

# Beyond Buildings



Beyond Buildings:  
Designed Spaces as Visual Persuasion

By

J. Donald Ragsdale

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P U B L I S H I N G

Beyond Buildings: Designed Spaces as Visual Persuasion,  
by J. Donald Ragsdale

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## PREFACE

This book is a natural extension of previous ones which I have written or edited on the subject of visual persuasion. Those books addressed the visual impact of structures. Two, for example, focused on art museums and demonstrated how a museum's collection and its arrangement of the collection were deliberate means of visual influence. Additionally, those books examined the museums' architecture as a separate type of visual persuasion. The most recent book assessed architecture in general, considering a wide range of buildings and structures such as skyscrapers, palaces, places of residence, government buildings, universities, and, again, museums.

Assessing architecture necessitated a consideration of design elements that were not part of the structure itself. An important element of architecture, for example, is a building site. It is as important to note the placement of a structure such as the Louvre as it is to consider its architectural style. The location of the Louvre at one end of the grand axis known as the Champs Élysées, as well as the museum's centrality in the city of Paris, are both elements which contribute powerfully to the visual power of the building. The grounds of such palaces as Versailles and Schönbrunn equally illustrate the visual power of site.

This book focuses specifically on the designed spaces which are a part of buildings as well as spaces, such as parks and gardens, which have been created as means of visual influence in and of themselves. It seeks first to find those visual images, elements, and communication principles which would be appropriate in answering the questions of how designed spaces influence viewers and to what degree. Secondly, it considers a variety of such spaces, such as parks, gardens, national parks, zoological gardens, battlefields, and even cities. Finally, the book examines a sample of especially notable interior spaces as examples of visual persuasion.

In the four previous books, I focused on those places I had actually visited, studied at first hand, and photographed, believing that there is no satisfactory substitute for the writer's actual presence. In this book, however, it was not possible to visit every place. Time and limited funds precluded that, especially with respect to US national parks and American battlefield memorials, cemeteries, and monuments outside the US. However, each such place assessed within was studied carefully through photographs and videos readily available online.

Also like my previous books on visual persuasion, this is a scholarly work, which concerns itself principally with theory and its application in the assessment of specific items. However like the previous books, this one should also be of value to the casual reader and especially the traveler as a point of reference to enhance visits to one or more of the designed spaces examined within.

# CHAPTER ONE

## THREE APPROACHES TO STUDYING SPACE AS VISUAL PERSUASION

“Space is an exceedingly common commodity: It fills the universe and surrounds us throughout our lives. It can appear so thin and extended that the sense of dimension is numbed or so richly infused with a three-dimensional presence that it endows everything within its fold with special meaning. Intensely three-dimensional space has the remarkable capacity to enhance our lives. It imparts our surroundings with a pleasing sense of comfort and security that is as important to the enjoyment of life as sunlight and a place to rest. It is a basic component of good urban design” (Hedman & Jaszewski 1984, 53). An examination of designed spaces is the central concern of this book, which assessment has the purpose of determining how such spaces impact the viewer visually. The power of space to affect viewers noted by Hedman and Jaszewski is akin to that of buildings and other structures and falls into the general concept of visual persuasion. This book is a natural and direct extension of previous studies of structures in general (Ragsdale 2007), American art museums (Ragsdale 2009a), Western European art museums (Ragsdale 2009b), and architecture as a whole (Ragsdale 2011) as visual persuasion. For that reason, it is appropriate to begin here with a brief account of how scholars with diverse backgrounds have approached the evaluation of visual persuasion. There are generally three such approaches: the visual rhetoric approach, the semiotic, and, for want of a better term, the elemental.

The study of persuasion has been the purview of scholars, especially those in communication studies, since Classical times and perhaps earlier. It has been overwhelmingly a study of verbal behavior under the rubric of rhetoric. Rhetoric has usually been associated with speakers, and at its heart has been about finding, as Aristotle put it, “the available means of persuasion” (1954, 24). Persuasion, in turn, referred primarily to changing someone’s way of thinking or behaving or both.

Examples abound. A common one would be found in those speeches, advertisements, and tracts which seek to convince smokers that smoking may lead to lung cancer or emphysema and to get them to quit. The process by which persuasion takes place is one which at its heart is quite simple: someone offers an assertion, which is to say makes a claim. Then this person provides some form of warrant or proof for that assertion or

claim. The proof may be a fact, an example, testimony, and the like. Usually, there are several warrants provided.

