain. Issues such as distant objects appearing smaller to us, and bright-colored objects appearing larger than they really are, are illusion factors that have the potential for altering environmental features. Studies have also shown that humans tend to exaggerate the vertical dimension, making physical objects such as buildings appear taller than their actual size. Planners can consider these design strategies as an advantage when wanting to construct an attraction to have the visual appearance of being larger than life.

When considering the importance that lighting can have to the human mind, it is important to recall the fact that lighting factors can be measured through features such as color, brightness, saturation, artificial vs. natural types and time of exposure. Fluorescent lighting has been proved to have a stressful, unpleasant result due to increased metabolic activity that comes from

exposure to this artificial, high-intensity type of lighting. The color of lighting can also serve as an important emotion trigger. Red lighting for example tends to emit more bodily activity and extreme emotion, whereas the color blue will tend to produce a calmer activity sense.

2.3.1.2. THE PSYCHOLOGICAL IMPACT OF COLOR

Pattern Matching refers to what scientists believe to be the immediate responses to color which takes place at the visceral level. Human response begins when the environment is sensed, resulting in the person's affective system instantly passing judgment to the brain. This subsequently results in the releases of neurotransmitters. Response to color, like many of the previously stated concepts, can differ from culture to culture. The color white for example in the Judeo-Christian world signifies joy and delight, however in China and Japan, white is a color associated with funerals and sadness. For Disneyland's Main Street, over 200 colors were personally chosen by Walt Disney, with each shop receiving a distinct color identity out of the pinks, reds, yellow-greens, and red-oranges palette.

Colors have a different impact on people when they appear on isolated chips as opposed to when they are actually painted onto walls. This explains why a person may like the color when they see it in a paint store, but not be as satisfied with the same color after having painted a room in their house with it. It is important for planners to keep in mind that the meaning of color is different when it is seen alone compared to when it is combined with the design of a motel. Different designs suit different colors; the meaning of color on its own is not the same as the meaning of the color in a design or within a combination of different designs. Playing into the notion of how color schemes can set off an array of emotion triggers within humans can be

beneficial for planners that wish to utilize color in a way that may increase the likeliness for a positive emotion response.

Color can also play a role in altering the appearance of the size of a room. This color technique is usually utilized in order to distort closed-off rooms to make them appear larger to those individuals within the room. Focusing more specifically on the power of color, color contains similarities to the non-visual more emotive sense such as the sense of sound. Like listening to music, color has the power of registering emotional meaning in the spectator. The color blue has also been noted as being able to alter the sense of time, making it seem as if time is extending. The affects of color seen within natural landscapes however is much more difficult to classify. This being the case, the subsequent senses being analyzed (although accounting for no more than 10 percent of user sensory input) are ones that play a bigger role in terms of emotional impacts within the observer, and thus aesthetic impacts as well.

2.3.1.3. SOUNDSCAPE (THE AUDIBLE SENSE)

Unlike the visual sense, where stimuli is only limited to what is in front of the individual, *the sense of sound* is non-locational and all-surrounding. It is also one of our senses that is categorized as being information-poor and remarkably emotion-rich. Sounds, compared to visuals, are more transient, more fluid, more unfocused and less precise in terms of orientation and localization. This being the case, planners can consider the role of soundscape to impact the environment by having the ability to adapt and change the auditory components in order to complement the immediate physical environment. Normally within destination environments, sound stimuli remains ubiquitous, seeing that it can be present in just about any location at

anytime, whether it was initially meant to be or not, or in other words, whether it was predicted noise stimuli or unpredicted noise stimuli.

Predictable noise stimuli can come in the form of foreground sounds, spontaneous sounds and background sounds. Unpredictable stimuli sounds are generated by means that are beyond the control of destination operators and come in the form of airplanes flying overhead or other noise pollutions coming from outside the area. Destination planners have the opportunity of using noise stimuli to evoke visitors by directing their attention to specific targets. The speed of pedestrian flow within an entertainment destination has also been known to correlate with the speed of the music's tempo. This is why slow-tempo music is generally played in retail shops, with the hopes that customers will subliminally be more inclined to walk at a slower speed which will therefore increase the amount of time being spent in that store. Fast-tempo music has been known to serve as a form of crowd control within fast-paced destination environments. During crowd peak hours, fast tempo music can be emitted throughout the site in order to create a faster pedestrian flow with the hopes of alleviating areas likely for congestion. Eating areas with limited seating capacity are also notorious for employing music with a faster tempo with the intentions of speeding up the eating behaviors of users in order to ultimately cut down the time the users spend in that particular area.

