

EXEDRA: FORM AND FUNCTION IN THE LANDSCAPE

A Thesis

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Master of Landscape Architecture

in

The School of Landscape Architecture

by

Daniel W. McElmurray  
B.A., Clemson University, 1989  
M.C.R.P., Clemson University, 1991  
December 2003

This thesis is dedicated to Jeffrey J. Hamilton.

## TABLE OF CONTENTS

DEDICATION .....	ii
LIST OF FIGURES .....	iii
ABSTRACT .....	v
CHAPTER	
1. INTRODUCTION .....	1
2. EXAMPLES OF FORM AND FUNCTION .....	4
3. EMOTIONAL FACTORS IN EXEDRA DESIGN .....	22
4. GUIDELINES FOR DESIGN DEVELOPMENT.....	29
5. CONCLUSIONS AND RECOMMENDATIONS .....	45
WORKS CITED .....	49
WORKS CONSULTED .....	55
VITA .....	57

## LIST OF FIGURES

1. Freestanding Exedra, Rome, Italy .....	2
2. Exedra at Parc André Citroën, Paris, France .....	7
3. Monier Sepulcher, Père Lachaise Cemetery, Paris, France .....	8
4. View through Exedra at House of Faun, Pompeii, Italy .....	10
5. View of Exedra, House of Faun, Pompeii, Italy .....	11
6. Children’s Exedra, Ben Franklin Elementary, New Orleans, Louisiana .....	13
7. Balhaus Exedra, Prague, Czech Republic .....	15
8. Pathway Exedra, Portofino, Italy .....	16
9. Hedge Exedra, Villa Lante, Italy .....	18
10. Market of Trajan, Rome, Italy .....	19
11. Piazza d’Italia, New Orleans, Louisiana .....	20
12. Exedra, Heidelberg, Germany .....	31
13. Blue Exedra, Pompeii, Italy .....	33
14. Exedra Arcade, Villa Gamberaia, Italy .....	34
15. Exedra with Fountain, Malers, Switzerland .....	35
16. Exedra and Mosaic Paving, Villa d’Este, Tivoli, Italy .....	36
17. Exedra, Chatsworth House, Derbyshire, England .....	38
18. Frescos, Villa Lante, Bagnaia, Italy .....	41
19. Small Sunken Park near Picasso Museum, Paris, France .....	42

## **ABSTRACT**

This study resulted in the development of design guidelines used to create a contemporary exedra, in relationship to commemoration in the landscape. Through research and field investigation, an assessment of forms, materials, uses and locational characteristics of the exedra provides an understanding of the dynamics of the relationships between the elements of the exedra. By understanding the historical and commemorative nature of the exedra, landscape architects can utilize the form to create freestanding or structurally-integrated exedral forms as a solution to the identified need for the development of human-scale, urban places which commemorate people, places, and events.

## CHAPTER 1. INTRODUCTION

What is the form and function of the exedra in the landscape? The exedra is more than a simple bench; it is a definitive place in the landscape which provides backed seating, interaction with the locational environment. The exedra--through layout design, bench form, commemorative features and decorative elements--is a place which stimulates conversation between strangers and energizes the urban experience. Relatively small in size compared to its surroundings, the exedra encourages a higher level of public intimacy and interaction than can normally be found in typical streetscapes. The exedra can also be defined by its purpose through the three actions which it promotes: observation, conversation, and commemoration.

Form, materials, use and location were initially researched in order to understand the dynamics of the relationships between the elements of the exedra. This information was combined with the understanding gained through field research in both Europe and the United States.

The analyzed research results illuminate how the inherent relationships between the elements of the exedra can provide a design framework to create a contemporary form and function, especially in relationship to the commemoration process in the modern landscape.

### 1.1. Importance to Landscape Designers

Why is the exedra important to landscape designers? Criticism of contemporary commemorative design often focuses on the lack of design details, few considerations for personal comforts, and a lack of structural dialogue with their surroundings. These bland and meaningless memorials have not been designed to create conversation; by being built oversized or irrelevant to human proportions, the visitor loses the sense of importance of the very persons or events which are being commemorated. These monuments then lose their value to the community because they are removed from the daily experience of life.

Exedrae were traditionally small scale, pedestrian spaces used in the urban environment to provide a public place of private conversation or memorialization through design elements and ritual. The contemporary exedra can provide the landscape designer with a form of commemoration with proven historical validity, providing a functional memorial built at a human scale within the existing urban fabric with ample consideration for creating intimate public discussions. The exedra has evolved from a commemorative burial place, which urbanized and energized early cities, into a sculptural form used without understanding of its reliance on contextual relationships and conversational purpose. By integrating the exedra with its environmental and commemorative aspects, the designer can provide a solid base for education of future urban dwellers of important people and events in their past.

Contemporary designers may need to better understand the dynamics of the exedra and its reliance on the street for its purpose; the exedra is often considered merely an architectural element used to dramatize a particular garden area or to serve as a tombstone in a cemetery. Unfortunately, the concept of a modern memorial which relates directly to the people and places of its environment is difficult to formulate for many

designers; however, through historical research and consideration of traditional elements, the concept of the exedra can be used to provide a dynamic and appropriate urban place.