Of course, the actual process of persuasion is not so simple. Sometimes, an appeal to an emotion such as patriotism substitutes for the logical warrants mentioned above, and sometimes assertions or claims may be made without providing any proof but which are effective because of the credibility ascribed to the source by the audience. There is also an awareness by students of persuasion that efforts to persuade depend almost entirely on how that audience's prior attitudes, values, and beliefs interact with the claims and warrants, a recognition that one cannot be persuaded unless one wants to be.

Especially helpful in understanding certain forms of visual persuasion is an awareness of what might be called incidental or unintentional persuasion. An example might be a single fact encountered by an auditor in a news report or overheard among friends. Let's say it is a statement that a principal cause of gum disease is the failure to use dental floss twice a day. That fact alone may be sufficient for the auditor to begin systematic flossing. It is not necessary that there be a full-blown persuasive speech or an ad campaign for persuasion to take place. In visual persuasion, a viewer may encounter an image completely separate from any kind of specific effort to have influence. Architecture is a good visual analogy of incidental persuasion. Subsequently, the issue of just what kind of response it is that one has to a standalone visual image will be explored, but clearly the response is not merely passivity. Previously, the response has been called compelling (Ragsdale 2011).

Although strongly committed to the position that rhetoric is at heart a verbal discipline, there have recently been those in the field who have embraced the notion that visual phenomena are also persuasive. Studies of visual persuasion by these scholars are called visual rhetoric. Although often referred to as rhetorical theory, the rhetorical approach is not theoretical in any scientific sense. To the layman, it might be described as the application of some philosophical perspective to the explanation of rhetorical phenomena. Aristotle (1954), for example, identified what he observed to be the essential components of oral persuasion, identifying such things as logic, emotion, and source credibility to mention the most fundamental ones.

Through the centuries, scholars not only have adapted Aristotle's views to the teaching of public speaking but have also used his categories as an analytical tool for assessing speeches. In the 20<sup>th</sup> century, Kenneth Burke (1955) observed that seeking to ingratiate oneself with an audience was an essential ingredient of persuasion and that assessing rhetorical



events required proper consideration of all of the elements of the events. Of course, scholars have engaged in an extensive set of Burkean analyses of speeches and speakers. Almost anyone who has written philosophically about communication may be used to provide some kind of insight into rhetorical events, and thus one regularly encounters assessments based on the texts of such recent writers as Jürgen Habermas, Jacques Lacan, Michel Foucault, Jacques Derrida, and Chaïm Perelman to name only a few.

The observation that the rhetorical approach is not theoretical in a scientific sense is not meant to be disparaging. Rather it is intended to explain the wide diversity which characterizes visual rhetorical studies as well as traditional verbal ones. Visual rhetoric, however, is not only characterized by varied approaches but is also diverse in the targets it examines. A recent volume of essays, *Defining Visual Rhetorics* (Hill and Helmers 2004, 21), acknowledges quite a variety: “political conventions, editorial pages, movie theatres, art museums, suburban food stores, government documents, as well as the Victorian drawing room and, as in Goggin’s examination of needlepoint, orphanage schools in the 19<sup>th</sup> century.”

While there is no typical approach, studies by Edwards (2004) and Tange (2004) give some insight into the point of view of visual rhetoricians. Edwards was interested in how “images disseminated in connection with newsworthy events become attached to the event in the form of cultural remembering. . . . some images are routinely re-presented long past the time when they are actually ‘happening,’ creating through visual equivalence a new experience that calls forth the reminder of the depicted event” (179). Edwards’s prime example of this phenomenon is the photograph of John F. Kennedy, Jr., age 3, saluting the coffin of his slain father as it passed on its way to Arlington National Cemetery. She provides evidence of the enduring power of this image through newspaper editorial cartoons which appeared many years later at the death of JFK, Jr. She concludes that “the frequent invoking of the ‘salute’ photograph as well as other historical images of Kennedy and his family members served to justify coverage [of the death] by positioning the plane crash as part of a larger narrative that involved a nation, as well as a family” (193).

Tange (2004) was interested in how the concept of home among the middle classes in Victorian England “was defined in large part through the imaginative value of domesticity, [where] the physical images presented by actual homes were complemented with print images in texts that participated in creating domestic ideology” (277). To illustrate her premise, Tange provides paintings of domestic scenes, floor plans of

Victorian homes showing the residents' "places," illustrations of work tables and chairs, sketches of drawing rooms, and drawings of table settings and menus. With the proliferation of these print images, Tange points out that "readers could consume as many works as it took for domestic ideals to become second nature, so that eventually the well-read, middle-class consumer . . . might 'naturally' be able to display a properly domesticated identity" (296).