2.3.1.4. SMELLSCAPE (THE AROMA SENSE)

Author, S. Van Toller uses the limbic system to describe the link between emotion and *the sense of smell*. The limbic system is the area of the brain that is known for controlling emotions and mood states and is closely integrated with scent pathways. The connection between smell and

emotion may even be reciprocal, in that smells influence mood states, which in turn alter the familiarity of a smell. Psychologist, Trygg Engen's studies on odor sensation and memory found that there are few odors, including the unpleasant ones that will innately result in a given response, although odors whose sources remain a mystery will tend to keep one anxious and curious.

The aroma sense has the capability of evoking other memories, both sensory and cognitive, of a particular time. Taking this idea, Behavior Scientist, Piet Vroon says: "Sometimes the sense of smell can function as a kind of 'starter motor' that evokes all kinds of apparently forgotten experiences and events from the past." From this, Vroon concludes that smells have the power of serving as memory aids and also as a means of conditioning our reaction and performance. Also, smell has the capability of developing specific meaning for a situation depending on the context in which it is perceived.

Just like sound, smell is even more information-poor and emotion-rich. Destination designers have the power of designing out the natural environmental scents through the means of deodorants, air conditioning, and air cleaners. Studies have shown that scent has the power of inducing feelings of pleasure, well-being, nostalgia, affection, and revulsion (Porteous, 1996).

The smells that individuals experience in theme parks can come in either two forms: recognizing if the smell is pleasant or not while memorizing it in terms of the type of experience it induces, and in terms of the mental image that one associates with that particular smell (Malnar & Vardvarka, 2004). Theme parks have been known to implement a variation of the *affect infusion model*, a tactic that emits desirable fragrances into the air-conditioning and heating systems which subsequently emits those fragrances into enclosed or semi-enclosed environments.

Disneyland for example directs all candy shop and bakery exhaust fans to blow cinnamon, vanilla, and chocolate scents onto Main Street. Other aromas included are fresh baked cinnamon rolls, and coffee. It is believed that when individuals are exposed to pleasant smells, their task performance is significantly greater (Mitrasinovic, 2006).

2.3.1.5. THE ANTHROPOLOGY OF THE SENSES

David Howes has been credited for studying how the human senses influence the perception of environments, cross-culturally. More specifically, Howes was interested in not only how our senses vary from culture to culture, but how “meaning and emphasis accorded each modality of perception” (Malnar & Vodvarka, 2004). He goes on to state that, “Indeed, if we do not ‘come to our sense’ soon, we will have permanently forfeited the chance of constructing any meaningful alternatives to the pseudo-existence which passes for life in our current ‘Civilization of the Image.’” Howes goes on to explain the importance for screening “out all the smells and sounds, tastes and textures of the artist’s environment. It ‘steps up’ the natural power of the eye to survey things from afar, while at the same time de-emphasizing the other senses as ways of knowing and communicating.”

Despite this idea, Howes explains how cultures differ in that some use some sensory more so than others, and also how their combining of some senses can differ in relation to how other cultures will combine their senses which will unavoidably result in differing experiences as well. Howes credits the Shipibo-Conibo Indians of eastern Peru for their usage of the *pluri-sensorial* mechanism, or the combining of multiple senses when experiencing an environment. On the other hand, Howes puts forth the idea of how the Western American culture primarily

experiences their environments through a visual means. “The former integrates sense while the latter dissociates them,” Howes explains. He raises the question of what the exterior world must seem like to cultures that incorporate more of a pluri-sensorial scheme and have less of a visual bias than what the Western American culture is accustomed to.

These ideas insinuate that not only is sensory response critical to adhering to cultural sensitivity through design, but the specific societal context as a whole will need to be addressed if it is to help its users to function more affectively. Howes concludes with five valuable considerations: first, other cultures do not necessarily divide the sensorium as the Western American culture does; second, the first step is to discover what sorts of relations between the senses a culture considers proper; third, senses that are important for practical purposes may not be important culturally or symbolically; forth, sensory orders are not static but develop and change over time, just as cultures do; and fifth, there may be different sensory orders for different groups within a society (Malnar & Vodvarka, 2004). Since destination environments are known for attracting users of many different cultures, these considerations can function as useful points for planners to consider when addressing the sensitivity of differing cultural needs and wants.