Admittedly, technology has provided faster communication and a sense of connection between people around the world; to their detriment, the urban dweller is not often provided a place in which they can physically meet other people in the urban landscape. Without the necessary guidance that design forms and features can provide, many urban dwellers may not know or have experienced suitable means of public interaction with other people. The exedra is important to designers because it provides this proven place in which design elements and features provide the means of getting strangers to talk to each other, thereby enhancing their quality of life and providing a more positive urban experience.

## 1.2. Definition of the Term Exedra

The first step in understanding the relational aspects of the exedra form is to define the term itself. A specific and easily identifiable place for small groups in the urban landscape, the successful exedra characteristically serves a flexible purpose and has a strong contextual relationship with its environment. The form can be classified into two main groups, freestanding and integrated, which are linked by their common purpose: to serve as aesthetically enhanced conversational places with seating provided for small groups.



Figure 1. Freestanding Exedra, Rome, Italy

Of Greek origin, the term when broken down into *ex* and *hedra* simply means exterior seat (Smith 480). Applied for thousands of years, the term first appeared, according to the Merriam-Webster On-line Dictionary, in English dictionaries in 1706 AD and was used to describe both “a room for conversation formed by an open or columned recess often semicircular in shape and furnished with seats” (Exedra), as well as “a large outdoor nearly semicircular seat with a solid back” (Exedra). In addition, the rarely used term *exedrium* occurs (Smith 480) to denote a small integrated form. The obsolete variant *proexhedra* was used by Heroditus to describe a large white marble exedra built on a promontory of Abydos by Xerxes to utilize while reviewing his troops (Daremberg 881).

Made of durable materials such as locally quarried stone, marble, and brick, the Greco-Roman exedra included decoration as an integral feature. Design of the exedra provided the opportunity for a flexible expression of imagination by the owner and architect (Daremberg 881). Elements which were used as architectural enhancements include busts, altars, statuary, columns with elaborate capitals, painted wall murals, frescoes, decorative mosaic floors, elaborately carved panels, painted surfaces, and carved inscriptions (Daremberg 881).

The integrated exedra in Mediterranean architecture was typically constructed as an open, three-sided room providing direct physical and visual access to a private courtyard or to a larger public or private room. The freestanding exedra, shown in Figure 1 above, was constructed for public use along a street, such as a sacred way or other public thoroughfares, and in relationship to other larger public areas.

These freestanding exedrae often served as both a memorial and burial location. The decorative quality of freestanding covered or uncovered exedrae attracted passers-by, enticing them to enter and participate in the commemoration of specific persons or actions. The public exedra was most often designed to be entered by stepping up one or more steps. This served two purposes: to remove a visitor from the mud of the street level and to further enhance the sense of entering a separate place.

In The Revival Styles in American Memorial Art, Peggy McDowell and Richard E. Meyer briefly discuss the revival of the exedral form as a commemorative form in the late nineteenth century: “The neoclassical exedra, traditionally a rectangular or semicircular niche with seats, encouraged interaction between environment, structure, sculpture, and people” (82). The level of interaction between tangible and intangible elements is what determines the success of the exedra in the landscape: the exedra should remain structurally distinct while being fully integrated into its surroundings, providing an aesthetically and socially stimulating experience.

## CHAPTER 2. EXAMPLES OF FORM AND FUNCTION

Understanding the elemental relationships of the exedra is key to providing appropriate and contextually functional places in the contemporary urban landscape. Each section below details historical examples of variations in the exedral form.

### 2.1. Form: A Large Outdoor Semicircular or Rectangular Seat with a Solid Back

Early exedrae were placed in important locations and were vital to the urbanization of their location—they “helped to energize and transform public space in Greek cities and sanctuaries” (Ratté 182). For example, outside the agora of the ancient Macedonian city of Thasos, a paved street leads past a well-preserved exedra built in 1 AD. Located adjacent to the Odeion and the Court of 100 Flagstones, as well as the nearby Herakleion and the Triumphal Arch of Caracalla, the exedra would have been a popular gathering place for small groups to meet, hold discussions, and to watch the passing traffic (Island). Early exedra were also used in park settings, such as the “rock-cut ship of the Akropolis of Lindos” (Ridgway 14) which is a naturalistic expression carved into the hillside in a reflection of the maritime culture of Rhodes. These exedra used available materials and were suitable for their climate and contextual situation.

In the medieval European garden, the exedra was often created using retaining walls topped with turf for seating rather than stone or brick. The thirteenth to fifteenth century herber was a small enclosed garden of under an acre often within the context of a larger garden; the herber included fragrant herbs and flowers, trees to provide shade, fruit and fragrance, an open grassed lawn area, a fountain, and an exedra for seating (Landsberg 13). This outdoor seat was often shaded by either a fabric covering or well-placed trees. Occasionally, period depictions of the exedra show a hexagon or octagon. The exedra was often used as an outdoor dining area, with tables brought into the exedra (Landsberg 52); this practice originated in Roman culture, where guests were situated within a larger exedra called the *triclinium*.

Other uses for the medieval exedra included holding conversations, seating for “spectators of archery or bowls” (Landsberg 52), and could even “become a cosy corner for an amorous couple, using the exedra as the winged head of a bed” (Landsberg 52). Although some medieval exedra were tiered to include solid seat backing, visitors needing extra support could simply sit on the ground and recline against the retaining seat wall of the exedra. This flexibility allowed for a more effective use of space in the limited and enclosed gardens in which the medieval exedra would be found.