Recently, in addition to the Hill and Helmers (2004) collection of essays, other works with a visual rhetoric approach have appeared, which illustrate how the approach is developing and how interest in visual rhetoric is growing. One of these is a reader with a collection of 20 recently published essays (Olson, Finnegan, and Hope 2008). The essays "investigate a variety of visual forms—photography, editorial cartoons, public monuments, tattoos, mural art, television news and advertising, stamps, prints. They describe images doing the work of social control and of social protest or political change" (Benson 2008, 416). The editors reveal that they had in mind a textbook for a college-level course in visual rhetoric. The essays are very much in keeping with the pattern established in the Hill and Helmers collection.

Another book represents a bit of a departure from these two collections by focusing on displays, including iconic photographs, national park landscapes, Budapest's Stalin Monument, public demonstrations, and tattoos. In fact, however, the use of the term "display" is only for the purpose of emphasizing the choice rhetors make when deciding what to reveal visually and what not to. In practice, the displays under consideration are the same or quite similar to the images in the two earlier collections, and "the rhetorical study of displays proceeds from the central idea that whatever they make manifest or appear is the culmination of selective processes that constrain the range of possible meanings available to those who encounter them" (Prelli 2006, 2).

A third book is entitled *Shaping Information: The Rhetoric of Visual Conventions* (Kostelnick and Hassett 2003), but it is quite different from the previous ones mentioned here in the visual images with which it is concerned. This book is more narrowly focused on the nature of visual language itself rather than rhetoric and in particular on the charts, graphs, icons, and the like which are used as the conventions of textual illustrations. This book is a descriptive one which traces the historical development of visual images used as illustrations. Since it does not seek to provide a rhetorical perspective to the use of visual images, it is an interesting but tangential contribution to the visual rhetoric approach.

Studies of visual rhetoric provide many meaningful insights into the phenomena they examine and help in understanding the purposeful use of visual images and its likely effects. Typically, however, visual rhetoric does not delve into the semiotics of images nor the elements on which the images are based. Again, this observation is not meant to disparage studies in visual rhetoric so much as it is to distinguish them from two other approaches to the study of visual persuasion: the semiotic and the elemental. Both of these approaches are rather more interested in visual images *qua* visual images. They seek to dissect images themselves to see how they function as available means of persuasion. The second or semiotic approach focuses holistically on visual signs, while the third concerns itself with the basic elements of visual imagery—dots, lines, geometric figures, and the like—and their organization into communication strategies.

The semiotic approach to visual persuasion was developed by Paul Messaris (1997) and was primarily targeted at the wide use of visual means to influence consumers in advertising. In an effort to explain the role of visual images in influencing consumers, Messaris took a semiotic approach, specifically an adaptation of the sign system of Charles S. Peirce (Buchler 1955). Pierce's system included a wide range of signs, some of which were visual in nature. From these, Messaris selected two for a typology of visual persuasion. They were icons and indexes. Icons are *representational*, in that they look like that for which they stand. Icons are abundant in the portal sculptures of Gothic cathedrals as well as the paintings hanging in the world's art museums. Indexes are *documentary*. They are direct evidence of a thing, such as unaltered photographs and artifacts like a cannon acting as a battlefield memorial. Messaris recognized also that how a sign is interpreted often depends upon its juxtaposition to other signs. The theory of *montage* in film is an example of this juxtapositional effect. Messaris termed this phenomenon syntactic indeterminacy, and it has been used to explain such persuasive effects as those of the great dinosaur skeleton in the rotunda of The British Museum of Natural History (Ragsdale 2007) and the location in the Louvre of *Nike of Samothrace* at the head of a grand staircase (Ragsdale 2009b).

How do icons have a persuasive effect? How do they influence consumers to purchase an advertised product, or to switch from one brand to another, or to maintain their brand loyalty? Messaris (1997) begins his answer to these questions by pointing out that advertisements are unwanted forms of communication, i.e., they are not sought out by ordinary persons. For this reason, then, the first function of an icon is to get attention, and Messaris devotes considerable space to providing

examples of attention-getting images. These examples include images that distort physical reality, such as an image of a woman's face with her mouth erased. The second function is to arouse an emotional response to the advertisement's product, such as the use of high or low camera angles to suggest inferiority or superiority. The desired result is influence on the viewer's attitudes and beliefs.

Indexes are also icons, but they have the added power of appearing to be real or to be representing reality faithfully. As such, indexes have the additional ability to prove something. As an example, Messaris (1997) mentions an ad for a laundry detergent. The ad shows two stained cloths immersed in solutions of different brands of detergent, with the one dipped in the product being advertised coming out cleaner than the other one. Indexes, then, offer proof analogous to the facts, statistics, and testimony of verbal persuasion, although to be sure viewers in general have come to be suspicious of staged, manipulated, or altered images especially as the awareness of the power of digital imaging has increased.