2.3.2. STIMULATION THEORIES

Stimulation theories construe the physical environment as being a crucial source of sensory information. The theories introduced below will explain a variety of ways that individuals react to, or can be affected by different types of *sensory stimulation* within their environment. *Sensory stimulation* comes from the information that is gathered from both simple stimuli such as light, color, sound, noise, heat, cold, and also more complex stimuli such as buildings, streets, outdoor

settings, and other people. Two significant ways environmental stimulation can vary are in amount and meaning. In amount, stimulation varies more obvious dimensions such as intensity, duration, frequency, and number of sources. Meaning refers to each person's integration and interpretation of the stimulus information that arrives. What makes these related can be that changing the amount of stimulation can change its meaning, which can ultimately affect the user's response to the sensory stimuli.

Whether acknowledged or not, humans commonly experience three different responses based upon sensory stimuli (Malnar & Vodvarka, 2004). First, an immediate, involuntary physical response to stimulus; second, a response habituated by prior knowledge of its source (depending on our understanding of the source. Are we familiar with the smell or sound?); and third, a response to stimulus influenced by one's memory with a particular time and place. It may be something familiar but not necessarily something that is comforting.

As described in the previous section, The Sensory Environment, the human senses function as to allow people to take in environmental information which in turn allows them to construct perspectives based upon that environmental stimulation. The stimulation theories listed and described below, are intended to explain the different ways that humans are affected by the environmental stimulation after the information has been received by their senses, and also, the meaning behind why people are affected differently. Five of these stimulation-oriented theories are: *adaptation-level theory*, *overload theory*, *restricted environmental stimulation theory*, *stress theory* and *phenomenology* (Gifford 2007).

Adaption-Level Theory: Maintains that individuals adapt to certain levels of stimulation in certain contexts; no particular amount of stimulation is good for everyone at all times. It asserts that stimulation that differs from one's adaptation level changes one's perceptions and behavior.

Overload Theory: Concentrates on the effects of too much stimulation. Considerable research in environmental psychology originates with problems that may be viewed from an arousal or overload perspective, such as the effects of noise, heat, cold and crowding. However we sometimes find ourselves in settings that offer too little stimulation.

Restricted Environmental Stimulation Theory (REST): Too little stimulation causes problems for us in some circumstances, as you might expect, but in others it yields surprisingly positive results. For example, the performance of easy cognitive tasks was proven to be improved under low stimulation conditions.

Stress Theories: Used to help explain the behavioral and health effects that occur when environmental stimulation exceeds an individual's adaptive resources. Suspected stressors included high population density, air pollution, hospitals, offices, extreme temperatures, traffic, noise, and disasters.

Phenomenology: A form of careful contemplation in which one goal is to understand what a setting truly means, especially to those who regularly spend time in the setting. As we become increasingly familiar with a setting, we create meaning for it. This meaning may be positive or negative in tone, similar or different from the meanings attached to it by others, weak or strong. Places without meaning affect us differently than places with meaning; we treat places without meaning differently than we treat meaningful places (Gifford, 2007).

2.4. USER CONTROL, CONSTRAINTS, & CROWDING

The functionality of destinations should serve the places' purpose of maintaining control over its users while still allowing the user to comfortably carry out the purpose of that environment without feeling threatened. The functions within destination environments should be apparent enough so that visitors are not shocked by what they find. "Woe be to the designer who, by plan sequence, induces in the observer a mood or expectation not in keeping with the functions of the plan" (Gunn, 1988). Planners of entertainment destinations should find this to be an easier task than planners of many other use types, because, more often than not, the visitor will anticipate the objective long before they arrive. These preconceptions have the power of influencing the design for the environment in a way that will provide user functionality while still maintaining the destinations' desired control of the user within the environment. The visitor's first impressions from the advertisements of the destination to the actual site entrance, are an example of design attributes that set the pace for the experience of the major purpose and function of the destination.