A renewed interest in classical forms during the Italian Renaissance provided the opportunity for the use of exedrae in a variety of settings, both interior and exterior, over several centuries. Primarily relating to the garden, the exedra became less of a place of commemoration and served in a more decorative capacity. Examples of the form, highlighted in the 1986 J.C. Shepherd and G.A. Jellicoe reprint of the 1925 Italian Gardens of the Renaissance, can be found in well-known gardens such as the Belvedere Court of the Vatican, the Villa Pia built for Pope Pius IV, the entry of the Villa Medici at Fiesole, and the gardens of Villa Vicobella near Siena.

The multitude of exedrae found throughout the grounds of the sixteenth century Villa d'Este in Tivoli were personally explored one warm day in June 2000; fortunately, the excitement of discovering exedrae in various situations and stages of restoration was augmented by the experience of the sounds and cooling mists of the multitude of artesian-fed water fountains in operation. Although water was not the focal point of any one exedra, the presence of water is heard and felt throughout the garden exedrae.

Whether located along the streets of the cities of Greece, in a Renaissance Italian villa, or as a setting for the royal court of Prussia, the exedral form provided the ideal format for conversation and observation. Well aware of its flexibility and classical roots, the architect Karl Friedrich Schinkel (1781-1841) was a prolific designer who utilized the exedra in both architecture and landscape to create classically-influenced designs. In Charlottenburg, Schinkel used fourteen exedrae on the ground floor of the main structure of one villa—in rectangular and semicircular form, paired and singular, large and small. Additional exedrae were used as main architectural features of the garden and in the layout of garden areas (Schinkel 36).

Being able to enjoy the surroundings, regardless of the weather, is one of the benefits of having a roof or other overhead shade structure. For one of the Royal Garden Houses at Charlottenhof, Schinkel designed a large semicircular freestanding exedra in counterpoint to the rear façade. This expansive, Roman-scale exedra was designed to accommodate a much larger crowd than the typical exedra. The seatback is a decorated frieze of figural relief, with planted urns placed regularly around the top of the seat wall. A significant feature of this exedra is the semi-circular fabric cover, supported by a central tent pole and radiating out to eight tether poles held in place by reclining statues. The view from within the exedra, across the distorted radial-patterned tile floor and open lawn with fountains, is directed to the columned portico of the Garden House and the domed grandeur of the main palace beyond.

McDowell and Meyer briefly discuss the revival of the exedra as a commemorative form in the late nineteenth century. They discuss the work of August Saint-Gaudens, Daniel Chester French, Stanford White and Bruce Price, in terms of the various exedrae that these men designed for various families and important contemporaries. Many of the designs discussed were created for New York's Central Park and Madison Square, various locations in the District of Columbia, cemeteries and battlefield parks. Other typical exedra built during this revival period include a 1900 monument to the founder of homeopathy, Samuel Hahnemann, in the District of Columbia; and the 1910 Plaza de la Patria in honor of Benito Juárez in Aguascalientes, Mexico.

At the 1915 San Diego Panama-California Exposition, one of the features of the botanical gardens was a simple exedra at the west side of the formal gardens (San Diego). Designed by landscape architects John C. Olmsted and Frederick Law Olmsted, Jr., the interior of the exedra was reached by stepping up three risers; two Doric columns created a central entry feature, with six additional square columns supporting an open lattice overhead screen. From the photographic record, it is difficult to discern any decorative artwork other than the stone clad corner columns. There are pedestals on either end of the three steps, suitable for placement of an ornamental piece. The lack of ornamentation likely reflected a quiet response

to the blended architectural styles of Indian, Mission, Pueblo, Neo-Classical and Spanish Baroque found in the city of San Diego (San Diego). The view from the west exedra included the entire length and entry to the glassed botanical exposition hall and the central walk from the dining court. From this vantage point, visitors to the exedra could watch other exposition attendees enjoy the formal gardens and flow between venues. Unfortunately, the bench seating shown in old postcards provided limited capacity and would have needed to have been supplemented by additional chairs or benches to create a more conducive environment for conversation and camaraderie.

Similar in climate to Italy, southern California is quite suitable for the use of the outdoor exedra. Based on the Italian villa Vicobella and a resurgent interest of designers in Classicism, Florence Yoch successfully designed the hillside estate of Mary Stewart in 1922 (Yoch 32). A set designer and landscape architect in California, Yoch designed the multi-level formal gardens and used the “architectural features of the upper terrace to frame the splendid views” (Yoch 33). The strongly vertical exedra provides an immediate focal point for entering the upper terrace, framed by the mountains of Montecito in the far distance. The exedra is ornamented by decorative and planted urns, a cornice, pilasters, and a large keystone feature. The seating area is located within an arched recess; from the interior, visitors face across the garden and central fountain to the vast expanse of the Pacific Ocean (Yoch 33-34).

James Yoch related that his aunt felt she had learned a lesson in the functional relationships of the exedra due to the disproportionate scale and layout she used in the Mrs. David E. Park Garden in Montecito. Here, Yoch took the Classical idea of the exedra as a room for conversation and expanded upon the idea. She created a large outdoor room with six stucco columns, an implied vine covering, and a large central square fountain as the focal point within the exedra. The hard benches do not face each other, nor do they promote a conversational relationship among exedra visitors. The minimalist treatment and lack of elemental relationships make this more of an open air courtyard rather than an exedra (Yoch 122). In spite of this disappointing garden, most often Yoch tried to make “public places seem intimate, useful and friendly” (Yoch 140).