Icons and indexes are visual signs. Syntactic indeterminacy, by contrast, has to do with the arrangement or juxtaposition of signs. Syntactic indeterminacy highlights the fact that, unlike the words in a sentence, a pairing or sequence of images is missing any information to determine what the relationship is between the images. Viewers, then, are left to form an association between them based on their juxtaposition. In the famous shower sequence in Alfred Hitchcock's film *Psycho*, the viewer sees an attacker wielding a large knife followed by a woman in the shower raising her arms to repel the attack leading finally to blood in the water circling the drain. The blade never actually touches the woman's skin, but the juxtaposition of the images and the rapid cutting of the montage sequence convince the viewer otherwise.

In advertising, some claims would be impossible to make verbally, because they are false. They can, however, be suggested by the association of one image with another. An obvious example is the use of a bodybuilder demonstrating an exercise machine. It cannot be claimed that the machine was the cause of the bodybuilder's physique, since diet plays a large role in the outcome of exercise. The association between the two, though, is compelling for the uncritical viewer. When the British Museum of Natural History, as mentioned earlier, displays a huge dinosaur skeleton in its entrance rotunda, a claim is being made about the importance of the theory of evolution and without saying a word.

In both the rhetorical and the semiotic approaches, the explanation of visual persuasion is straightforward. A claim is made and an image is used as its support or warrant, such that visual and verbal persuasion differ only

in their form. If the image is compelling, just as one could say a statistic is compelling, then the claim may be convincing or motivating. Of course, many variables determine the effectiveness of a persuasive appeal, but insofar as this example is confined to just one variable then it can reasonably be thought of as accurate. In some notable and widespread cases, however, visual persuasion is not comparable to the claim and warrant model mentioned above, and in these cases the rhetorical and semiotic approaches are inadequate. In these cases, and buildings are good examples of them, there is no claim unless it is an implicit one, nor is there a warrant unless the elements of visual design are warrants. In any case, it would only be artificial to try to impose the claim and warrant model on something like a building, when a much more useful approach would be to develop an approach directly suited to the image or images.

In three previous books, Ragsdale (2007, 2009a, 2009b) adapted Messaris's (1997) analysis of icons, indexes, and syntactic indeterminacy to the assessment of museums as visual persuasion. Ragsdale first used icons and indexes as the basis of a typology of museums, with art museums generally identified as iconic and museums of natural science identified as indexical. Then, the assessment of individual museums was made by evaluating the significance of the museum's collection—its icons, its indexes, or both—the significance of the works' display or "hanging"—syntactic indeterminacy—and the power of the museum's architecture. This assessment called for an expansion of Messaris's images beyond icons, indexes, and syntactic indeterminacy and for a new, elemental approach to evaluating the architecture as visual persuasion based on the elements and communication strategies of visual literacy. Subsequently, this approach was used to assess architecture in general, including palaces, residences, skyscrapers, cathedrals, universities, and the like (Ragsdale 2011).

It is this latter methodology that forms the third or elemental approach to the study of visual persuasion. Before focusing on the nature of the elemental approach, however, it will be helpful to examine the ways in which Ragsdale expanded Messaris's (1997) system. As mentioned, it was necessary to expand Messaris's system to account for structures in general and museums and their contents (Ragsdale 2007). The basic system did not, for example, afford a way to assess the difference between *discursive* and *nondiscursive* visual signs. Discursive signs have a clear parallel in language, as in the case of the "sermons in stone" of the portal iconography at Notre-Dame de Paris. However, the light-gathering structure of a cathedral, probably intended to represent the nature of God himself or of Heaven, seemed not to have any parallel in language. The

term nondiscursive was used to describe such visual elements. Color is a nondiscursive sign. Space is similarly a nondiscursive sign. The ruins at Oradour-sur-Glane near Limoges in France and the tranquility of a Shinto shrine must be considered within their encompassing contexts. It was also necessary to resort to the distinction between central and peripheral pathways for information processing made in the Elaboration Likelihood Model of Petty and Cacioppo (1986). Central processing involves deliberative thought about the content of a message, while peripheral processing is more impressionistic. This distinction was especially useful in describing the differences between discursive and nondiscursive visual signs. Discursive ones would seem to necessitate central processing, while nondiscursive ones are likely to be processed peripherally.