Traveling can have both positive and negative effects that depend partly on the experience and partly on the traveler. The overall traveler satisfaction will depend on their individual preferences and expectation. When the two are not in conflict with the actuality of the environment, it can be expected that the traveler will have a better chance of maintaining a more positive mental health outlook during the duration of their trip. There can be numerous functionality attributes for inflicting a healthy and positive environment onto these types of visitors. However despite careful design, there are still numerous outcomes that may end up resulting in poor environmental health such as stress for visitors. One primary cause of environmental stress can be a combination of human overcrowding and the sensation of loss of control. It is vital for

destination sites to be planned to take into account issues such as maintaining a sense of crowd control in order to mitigate congestion and to also maintain an overall sense of pedestrian flow within the site. This section will cover the topics of *user control and constraints* and *crowding* to carry forth the notion that when handled correctly, these features can function in a way that promotes a healthy and pleasurable atmosphere for users of these sites. After evaluated, these characteristics will more specifically be applied to entertainment destinations under the section of *User control, constraints, and crowding* + Destination Environments.

2.4.1. USER CONTROL AND CONSTRAINTS

Individuals may adapt to a certain level of stimulation and sometimes be exposed with too little or too much of it, however another obviously important consideration is how much control individuals actually have (or think they have, or want to have) over environmental stimulation. Those who maintain control over the amounts and different kinds of stimulation that comes their way generally are better off than those who have little control. The control people perceive to have will vary considerably depending on the kind of setting they are in, such as their own personal home versus being stuck in a traffic jam.

When individuals feel as if they are in a crowded situation, they may be inclined to feel as if they have lost much of their ability to control what happens around them. Theories of *personal control* have been developed to account for the effects of being able or unable to influence stimulation patterns. For example, the lack of control often leads to *psychological reactance*, the attempt to regain the freedom one has lost. Individuals who conclude that control is difficult or impossible to regain may succumb to *learned helplessness*, the conclusion that no amount of

effort can succeed in overcoming an unpleasant or painful situation. Understanding at what point people will respond to control issues can benefit planners who are aiming to accomplish crowd control without setting off a sense of loss of control for the users.

2.4.2. CROWDING

Perceptions of crowded environments are greatly influenced by the physical context of its surroundings, with potentially serious consequences if successful implementation methods for achieving crowd control are not present. These influences can range from physical (enclosure, high-densities, shortage of space), social (number of people), and personal (individual differences) factors which can have a negative effect on people who because of these factors, may be more inclined to develop a perception of overcrowding within their environment. The stress that can be associated with overcrowding can be attained from a perceived loss of control, stimulus overload, and behavioral constraints. These concepts remain variable however, as individuals are influenced differently and therefore their response to these crowding influences will differ as well. Nevertheless, these concepts are all vital to take into consideration when evaluating crowd control methods within a fast-paced destination spot.

2.4.3. SOCIAL AND PERSONAL INFLUENCES OF CROWDING

The number one *social* influence on crowding simply perceives that too many people are present within an immediate vicinity. Johnathan Freedman's *density-intensity* theory proposes that density itself is not harmful, but merely magnifies whatever else is going on (Gifford, 2007). If the atmosphere is negative, than high-density may be likely to intensify that negative sensation.

Adversely however, density also has the capability of positively increasing the atmosphere that an individual perceives as being in a current state of positive-being. Freedman argues that density is neutral, and that it is up to the environment as to whether or not the issue of density will serve as having a more positive or negative effect on the perceivers within that environment.

Personal influences for causing a crowded sensation for people can include personal factors such as gender, coming from a new culture, being unfamiliar with the setting, containing a preference for low-density in general, and having a large personal space buffer.

The social and personal influences listed above can be seen as almost certain ways for increasing the intensity of stress due to a perceived increase in crowding within an environment. Two response behaviors due to a crowded environment have been recognized as being widely present among individuals. They are a *loss of personal control* and *overload*.

A loss of *Personal Control* conceptualizes the idea that when individuals are crowded, they feel as if they have lost much of their ability to control what happens to them. A common feature is that these individuals will perceive their surroundings as being unpredictable or predictably undesirable.

Overload refers to the notion that densely populated areas are very likely to overwhelmingly stimulate people beyond their capacity to process the information they receive. This concept of overload focuses on the relation between the amount of incoming information compared to the individual's preferred level of stimulation and also, their ability to absorb and process that information.

When pedestrians are subjected to more commotion or stimulation around them, their perceptual field is more likely to narrow. They will be more inclined to look straight ahead, missing out on

needed information from the periphery of their paths. It is important to maintain a sense of crowd control so the individuals will not be more prone to stress or other health issues resulting from a lack of necessary environmental information being received.