One of the most accommodating public parks in Paris is the Parc André Citroën, designed by landscape architects Gilles Clément and Allain Provost; the actual experience of being inside the park exceeds the intent of the designers which “concentrates on landscape, ranging from the formal to the very nearly wild” (Ellis 62). One area of the park is of particular interest in terms of the exedra ( Figure 2 below); the Serial Gardens include a raised walkway overlooking six thematic gardens, water ramps and several small greenhouses. As shown in Figure 2 below, each greenhouse is entered through an exedra, where park visitors can sit in sun or shade, listen to hidden water falling, and watch the passing foot traffic. In contrast to the detrimental effect of scale and proportion in Yoch’s residential design of the Mrs. David E. Park Garden, the minimalistic exedra of the large and visually stimulating Parc André Citroën needs no distracting decorative elements. The experience of the exedrae’s remote and protective quality offers a tranquil contrast to the wide open central lawn which teemed with life during our visit on a sunny summer day.



Figure 2. Exedra at Parc André Citroën, Paris, France

Creating a sense of enclosure and definition of spatial boundaries by using seating with backing is one of the major characteristics of the exedra. In the Smith & Hawken trade sales catalog for 2000, the company offered the Chadwick Bench; although the company does not use the term exedra, the catalog description provides many of the design characteristics which make the urban exedra successful. “Placed singly or arranged in groups, the gently curving Chadwick Bench provides a design solution in countless architectural and landscape settings. Designers have specified the Chadwick to round corners and soften rectilinear spaces” (Smith & Hawken). The catalog description goes further with, “Paired lengthwise, they

form an ample semicircle; facing one another, an enclosure is created” (Smith & Hawken). The most simple form of the exedra is often the most powerful; a large outdoor semicircular or rectangular seat with a solid back provides a definitive framework for a variety of experiences.

## 2.2. Function: Honorific Monuments

The exedra is much more than just a bench forming an enclosure in a visually-stimulating location; it is an opportunity for commemoration of persons and deeds. The form was taken advantage of by early



Figure 3. Monier Sepulcher, Père Lachaise Cemetery, Paris, France

architects to bring life to the grave and to promote “[. . .] active memory perpetuation” (Davies 51). A large number of exedrae have been discovered in both sacred and civic spaces, such as sanctuaries for the gods Asklepios and Apollo, along the Sacred Way to Delphi, and in the agora at Priene (Ratté 182). These early exedrae were multi-functional places “as honorific monuments, votive offerings, and ringside seats for important processions and festivals” (Ratté 182).

Freestanding exedrae often were memorials to community members, strategically located along public thoroughfares. These ancient commemorations were carved with sculptural decoration to capture the attention of passersby and to provide an inviting place for the weary to come in and rest. Memorial spaces were often provided by the civil authorities. One example of this can be found in Pompeii, documented in the translated inscription, “To Mamia, daughter of Publius Mamius, City Priestess. Gravesite given by decree of the Town Council” around the seatback of an exedra still existing on the Street of the Tombs outside the Herculanean Gate (Pompeii). Eventually, roadside burials were grouped into cemeteries, which in themselves became a combination of sacred and public places; one such place is Père Lachaise Cemetery in Paris shown in Figure 3 above, where the remains of many notable people are honored with memorials similar in form to roadside exedra.

In the freestanding Greco-Roman exedra, it was the duty of the visitor to take time to reflect on the exedra’s memorial nature and the deceased it honored (Davies 101). McDowell and Meyer note that “John Francis Stanley observed in 1912 that the ancient Greeks employed the design because of its practical nature, which provided seats for individuals attending commemorative rituals for the dead [at that site]” (McDowell 81-82). Exedrae, in this sense, were both sacred and civic places. “Like the Greeks, the Romans often built exedrae along roadsides where funerary shrines were accessible and readily observable” (82).

Additionally, the Romans frequently combined the configuration with an altar or table for burial feasts” (80-2). Altars provided a place for votives or other offerings while serving an additional commemorative purpose, such as honoring the person responsible for building the exedra or undertaking other civic-minded actions (Votive). The “intricate sculptural decoration [. . .] could provoke interest in the beholder, engaging his attention as it forced his eye to roam over cuts in the stone, and experience lively movements of light and shadow, especially during nocturnal rites by the light of flickering lamps” (Davies 51).

In the historic exedra, suitable decorative elements included commemorative columns, altars, tables, vases, planters, sculptural friezes, statuary, painted walls, vaulted or painted ceilings, and mosaic floors. Moveable tables were brought in for dining or other activities, and water provided either a focal point, a cooling mist, or the pleasant sound of moving water within the exedra. In a private setting, a higher level of impermanent ornamentation can occur; in contemporary public settings, decorative features are limited to more permanent methods of installation for maintenance and security reasons.

Like many Renaissance and revivalist exedrae, the 1734 Temple of British Worthies at Stowe in Buckingham, England, is not used to house the remains of any persons. Designed by William Kent, it takes

its name from the eight busts of notable British authors, which were relocated from the side of a garden building and increased in number to sixteen. The Temple does not provide seating for its visitors but instead has three risers on which visitors can stand at suitable heights to view the busts and inscriptions (Temple).