It was also necessary to add to icons and indexes another pair of visual signs to account for the varieties of art found in museums (Ragsdale 2009a). There are inadequacies in the icon/index categorization raised by the existence in the vast majority of art objects of symbolism. A recognition of such a symbolic image is to be found in C. S. Peirce's theory of verbal signs. For Peirce, a symbol was a conventionalized representation of its object. The best example is a word, such as "man." By contrast, a stick figure drawing of a man is an icon, and a photograph of a man is an index. What, then, is a visual symbol in Peircean terms? While it might be more difficult in visual communication to find instances than in verbal communication, where symbols abound, there are conventionalized visual symbols to be found in every culture (Ragsdale 2007). Trees of life, owls, crucifixes, angels, and the like all have implications beyond mere representation. Accepting that visual signs may be symbolic provides a means for interpreting the many instances of traditional art, which are merely puzzling when contemplated as icons. So symbols not only get attention and evoke conventional emotional associations as icons do, they also carry with them specific meanings.

Peirce did not anticipate the rise of modern art and its practical rejection of representation. The works of such painters as Jackson Pollock, Wassily Kandinsky, and Piet Mondrian cannot be classified as either icons or indexes. Neither can they be called symbols. For this reason, a fourth sign is required, which has been called a *presentation*. A presentation is a visual composition of dots, lines, tones, colors, and the like presented through visual communicative strategies such as balance, symmetry, sharpness, randomness, and the like, but which does not "represent" anything. The interpretation of a presentation will always be subject to more variation than that of a symbol, an icon, or an index, since presentations do not have clearly differentiated objects. Objects of

presentations are ordinarily unknowable, ineffable, or indecipherable, and their persuasive impact is likely to be a function of subjective interpretation.

Consideration of the presentation is, in fact, the point where the need for a third approach to visual persuasion became evident. Not only are works of modern art presentations, so are buildings. How does one account for the power of architecture to compel a persuasive reaction? Since buildings are not symbols, or icons, or indexes, one is forced to examine the most basic elements of architectural design themselves. This elemental approach is presented in detail in *Compelling Form* (Ragsdale 2011), therefore it will be presented here in a more summary form.

Those who are familiar with the field of linguistics are aware that language is formed by a set of fundamental building blocks called phones or sounds. Sounds are roughly indicated by an alphabet, although conventional alphabets are not good indicators of pronunciation. For that information, linguists rely on the International Phonetic Alphabet, where each symbol always and faithfully represents one and the same sound regardless of language. From these fundamental building blocks, words are built, and words are arranged into phrases and sentences. While linguists usually stop their analysis at this point, others interested in language, such as writers and literary theorists, continue to consider combinations of sentences into paragraphs, paragraphs into chapters, and so on. Semioticians, of course, focus on the denotations and connotations of words.

Like linguists, architects design buildings using fundamental building blocks. These include scale, line, rhythm, light, texture, color, ornament, acoustics, space, mass, and the like, which are combined into geometric shapes, arches, columns, domes, walls, windows, and so on (Ching 1979; Ragsdale 2011; Roth 1993; Strickland 2001). Before proceeding, one more example from the field of linguistics will be useful. From acoustic phonetics, we know that phones or sounds are actually not the fundamental units of language, although to be sure they are the fundamental perceptual units. In fact, phones are composed of basic aspects of sound which are the consequences of the production of sounds themselves. These basic aspects are called distinctive features. A simple example of a distinctive feature is voicing, which makes it possible to distinguish between such English language sounds as “p” and “b,” “t” and “d,” and “k” and “g.” In each of these three pairs, the second sound is distinguishable from the first significantly because it is articulated with the vocal folds vibrating.

Of course, phoneticians and speech pathologists have long analyzed sounds at this more basic level. Even before the findings in acoustic

phonetics using the sound spectrograph made them precise and discrete, issues of voicing, resonance, and articulatory position have been vital to an understanding of articulation and of a variety of communication disorders. To return to the elements of architecture, further probing shows that elements such as rhythm and mass resolve into yet more basic units, like dots, lines, and shapes. Often referred to as the elements of visual literacy (Dondis 1973), it is these elements that ultimately explain the visual images we see and which either do or do not have a persuasive effect on us. As sounds or phones underlie spoken language, so “the dot, line, shape, direction, tone, color, texture, dimension, scale, movement” underlie visual communication (Dondis 1973, 39).

“The dot is the simplest, irreducibly minimum unit of visual communication. . . . dots connect and therefore capable of leading the eye” (Dondis 1973, 40-41). A chain of dots is a line, which “because of its nature, has enormous energy. It is never static; it is the restless, probing, visual element of the sketch” (43). Dondis’s claims seem almost fanciful and open to dispute until one finds that her observations rest on findings in the psychology of perception, especially that of Gestalt psychology.