2.4.4. USER CONTROL, CONSTRAINTS AND CROWDING + THE ENTERTAINMENT DESTINATION

When designing for a controlled circulation system within an environment, entertainment destinations can often employ a series of interconnected nodes where each has a capacity to function as a sub-node in order to dissolve large groups of visitors into smaller ones (Mitrasinovic, 2006). Techniques of crowd control also come in the form of roundabouts. In the 17th century, it was common for fairs to place roundabouts at each of the site's corners when trying to maintain a steady crowd circulation flow. However by the 19th century, focus was more centered on entertainment, migrating the locations of roundabouts from the periphery of the site to its center. Carousals and performance stages can serve as an effective means for a roundabout. Circulation design can also be executed so that a sense of a 'vortex' is established, dispatching visitors on to the spending routes. Walt Disney Imagineers have noted circulation concern in regards to 'the spaces through which our guests travel within and between attractions, and the time it takes them to do this. How much time will it take to give the guest an experience, and what other experience might precede or follow it? How does one form affect another?' (Mitrasinovic, 2006).

3. Findings

3.1. CASE STUDY #1: EXPLORING LAS VEGAS THROUGH THE SENSES

Visitors will commonly remember their experience in Las Vegas based upon their level of *sensory stimulation* within each themed environment. The probability of evoking a strong image in visitors can be increased by the combining of multiple stimuli within any given area. The way in which these spaces played out within their minds and bodies are a result from having encountered places that drew upon a multiple of senses through careful theming and multiple ambiance factors. Although the sensory stimuli coming from the immediate surrounding environment serves as the main influential factor for arousing the senses, the role of the employees within the different Las Vegas settings can also play a part in the guest experience.

The focus on sensuality, intimacy and interpersonal relations between employees and guests serve as a crucial attribute for successful sensory design. Performative theming serves as a planning tactic that is accomplished when all employees within an environment act as if they are “always on stage.” The tourists being able to easily recognize these roles in the employees will facilitate in maintaining the desired theme for any particular area. This idea is recognized in casinos such as Paris, where employees there are noted for their French-speaking abilities, or the Italian serenades that are done by the gondoliers in the Venetian. Gestures and body image coming from the employees will also play a part in creating an overall positive image. Positive greetings and keeping behind-the-scene discussions out of earshot from guest are attributes that will contribute to a positive auditory sense from the visitor.

Las Vegas’ entertainment venues have continually been able to offer a genuine familiarity of authenticity for their patrons due to the planners successfully understanding the link between entertainment and the human senses. The range of senses deployed in the Las Vegas environment guarantees not only an immersive experience, but also increases the availability of

varied experiences for the patrons as well. The construction of a multisensory environment enables patrons the opportunity for experiencing a place in many different forms, partly depending on how they are able to translate the sensory information received. By incorporating any combination of the five senses into the design features of the environment, the setting will essentially become an experiential ground, allowing for the consumer to develop an individualistic experience. The personalization of these experiences are credited to the notion that although people may be engaged in the same setting, the way each person takes in the sensory information will remain unique to that individual. For the purpose of showing how our senses can ultimately influence our individual environmental appraisals within an entertainment destination, the three senses of sight, smell, and sound will be applied to the Las Vegas Strip in order to illustrate the role they can play within this entertainment destination.

SIGHT

The visual stimuli of Vegas' strip can possibly prove to be overwhelming due to its massing and other visual stimulation overload factors such as an abundance of flashing lights, elaborate architecture types, and the overload of advertisements in the form of billboards and flyers.

However, it has been noted that the more sensory design that is incorporated within a Las Vegas setting, the more that it can communicate to the visitor and the more likeliness it will carry the power of being able to separate itself from other similar settings (Lukas, 2007). Las Vegas' themed casinos are often viewed as places of fantasy, excitement, and excess (Lukas, 2007). This interpretation can be attributed to the sensory bombardment that patrons are surrounded by during their Las Vegas excursion.

Las Vegas' amplified visual appeal for example can be a direct attribute for the influencing of individuals' heightened sense of sight. Since the sense of sight has proven to be the most

dominant of all the senses, the array of environments within the Las Vegas setting have proven to be very successful with being able to play out to the visual sense within their visitors.