A contemporary example, also tied to literary roots, is the winning design for the Veterans Memorial Park in West Hollywood, California. The design combines poetry and landscape architecture; located at the junction of Santa Monica Boulevard and Holloway Drive, the exedra “[. . .] functions as a landmark along the city’s major boulevard [. . .] becoming] a virtual stage, with the use of walls and earthwork for structure and setting, water for sound, a wreath of laurel trees for visual screening, and inscribed poetry to set the mood” (Hammett).

The designer, Doug Campbell, ASLA, even alludes to one of the most compelling aspects of the exedra, the pageantry of the streetscape. “‘There is much theatricality, illusion as well as actual separation.’ That separation creates a refuge from the boulevard, a more pedestrian- and event-oriented place” (Hammett). Rather than stepping up from the street, visitors step down into the memorial, following a tile mosaic linking the upper fountain with the lower pool of a water wall. The seating is simple, and visitors can participate in an intergenerational dialogue between “[. . .] an anthology of works by such poets as Walt Whitman, Emily Dickinson, Gwendolyn Brooks, and Yusef Komunyakaa, [which] allows disparate voices



Figure 4. View through Exedra at House of Faun , Pompeii, Italy

to come together, across time and experience” (Hammett). The design does not single “[. . .] out a particular conflict” but instead is supposed to signify all aspects of “military life” (Hammett).

### **2.3. Function and Form: A Room for Conversation Formed by an Open or Columned Recess**

Historically, when used in domestic living, exedrae were considered extensions of the garden into the house and were decorated with garden scenes and mythical imagery. Semicircular or rectangular in shape and furnished with seats, interior and well-protected exedrae had more elaborate decorations, including



Figure 5. View of Exedra, House of Faun, Pompeii, Italy

painted walls, vaulted or painted ceilings, and mosaic floors (Alexander). In a typical Roman house or villa, “the exedra was a large, elegant room usually located off the peristyle garden. It was used for formal entertainments and lavish dinner parties” (McManus). Guests would have flowed easily between the conversations being held in the exedra, the horticultural interests found in the *peristylum* (colonnaded garden), and the culinary presentation in the *triclinium* or dining room (McManus).

In the House of Faun in Pompeii, the exedra is found in the more private section of the house, and would have been used much like a modern parlor: for conversations among the wealthy Romans (Palazzo) and to provide “a place where they could relax and entertain special guests” (Spaeth). Although the mosaic tile floor has been relocated to Naples and the roof of the villa has not been reconstructed, as shown in Figures 4 and 5 above, the House of Faun exedra is still easily understood as a dynamic place between the two peristyle gardens.

The Canopus of Hadrian’s Villa was an elaborate and large exedra at the terminus of a large pool in the Stadium complex; most likely used for banquets, the exedra was accessed through four immense Ionic columns and featured a vaulted semi-domed ceiling (Littlewood). A small pool was centrally located and niches for sculpture and artwork located around the perimeter of the exedra above a wide ledge, used for holding serving dishes (Ricotti 172). The small pool is a typical feature of larger exedra when used for dining, as Romans customarily washed their feet before dining (Ricotti 173).

Serving a more public purpose, the east and west exedrae found in the Great Temple of Petra are strategically located in the transition area between the lower court and the forecourt of the temple proper. Activity across the length and breadth of the lower court and traffic up the twelve stairs to the forecourt would have been visually accessible for the visitors to the exedra; private conversations could continue while observing the interactive patterns of other temple visitors (Petra).

#### **2.4. Function: A Place of Education**

Often integral features of the portico of the gymnasium, exedrae have a long association with learned persons and can be associated with the roots of early university education. “It [the exedra] was furnished with seats on which the philosophers usually sat to talk with their disciples” (Seyffert 232). “Exedra, which properly signifies a seat out of doors, came to be used for a chamber furnished with seats, and opening into a portico, where people met to enjoy conversation; [ . . . ], which were used for the lectures and disputations of the rhetoricians and philosophers” (Smith 480). Vitruvius discussed, in his first century BC text on architecture, the layout of the square or oblong Greek palaestrae, which combined bath facilities with areas for physical sports such as wrestling, as well as provided at least three exedrae with seats where those “who delight in study, may sit and dispute” (Vitruvius). In at least one instance in Pompeii, such an exedra was given the designation of “schola” (Daremberg 883) to distinguish its location as a place of scholarly discussion.

In 389 BC Plato founded the Academy in Athens, the institution often described as the first European university. It provided a comprehensive curriculum, including such subjects as astronomy, biology, mathematics, political theory, and philosophy. Instruction took place in a park-like setting, with discussions held in exedrae scattered throughout the Academy grounds (Plato). The Platonic influence can be observed in Thomas Jefferson’s incorporation of the exedral form into Pavilion IX in his 1817 design of the University of Virginia, used as a means of encouraging interaction and discourse between teachers and students (UVA).

The symbolic association of education with the exedra continues to exist. In Baton Rouge, a 1994 memorial by W.D. Hopen entitled “Dialogue of the Heart” was constructed at Catholic High School for the Brothers of the Sacred Heart (Smithsonian). At Benjamin Franklin Elementary School in New Orleans, the schoolchildren enjoy recreational and educational activities in their exedra which is located in the front garden of their school on South Carrollton Avenue, shown below in Figure 6.

Virtual exedrae exist, where websites such as the Exedra Tironum provide a forum for essays, lectures and links to a wide range of information, including Latin, medicine, church lore, history, geography, culture, and mythology (Exedra tironum).