Gestalt psychology has contributed a substantial amount to our understanding of how human perception of visual elements and communication strategies works. It suggests that there are universal human perceptual responses, such that an analysis of visual design should suggest why some images are compelling and some not. “One factor alone is common currency between artist and audience, in fact, among all people—the physical system of their visual perceptions, the psychophysiological components of the nervous system, the mechanical workings, the sensory apparatus through which they see” (Dondis 1973, 21).

With Gestalt psychology in mind, then, it is easier to accept such claims as “the square has associated with it dullness, honesty, straightness, and workmanlike meaning; the triangle, action, conflict, tension; the circle endlessness, warmth, protection” (Dondis 1973, 44). This is not the place for a primer on visual literacy, rather the purpose here is to establish the notions that basic visual elements are perceived similarly by all human beings and that they have both emotional and intellectual consequences. This said, it is reasonable to expect that an assessment of designs using these elements as units of analysis would be fruitful in discovering the reasons for their effectiveness or lack thereof as means of visual persuasion.

Basic elements are not used in isolation but rather in combinations to formulate visual messages. This happens through the application of “visual



techniques” or “communication strategies.” Dondis (1973, 16) discusses a number of the most common of these communication strategies but points out that there are undoubtedly many more. Some of the most common are as follows:

- Balance—Instability
- Symmetry—Asymmetry
- Regularity—Irregularity
- Simplicity—Complexity
- Unity—Fragmentation
- Economy—Intricacy
- Understatement—Exaggeration
- Predictability—Spontaneity
- Boldness—Subtlety
- Simplicity—Complexity
- Depth—Flatness
- Sharpness—Diffusion
- Sequentiality—Randomness
- Repetition—Episodicity

It might be tempting to treat these bipolar opposites as continua representing “good” versus “bad” visual messages. For example, terms like symmetry, simplicity, and sharpness seem superficially to be goals of effective design. However, there are messages that may call for something between the two poles or even full-blown asymmetry, complexity, and diffusion. The communication strategies are therefore descriptive rather than prescriptive, and each visual design, when assessed, must be evaluated in its own terms. Although it is not the focus of this book, abstract art is an especially good example of this caveat.

Dondis (1973) uses the strategies to characterize architectural styles and in doing so demonstrates how they might be used to assess other types of visual designs. Two examples should demonstrate sufficiently her approach. Classicism is a very familiar architectural style, and Dondis (140) describes it with these visual communication strategies: harmony, simplicity, accuracy, symmetry, sharpness, monochromaticity, depth, consistency, stasis, and unity. Notice that some of the terms used to describe Classicism do not appear in Dondis’s list above of the most common ones, illustrating the flexibility of the use of strategies as a descriptive tool.

Expressionism is less familiar. It sought to imitate visually those often bizarre and fantastic images of one’s “private vision, emotional state, or subjective responses to objective reality” (Cook 1996, 964). Cinema scholars would offer as examples Robert Wiene’s *Das Kabinett des Dr.*

*Caligari* and Fritz Lang's *Metropolis*. Buildings in both of these films are angular rather than rectangular and the lighting is often *chiaroscuro*. Dondis (1973, 138) offers up the Byzantine and the Gothic architectural styles as examples, saying "expressionistic style is present when the artist or designer is seeking to evoke a maximum emotional response from the viewer." The communication strategies characteristic of Expressionism are: exaggeration, spontaneity, activeness, complexity, roundness, boldness, variation, distortion, irregularity, juxtaposition, and verticality. The elemental approach to the assessment of visual persuasion examines the basic components of images and the strategies employed in their use.

As mentioned above, this elemental approach to the assessment of visual persuasion has been used in examining architecture in general (Ragsdale 2011). Since it is fair to say that an examination of designed spaces is merely an extension of the elements of architectural design, a brief summary of the approach to the assessment of architecture should be helpful. Space is in fact one of the elements of architectural design. The basic principles of architectural design may first be found in written form in the ten books of Vitruvius (1960). While Vitruvius was explicit in explaining these basic principles, his list was rather general. Modern authors fortunately provide more elaborated lists. Strickland (2001, xi-xiv), for example, includes the following: rhythm, line, scale or size, light, texture, color, ornament, acoustics, site, space, weight/mass. Roth's (1993) list is not appreciably different from Strickland's. He lists: proportion, scale, rhythm, texture, light, color, ugliness, ornament, acoustics, space, function, and "firmerness." Roth's treatment of space is very appropriate for the assessments proposed in this book.

Ching (1973) is quite aware of the interaction of the basic elements of visual design with communication strategies as Dondis describes them in architectural design. He begins his account with the basic elements: points, lines, planes, and volume and then shows how form and space are organized according to the principles of circulation, proportion, and scale following a familiar set of principles: an axis, symmetry, hierarchy, rhythm/repetition, a datum, and transformation. While his list of principles is shorter than those of Strickland and Roth, Ching shows more explicitly than either of the other two writers how such elements of architecture as rhythm, line, and scale are related to the more fundamental basic elements and communication strategies.