One way for planners to attain a more genuine and intimate experience for visitors is by the re-creation of existing places from around the world. This is exemplified in places such as New York, New York, Paris, and Caesar's Palace. The authentication of such places is attributed to the great level of detail that is achieved through multisensory theming. For example, an attempt of re-creating authenticity is seen in the Paris casino. A sign reads: "Caution: The cobblestone floor you are about to enter is a re-creation of an authentic Paris Street. It is an uneven surface. Therefore, please watch your step." The casino has also chosen to replicate the streets of Paris by including the shouting of a drunk outside the Gare du Nord station as well as incorporating street musicians inside the subway. The rainforest café is also an environment that recreates an existing atmosphere through its abundance of interior detail. It achieves this by re-creating scenes that might be common in an actual rainforest, such as a thunder storm that happens in the restaurant every 30 minutes, complete with flickering lights to resemble lightening, and loud sounds that resemble thunder.

Allowing patrons to experience these places through a range of multisensory aspects contributes to an overall more convincing experience for the re-created place. Although the visual sense resides as the most dominant sense tool within humans for gathering information, it is crucial to give visitors alternative opportunities that involve their other senses in order to get past the façade aspects of their immediate environments and truly be engaged with the entirety of the environment.

SOUND

It can be beneficial to consider the role of soundscape as having the capability of impacting an environment due to the flexibility of adapting and changing the auditory components in order to complement the immediate physical environment. Normally within destination environments such as Las Vegas, sound stimuli remains ubiquitous, seeing that it can be present in just about any location at anytime, whether it was initially meant to be or not. In the case of supporting the numerous themed areas of Las Vegas, the auditory component within a particular setting will remain crucial to the success for that specific setup. The Treasure Island's famous Siren Show for example produces a number of auditory stimuli that work together to facilitate in producing a more authentic experience for the visitors that will work to complement that specific theme for the setting.

From the bustling of the high-energy crowds to the shouting at a craps table, Las Vegas offers an endless array of sounds that carry the ability of remaining unique to each themed area of Las Vegas. One of the most iconic sounds of the entire Las Vegas entertainment strip is the real and simulated noises that the coins make as they fall from the slot machines and are caught by the metal tray below. This being the case, patrons have been known to avoid the casinos that utilize the ticket dispensing system which displays the amount won, and rather stay put at the actual machines that allow the coins to disperse themselves. These visitors remain loyal to casinos such as The Frontier due to the fact they will get the *real* sounds of coins hitting metal (Lukas, 2007).

SMELL

The human sense of smell carries the capability of developing specific meanings for a situation depending on the context in which it is perceived. Entertainment destinations hold the power of emitting what have been known to be 'pleasant' scents within an environment in order to trigger

a positive emotional response from visitors. Studies have even shown that when certain slot machine areas in a popular Las Vegas casino were intentionally odorized, they saw an average of 45.11% increase of users within those specific odorized areas for the duration of a weekend. Furthermore, the amount of the increase appeared greater on Saturday when the concentration of the odorant was higher. The average increase of users for Saturday was 53.42% (Hirsh, 2006).

The different themed environments of Las Vegas have all been known to incorporate their own olfactory cues that facilitate in characterizing each unique setting. Although some scents can remain universally recognizable as having come from any given vicinity, the areas of Las Vegas have been known for utilizing specific smells to achieve a familiarity linkage between the visitors and that particular themed area.

The aromas being emitted from the food buffets reflect that particular food type common to the specific theming for that particular restaurant. For example in the Rio Hotel and Casino, visitors can expect their sense of smell to be overtaken by the meat-filled Brazilian dishes native to the country of Brazil. The food being served within the Paris Casino will reflect the culture food of the French, and even be presented at small food stations that resemble the architectural atmosphere of a small French town.

CONCLUSION

The way that a visitor develops their own environmental appraisal for a particular place can be greatly influenced by the combined *multisensory stimulation* that is present within that environment. A person's experience within each environment will be unique depending upon how that individual processes and interprets the given stimuli through their respective senses. The different types of *sensory stimulation* coming from within a destination environment have

the power of affecting individuals' behavior from the subliminal level. This being the case, planners have the capability of achieving specified goals by tapping into sensory design within their development. By doing so, planners are able to unconsciously affect the visitor without the visitor even realizing it.

By deploying a variety of luring sensory features, visitors will have an easier time adapting to their environment by establishing a connection to the setting through senses. This may result in any particular individual spending a greater amount of time at one specific location. An example of how this sensory connection can serve as an economic tactic would be an individual choosing to spend an extended amount of time in front of a slot machine because he or she feels comfortable within that setting.