Figure 6. Children’s Exedra, Ben Franklin Elementary, New Orleans, Louisiana

## 2.5. Function: A Throne

An interesting story relates the use of the exedral form in Egypt as both a casual place of observation and one of great power. Passed along as “The Story of Sinuhe,” the importance of the exedra as a meeting place and a place of reception is highlighted by this classical Egyptian traveler’s tale which began circulating circa 1800 BC (Texts). Returning from exile, the merchant Sinuhe came back to Egypt from Syria, was well-received at the border, and made his way to the royal palace. There, after his arrival,

When dawn had broken, very early, they came and summoned me, ten men coming and ten men going, to escort me to the Palace. Between the Sphinxes, I put my forehead to the ground, as the Royal Children waited in an exedra to meet me. The courtiers who are Ushers into the Audience Hall sent me on to the Private Chambers, where I found his Majesty on the Great Throne in an exedra of fine gold. When I stretched out on my belly, in his presence I did not know myself, though this God greeted me pleasantly - I was like a man caught in the dark, my soul departed, my body was powerless, my heart was not in my body to tell me life from death (Texts).

The story further relates how Sinuhe was then invited to speak with the Pharaoh and was warmly welcomed back as a noble in the Pharaoh’s court.

Located in the Western Hemisphere, the monumental architecture in Chan Chan, Peru, included the multi-functional *audiencias*. These U-shaped architectural forms in some instances served as burial locations; “often, but not always, the audiencias are associated with contiguous rooms thought to have been storerooms and are located in such a manner that anyone wishing to gain access to these rooms would have to pass in front of one or more audiencias. [. . .]; the hypothesis [is] that the audiencias were administrative offices of persons” (Keatinge 204) in charge of the storerooms. Whether found in more urban or rural context, “[. . .] the *audiencia* seems to represent a symbol of state authority and administration” (Keatinge 204). As an exedra, the *audiencia* form provides an interesting twist to the general exedral form which is most often found to be twice as wide as it is deep; in contrast, the *audiencia* is twice as deep as it is wide. This created an enclosed space much more removed from its surroundings and focused attention on the person in charge.

## 2.6. Form: A Simple Rectangular or Semicircular Recess

In the Roman suburb of Prima Porta, excavations of the villa of the Empress Livia unearthed two *cubicula*, or bedrooms, south of the atrium facing the small *peristylum*. Between the two *cubicula* there is a small open room, an exedra, which would have provided additional necessary living space for the residents of the villa (Cubicula).

In Prague, at the Balhaus overlooking the city, the windows were designed within an external recess with seating provided in the interior space created. Shown in Figure 7 below, the simple rectangular recesses are ornamented with frescoes and provide the user with a shaded observation point for activity in the garden as well as interior visual access.



Figure 7. Balhaus Exedra, Prague, Czech Republic

Not all simple recesses are associated with a particular building. On the pedestrian pathway to Portofino, Italy, a simple oblong indentation in the retaining wall is shown in Figure 8 below. It is furnished with a long bench which provides a welcome place for the foot-weary traveler to rest after the strenuous ascent, or can serve as a destination for a quiet bag lunch for residents and visitors alike.

Making the urban pedestrian experience more accessible and enjoyable, Portugal has “[. . .], in recent years, turned its attention to the creation of new urban parks in the mode of the great urban parks of the nineteenth century. [. . .] The latest of these new parks to be constructed is the Park of Almada, located in



Figure 8. Pathway Exedra, Portofino, Italy

the city of Almada across the Tagus River from Lisbon” (Miller 28). At the heart of the park is a sacred precinct, where large earth berms enclose a wide expanse of quiet lawn and fountains. Prior to entering the sacred precinct is a more traditional exedra which the designer calls “contemplation nodes” (Miller 32), providing a small seating area just one step up from the main pathway. Other rectangular recesses from the main path provide simple stone seating and the opportunity to observe the passing foot traffic and the pastoral scenery.

### **2.7. Form: A Porch or Chapel Projecting from a Larger Building**

The Greek term *lesche* would have been used for a porch or chapel projecting from a larger building; an example of such a place was found at in Thasos on “one side of the temple of Herakles at the foot of the Akropolis. The building was used for public display of official documents” (Ridgway 25). Among the Romans the word exedra had a wider meaning, answering to both the Greek terms, exedra and lesche. “Thus it is not only used to signify a chamber for ordinary resort and conversation in a private house, or in the public baths and gymnasia open to the sun and the air, [ . . . ]; but the word is even applied to the hall attached to the theatre of Pompey, which was used as a place of meeting by the [Roman] senate” (Smith 480). On the Ides of March in 44 B.C.E. Julius Caesar was assassinated within this exedra (Daremborg).

In the Fourth Book of Andrea Palladio, the description of the Temple of Jupiter includes a plan indicating the temple utilized a double row of Ionic inner and Corinthian outer columns flanking the central chambers of the sacred space on three sides. The terminus of the main chamber is a chapel which is a semicircular exedra with four semicircular and three rectangular niches, with eight small decorative columns interspersed among the niches (Ware 92).