Three examples from *Compelling Form* (Ragsdale 2011) should suffice to illustrate the elemental approach. First, there is the Gothic cathedral, which, among other significant design features, relies on rhythm, scale, light, and ornament. If one were to break down the power of the

cathedral's overall effect into its components, these design features would stand out in explaining that power. Rhythm can be seen, for example in repeated arched windows, scale in the footprint of the cathedral and the height of the spires and towers, light in the clerestory and rose windows, and ornament in the exterior carvings at the entryways.

Second, many buildings are made compelling by their sites. The Louvre, for example, is not only centrally located in Paris but lies at the terminus of the grand avenue, the Champs Élysées. The Parthenon in Athens is on the hill of the Acropolis. The Colosseum in Rome is located adjacent to the Forum, and Durham Cathedral lies within the walls of Durham Castle at the top of a hill above a moat-like river. Third, some buildings are visually compelling because they are so perfectly symmetrical. Examples are easy to find in both Classical and Neoclassical architecture: the Roman Pantheon, the British Museum, and the Philadelphia Museum of Art. When one concludes that the use of these design features makes a building compelling or visually persuasive, he or she is relying on the knowledge of Gestalt psychology which explains how such features are perceived. The central concern of this book, however, is designed spaces, so it is appropriate next to consider space as one of the basic elements of architectural design.

"Space constantly encompasses our being. Through the volume of space, we move, see forms and objects, hear sounds, feel breezes, smell the fragrances of a flower garden in bloom. It is a material substance like wood or stone. Yet it is inherently formless. Its visual form, quality of light, dimensions and scale, depend totally on its boundaries as defined by elements of form" (Ching 1979, 108). It is easy to lose sight of the significance space plays in our lives, yet as soon as one is caught in a traffic jam or a seemingly endless queue at some event one becomes aware immediately that there is not enough space. In truth, one may need space almost as much psychologically as one needs water physiologically. As noted before, space is one of the elements of architecture, such that buildings cannot be properly assessed for their visual power without considering the spaces surrounding them and the spaces they enclose.

There are four kinds of space considered with regard to buildings. There is "purely *physical space*, which can be imagined as the volumes of air bounded by the walls, floor, and ceiling of a room" (Roth 1993, 45). Positive space would be the most obvious type of physical space, "one that is conceived as a void, then wrapped in the built shell erected to define and contain it." Within all buildings are positive physical spaces. Less obvious, and less common as well, is negative space, which is that "created by

hollowing out a solid that already exists” (51). A cave is a negative space, as is a tunnel.

The second kind of space is “*Perceptual space*”—the space that can be perceived or seen. Especially in a building with walls of glass, this perceptual space may be extensive indeed and impossible to quantify” (Roth 1993, 45). Often, comparatively small houses rely on glass to give the impression of more space. Several art museums around the world use the same principle for dramatic effect in their foyers. The Christchurch Art Gallery in New Zealand comes immediately to mind, along with the Metropolitan Museum of Art and the Museum of Modern Art in Manhattan. Standing in the foyer of the Christchurch museum and looking out suggests a vista including the area outside the building. The rotunda dome at the Met draws one’s eyes to the sky outside.

“Related to perceptual space is *conceptual space*, which can be defined as the mental map we carry around in our heads, the plan stored in our memory” (Roth 1993, 45). Many art museums consist of galleries of loosely connected rooms. Although galleries are usually numbered so that one may experience a collection in some sensible order, the memory one has afterward may be more of a maze or a rabbit warren.

Finally, “the architect also decisively shapes *behavioral space*, or the space we can actually move through and use” (Roth 1993, 45). Behavioral space may be, and most often is, directional. Roth points out that in the Gothic cathedral there is only one path, and that is the one which leads to the altar. Shopping malls most often use directional space to insure that customers are drawn to certain stores. Casinos are arranged directionally to lead visitors to the gambling venues that are the most popular or that have the greatest potential for the house. Less often, one encounters nondirectional space, where many paths lead to the same end point. Zoos especially, but also parks and gardens, exemplify nondirectional space. However, pathways in zoos, parks, and gardens are often laid out to direct visitors to highly popular venues within.