3.2. CASE STUDY #2: THE PERCEPTUAL ILLUSIONS OF DISNEYLAND

The Disneyland environment, or as some have referred to it as the “Symbolic American Utopia,” has been credited for the discovery and execution of numerous design tactics that has resulted in Disneyland being the ideal environment for consumer escapism. By having the ability to design their environment to construct out all of the negative, unwanted elements and to program in the positive ones, the Disneyland atmosphere carries the capability for depicting the ‘realer-than-life’ aura onto their guests through multiple themed areas. The range of atmospheres provided within the park, creates the opportunity for individuals to be immersed in numerous surreal environments that engages them in a variety of sensory experiences.

When planning for the Disneyland environment, it was crucial for the entire design team to think like a storyteller. This opened up for the cinematic possibilities of allowing people to step right into an array of different stories upon having entered the park. The aesthetic opportunities posed by the architectural framework allows for users to develop their unique environmental perspective for their environment, which will ultimately serve as the foundation for shaping their environmental appraisal for the entirety of their experience. Every design detail from the color palettes to the presence of the ‘forced perspective’ design strategy, are all aesthetic factors that can be combined in order to create a sense of picturesque for the user of the site. The idea of the picturesque, or the ideal landscaped environment within a themed setting for an individual, can provide the user with a positive aesthetic experience, leading to an enhanced appraisal for that environment. This case study was specifically chosen to show the numerous ways that a large-scale entertainment destination can utilize aesthetic design tactics to achieve a high degree appraisal from the park-goers.

Disneyland's invariability of architecture styles and park themes stemmed from the actual Disney stories themselves. Walt Disney himself asserted that his intention was not for Disneyland to provide a sense of "realness," but rather, to create a completely believable atmosphere. Disney once said that, "What we're selling is a belief in fantasy and storytelling, and if the background wasn't believable, people wouldn't buy it." He was determined to create fiction into fact by including myths and legends to be included as part of everyday life. Disney went on to say that, "Imagination is the model from which reality is created" (Dunlop, 2004).

The desire to achieve this believable storytelling environment was what they referred to as *ersatz-authenticity*. For example, this can be visibly seen by the way the bellhops and barmen within the different themed Disneyland areas would dress up in order to compliment the specific theme or era that they were working within. A Disneyland team member was quoted as saying, "When somebody's stimulated and provoked by a building, there is a certain amount of intensity and revelation that occurs. When you're inspired, that's entertainment." This quote can be attributed back to the idea of Disneyland having the ability to create a picturesque environment, providing endless amounts of stimulation for the users of the site to feed off of. It has been noted that Walt Disney and his designers always maintained control over design-related issues in order to provide a sense of visual synchronization and psychological order. Amusement park historian Judith Adams noted that it was this control over both the design and the ability to control the experience of the individuals that gave Disneyland a certain advantage. "Everything about the park, including the behavior of the 'guests,' is engineered to promote a spirit of optimism; a belief in progressive improvement toward perfection" (Dunlop, 2004). One of the main contributing design factors for creating this sense of "perfection" can be attributed to the many different perceptual illusions that are present within the Disneyland themed settings. Although

not always consciously present to visitors, these illusions can all serve as contributing factors for establishing a positive environmental appraisal for them.

PERCEPTUAL ILLUSIONS

Lying within the opening paragraph for the 1953 Disneyland proposal, Walt Disney wrote, “Like Alice stepping through the Looking Glass, to step through the portals of Disneyland will be like entering another world.” This was his way of saying that an individual’s experience will be heightened by the manipulation of the environment’s size, shapes, colors and sounds. Although these manipulations are not always entirely illusions, they do hold the capability of tricking the subconscious mind at first glance.

One such manipulation tactic is the concept of *miniaturization*. This concept allows for designers to meet their design goals without overwhelming the tourist with the actual magnitude of “real-life” scale. The Disney Corporation more specifically used the tool of miniaturization in order to provide a more comforting experience and to not present people with a threatening and tension-filled environment, potentially resulting from large scaled landscapes and other massive architectural features.

In the decade preceding World War II, while Americans were abandoning their small hometowns for cities and suburbs, they also left behind amenities that came along with their small-towns, from the town halls to the town squares. Disney’s vision for Main Street, USA was to capture all of the nostalgic associations of small-town America with the hopes of visitors yearning once again for the towns and town squares they had once abandoned. Historian Richard V. Francaviglia credited Disney’s Main Street as being one of the most successful pedestrian environments in the world, referring to it as “a remarkably effective design for reinforcing

experiences, heightening anticipations, and moving traffic” (Dunlop, 2004). Keeping this in mind, it is crucial as a planner to note just how Disney was successful in achieving his specific design visions for the Main Street corridor by using many forms of manipulation.