## **2.8. Form: The Space Between the Buttresses of a Large Church or Cathedral**

“Exedrae enabled the Late Antique and Byz. [Byzantium] architect to transform a square, rectangular, or polygonal plan into a single volume of space unified around a central, vertical axis” (Kazhdan 769). Whether as an interior sacred or secular space, an exedra can also be defined as “any room, semicircular or rectangular in plan, that opens full-width onto an adjacent larger space or room, covered or uncovered” (Kazhdan 769). Originally called the Great Church, the Hagia Sophia in Istanbul, is an early Christian temple completed in 537 BC which utilizes small decorative exedrae around the central chamber; the large flanking columns of the exedrae provide support for the domed roof as well as define these intimate places for conversation (Sophia). “Eusebios of Caesarea noted their presence at the basilica in Tyre, the Octagon at Antioch, and the Constantinian Martyrion in Jerusalem. [. . .]; Exedrae like these, open only to the central room, flanked the Octagon in the Palace of Galerius, Thessalonike, and several Constantinopolitan palaces” (Kazhdan 769).

## **2.9. Form: A Defining Architectural Form**

The exedra can be a defining architectural form, which lends its shape to a larger structure or collection of spaces. In the landscape, the exedra can be defined by using plants. Trimmed into semicircular hedges, the arched arcade of the Villa Gamberaia in Tuscany is the defining terminus of the reflecting pool and serves as an interested frame through which the garden can be viewed. Other examples of Italian topiary exedra include the termination of the seventeenth century garden axis of Cetinale near Siena, the formed hedges of the late seventeenth century Villa Marlia near Lucca, the formed hedges and benches of Villa Lante in Bagnaia shown below in Figure 9, and the early nineteenth century hedges of the Collegio Rosa at Spello (Shepherd and Jellicoe).

A building or large memorial feature can be designed as a large scale, semicircular exedral form. For instance, the Market of Trajan in Rome shown below in Figure 10 is a “complex of shops and offices on the natural slope of the Quirinal Hill [which] overlooks the [Roman] Forum. Originally across from the Forum of Trajan, it was located behind the exedra of a courtyard in that forum and was itself designed as an exedra” (Sullivan).

Designed by Apollodorus of Damascus in circa 110-112 AD, the Markets “[. . .] were three levels of shops, the lower level opening up to the hemispherical façade, the second level opening into the interior where there was a large vaulted indoor market hall, and the third level (set back) opening at the rear to a

street above on the hill” (Sullivan). The form of this Market is still a significant contribution in the urban landscape around the ancient Roman forum; on the day we visited the area, the grounds in front of the Market were being set up for an outdoor summer concert.

Another Roman instance of the use of the exedra over the course of several generations relating to markets is found at the Piazza Dell’Esedra, the local name for the Piazza della Repubblica. Defined by the exedral form of the Baths of Diocletian and rebuilt on existing foundations by G. Koch, 1896-1902, the piazza served as location for a meat market on Thursdays and Fridays from the 17th to 19th centuries (Cigola).

Another type of market that the exedral form was suitable for defining was prostitution. A Byzantine brothel was unearthed during “[. . .] excavations at Bet She’an, ancient Scythopolis, capital of Palestina Prima. [. . .]; each half of the exedra comprised six trapezoidal rooms with front doors. Some of these rooms also opened onto a corridor or a hall at the back of the building” (Dauphin). The prostitutes recruited from passers-by and the Byzantine Baths next door. The rear “[. . .] entrance-and-exit system [was] for supposedly ‘respectable clients’” (Dauphin) and would have allowed for a more discreet encounter between client and customer.

A contemporary example of an exedra used as a defining architectural form is the Post-Modernist Piazza d’Italia in New Orleans, Louisiana. This construction was originally intended as an urban expres-



Figure 9. Hedge Exedra, Villa Lante, Italy



Figure 10. Market of Trajan, Rome, Italy

sion of the Italian influence in New Orleans; it is a prime example of the importance of each of the four factors--environment, structure, sculpture and people--to the creation of a successful exedra. The elements and typical features are present; unfortunately, the elements have disproportional, unbalanced relationships to each other and their environment.

The Piazza d'Italia, as shown in Figure 11 below, is not a successful public place; the decorative neon no longer illuminates; the tremendous tiled fountain shaped like Italy is unrecognizable and dangerous when wet; limited and uncomfortable seating discourages visitation; the Piazza faces an empty parking lot rather than being surrounded by the large buildings to which it was scaled to relate; and, is primarily accessed from a secondary road. Most visitors to the Piazza are vagrants and adventurous urban explorers. The Piazza does fulfill one key role of the typical exedra; it commemorates the folly of Charles Moore and is a testament to poor craftsmanship. Fortunately for this modern ruin, in 2003 construction began in the adjacent parking lot for a new hotel structure; the hotel project construction effort includes the restoration of Piazza for use as a courtyard area for the hotel. This will provide context for the Piazza, a steady source of visitors, and a more appropriate memorial to the tremendous influence of Italian-Americans in New Orleans.



Figure 11. Piazza d'Italia, New Orleans, Louisiana

## **2.10. Summary of Implications Based on Historic and Contemporary Examples**

There are numerous implications for the landscape architect to consider when using the exedra as a design tool, based on interpreting the form and function of historical and contemporary examples. To successfully create an exedra for contemporary use in the urban streetscape, the design must address the four common factors of the successful exedra which emerged through this research as most important, including: a well-define contextual relationship with the street and adjacent structures; a clear and understandable structure of entry, enclosure, and seating; decorative features to stimulate interest and provide

for commemorative opportunities; and most importantly, considerations for comfort and conversation among pedestrian users.