As Roth (1993, 49) points out “with slight redefining, these terms can be used to describe experiences in large outdoor spaces as well,” so the term designed spaces is an inclusive one and ranges from the interiors of such monumental structures as the Pantheon in Rome, Salisbury Cathedral in the UK, and Versailles to the exterior designed spaces of flower beds and lawns of a personal residence to the vast parks and hunting preserves of European kings. The emphasis in this book is on exterior designed spaces, thus exterior spaces are the starting point. Following the assessment of exteriors, however, the book will also consider several interior spaces in order to assess the element of space in significant

buildings more thoroughly than in previous works (e.g., Ragsdale 2011). Since shopping malls illustrate directional space especially well, they will also be included.

In this volume, the exterior designed spaces which will be examined include parks and gardens, national parks, zoological gardens and parks, amusement parks, battlefield memorials, and national cemeteries. In examining these designed spaces as visual persuasion, the typical approach will be the elemental one, with semiotic analysis when it is called for by the particular space. Next, however, a fundamentally important issue must be addressed. This issue is the nature of the response to a visually persuasive stimulus. As reported earlier, visual images may be used as supporting materials for a verbal proposition, and in this way they function just like facts, statistics, and examples do in verbal persuasion. It is not clear, however, just what the response is to a visual image standing on its own and the extent to which that response can legitimately be called a persuasive one.

The central outcomes of verbal persuasion are attitude change and behavior change. As noted previously, little consideration has been given to the outcomes of visual persuasion when it is an image standing alone that is the stimulus. In a previous work (Ragsdale 2011), the effects of standalone images were said to be compelling, a term presumably synonymous with attitude or behavior change. To date, the precise meaning of the term compelling has not been rigorously addressed. The reason for this oversight, if you will, is that it is almost self-evident that an image has some effect on the viewer. Think about the contemplation of a Gothic cathedral, a painting such as *La joconde*, a Robert Capa photograph, or a museum building such as the Guggenheim in Manhattan. It would seem hard to imagine a person not being affected by such images. However, it is equally hard to describe just what that effect is.

One would like to think that the images mentioned above are simply beautiful and that beauty, in turn, is persuasive, meaning that beauty is a mediating variable in the process of visual persuasion. There are two immediate problems with this explanation however. The first is that beauty itself is not a term or a response with which everyone agrees. Through the centuries, that which constitutes beauty has varied as well (Eco 2004). The second and more serious problem is that the aesthetic response which beauty evokes may not necessarily be persuasive. As if these two problems were not enough, there is also the lack of any carefully described connection between an aesthetic response and either attitude or behavior change. Ultimately also, there are issues to consider such as whether or not an image that is not beautiful is persuasive and what the visual effect is of

an image which is outright ugly. The first step would seem to be an analysis of just what a persuasive response is. If the simplest response to persuasion is attitude change, then an examination of the nature of an attitude is the proper beginning point.

In the middle of the 20<sup>th</sup> century, the psychologist Charles Osgood and his associates developed a measuring instrument called the semantic differential (Osgood, Suci, and Tannenbaum 1957). Although initially intended to explore the nature of meaning, the semantic differential came to be widely used to measure a large variety of psychological and linguistic variables including attitude. The instrument is a simple list of bipolar adjectives separated by seven-point scales used to measure the closeness of a test taker's response to one end or the other of the scale and with respect to a particular word, behavior, or concept such as cigarette smoking. It turns out that the adjectives represent the underlying dimensions of the connotative meaning of, say, cigarette smoking. Not all bipolar pairs go together, which is to say that connotative meaning is a multidimensional concept. "Good" and "bad," for example, measure the same thing as "positive" and "negative." However, "hot" and "cold" and "strong" and "weak" are not in the same semantic universe.

Interestingly, one factor emerged as a recurring element of meaning as well as the factor accounting for most of the error variance in each case. That factor was labeled the evaluative factor, since it was characterized by such bipolar adjective pairs as "good" and "bad." In simple terms, the research of Osgood and associates showed that virtually all responses on the semantic differential included a large amount of evaluation. We either like things or we don't. How, then, is this finding related to our concern with the nature of an attitude? The answer turns out to be quite simple: an attitude is itself a predisposition to react to something in a positive or negative way (Gass and Seiter 2014). Humans seem to have attitudes about everything!

It is necessary, then, to describe part of the response to an isolated visual image, i.e., one that is not obviously being used as a warrant to support a claim, as an evaluative one. We may well see a cathedral such as Notre-Dame de Paris as evidence of the power of the Church, but we do not have to do so to respond to it as a persuasive message. Its design elements alone affect our attitudes. These effects may not be the same for each viewer. Some may not find a view of Notre-Dame to be negative rather than positive, but the result of the viewing is an attitudinal one nonetheless. This view suggests that the attitudinal response is not necessarily one mediated by the aesthetic one. The two responses may be separate or overlapping, and one may indeed mediate the other for some