Unlike strip malls and your common thoroughfares where everyone seems to provide an overload of visual stimuli, the planning for Main Street USA was careful to remain aesthetically unthreatening. “Most urban environments are basically chaotic places, as architectural and graphic information scream at the citizen for attention... This competition results in disharmonies and contradictions that... cancel each other out” John Hench (Marling, 1997). Walt Disney was careful as to make sure that his visitors were not overwhelmed by the experience of everyday burdens of social life. He hoped to achieve this by planning Disneyland to be an ideal pedestrian-friendly environment and by consigning all vehicles to a distant parking lot, allowing individuals to forget about them for the day once having passed through the Disneyland gates (Marling, 1997).

The Victorian façades along Main Street for example consist of scaled-back architectural styles. The first stories of the buildings are full scale but the floors above diminish in height to give off the perception that they are extending further into space. This tactic is known as *forced perspective*. Each story farther up also contains smaller windows, smaller awnings, smaller cornices, and so forth. The gradation of the building heights and other characteristics as they change from the first floor to the third, results in a strong visceral affect due to the emotional affects it may have on pedestrians “in term of pleasure and dominance induced by miniaturization” (Mitrasinovic, 2006). The façades of these buildings also play a role in sustaining the Victorian theme by including Victorian-architectural doors that lead to nowhere, windows that never open, and including curtains that serve the purpose of hiding the storage

rooms and offices that are located on the second and third levels of the buildings. The hiding of these second and third floor uses facilitate in sustaining the visual stimuli that is expected to be produced by the illusion from the Victorian façades.

The successful implementation of forced perspective and determining the specific scales needed can, be credited to the consideration of numerous variables. Such variables can include: the different possible distances from which a building will be viewed, the proximity of other adjacent buildings, the designated height required for the proper functionality of each story of the structure, and the anticipated landscape design for the surrounding vicinity. Vegetation can be implemented in away so as to support the desired illusion planned for any particular setting.

Disneyland remains the pioneer for implementing the forced perspective technique in order to achieve specific design-related goals. At the Matterhorn attraction for example, larger trees are placed lower down and the trees farther up the mountain, decrease in size. Although nowhere near the statuette of the real mountain, it still gives the impression that the attraction's 147-foot height appears to be much taller without overwhelming the tourist with the actuality of the height.

The technique of forced perspective is also dramatically present within the Sleeping Beauty Castle design. It was constructed so that the ground levels were at normal size, but higher areas were progressively smaller. This makes the upper areas look even higher when seen from below. The scale of the architectural elements are much smaller in the upper reaches of the castle compared to the foundation, making it seem significantly taller than its actual height. Standing at 75 feet tall, the bricks in the upper courses of the base are slightly narrower than those below making the castle appear taller than it is.

Many of the structures in the Disneyland Park are designed to be seen from street level only. The castles however are intended to be convincing from all perspectives, and are even portrayed to be larger than life through careful design manipulation. From the time park-goers first enter the park, the Main Street pathway play the role of framing the Sleeping Beauty Castle, making it seem grander and more striking than its actual height.

From the specific color palettes chosen for the attractions, to the types of music employed throughout the park, Disneyland continually sets examples for how the smallest details can have the potential for positively contributing to the development of a user's environmental appraisal. For example, the vivid red hue of the sidewalks in Town Square and in the Hub area (the area just in front of Sleeping Beauty's Castle), was chosen to enhance the green of the grass, as the two colors are opposites on the color wheel. The often upbeat and buoyant tempo music types that are played within each themed area within Disneyland were specifically chosen to not only represent the period and parallel specific themes, but also to ultimately evoke a sense of optimism with its visitors.

CONCLUSION

The perceptual illusions mentioned above all function with one another to ultimately trick the visitors into believing that an object is larger or smaller in scale. Other design tactics such as the detail and color of the Disneyland structures and attractions are more obvious attributes that are present in environments that are able to facilitate in shaping the perspective of the users of the site. Every design detail from the color palettes to the presence of the 'forced perspective' design strategy, are all factors that may play a role in creating a sense of picturesque for the different Disneyland themed environments. This concept of the picturesque, or the ideal landscaped

environment, may provide the visitor with a positive aesthetic experience, resulting in an enhanced environmental appraisal for any particular environment.

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