The first aspect to address is often the commemorative nature of the form; from its early use, the exedra was used as a burial and memorial location for community members and their activities. It served as a valuable location for rituals to be undertaken and as a reminder of the importance of others in the urban community from the collective community past. In this respect, the focus of the contemporary should be on engaging the pedestrian both mentally and physically to promote active memory perpetuation of a person or event (memorialization).

Based on features and elements which worked in urban areas in the past, the modern pedestrian should be lifted off the street by elevating the exedra no more than three steps above the level of the sidewalk, thereby creating a viewing stand for the pageantry of the streetscape. As found in historical examples, it is still necessary to provide a suitable seat with seat back or seat wall to provide for user comfort. The shape can be rectilinear, circular, hexagonal, octagonal or other geometric configuration as determined by the site; the scale of the space and the seating orientation should encourage conversation and intimacy among the urban public.

The exedra can be used to round corners and soften rectilinear spaces. The exedra form can also be used to take advantage of the space between support columns. It should use local materials and reflect local culture; this could include using shaped vegetation and architecture to create the exedra. As in medieval Europe, retaining walls can be topped with turf for seating in an outdoor exedra.

The designer can provide shade by using a roof, fabric covering, well-placed trees, arbor or lattice-work in the design; where security is a concern, a measure of privacy can be achieved through permeable fencing or a trellis while providing for safety through dynamic lighting. Designers should consider the exedra an extension of the garden, with thematic embellishment relating to garden scenes and mythical imagery.

Overcoming the lack of embellishment may be one of the most difficult tasks for the landscape designer. Elements must be durable to withstand vandalism and the effects of urban pollution; designers also have to contend with a lack of sufficient craftspeople to recreate historical elements. In this respect, the contemporary exedra can include decorative elements utilizing contemporary durable materials without sacrificing the opportunity to create a visually enriching experience through colored concrete, tile, metal, and other modern materials.

## CHAPTER 3. EMOTIONAL FACTORS IN EXEDRA DESIGN

To evoke emotion through design, landscape architects need to first cultivate an awareness and understanding of these following factors which can create a dynamic and responsive exedra design. Commemoration is only one such reason to design an exedra

Other factors “[. . .] may be the result of historical association and memory. They may be related to the cultural ideas of a particular period or civilisation. They may simply be pleasure in things well made and well cared for — human craftsmanship” (Moggridge 106).

### 3.1. Commemoration of Past Actions and Persons

Providing a connection for urban residents to their predecessors and their actions gives an enhanced understanding of how that particular urban environment developed over time; it gives a sense of continuity, of endurance. “The predisposition to prefer past to present stems from two common but erroneous perceptions. One is the tendency to recall only what was best and assume it was characteristic [while the] second error is to view past and present as equivalent in length and hence in productive capacity, neglecting the fact” (Lowenthal *Revisiting* 93) that the present is generally considered within the narrow range of thirty years while the past is a conglomeration of hundreds of years.

However, an “awareness of the past is essential to the maintenance of purpose in life. Without it we would lack all sense of continuity, all apprehension of causality, all knowledge of our own identity” (Lowenthal *Age* 103). “The past we know is our experience is not what actually happened; it is contingent on our own views, our own perspectives, our own present” (Lowenthal *Revisiting* 91). Future urban dwellers are dependent on the people in the present to provide adequate and appropriate commemoration of important people and actions. “What we know of history differs from what actually happened not merely because evidence of past events has been lost or tampered with, or because the task of sifting through it is unending, but also because the changing present continually requires new interpretations of what has taken place” (Lowenthal *Age* 103).

As a culture, we rely on plaques and mounuments to help us remember. Katherine Melcher, in her critique of the built landscape of the Oklahoma City National Memorial, eloquently states, “We stand back, look, read and understand, but we are no longer directly engaged. By memorializing, we are trying to preserve a living thing—[. . .]—our memory of the event” (135).

### 3.2. The Experience of Landscape

“Landscape architecture is an *experience* over time—’The event,’ as Robert Lowell says of poetry, ‘not a record of an event’” (Krog 375). “Buildings and topographical poems, insofar as they are artworks, clarify experience. They clarify different kinds of experience and encourage us to select different kinds of environmental clues to attend and fuse in the imagination” (Tuan 97-99). “One part of experiencing places, for instance, has to do with changing the way we look at things, diffusing our attention, and also relaxing its

intensity—a change that lets us start to see all the things around us at once and yet also look calmly and steadily at each one of them” (Hiss 35).

There is a “[. . .] firm belief, passed on from generation to generation, that there is and will always be a part of the world remote from the city where we can retreat and find ourselves” (Jackson 225). The exedra can provide such a retreat, with accessibility for the exedra inhabitant to gain a new perspective on the experience of their surrounding landscape. “The finished form of landscape architecture is what we have under our feet and above our heads: the scents, sounds, silence, temperature, and time. It is pleasure, excitement, ecstasy, awe, reverence, incredulousness, fear, melancholy, agitation, disgust; it is the mood of the place” (Krog 375).

Unfortunately, landscape designers often fail to provide the opportunity for personally relevant experience suitable to individual sites. “Although surprise, chance, and ambiguity are central to experience, the landscape architect is distressingly willing to make the landscape obvious and palatable” (Krog 376). Creating the experience of a place requires designers to pay attention to what they are creating. “Landscape architecture, as Coleridge said of poetry, ‘...should be carried forward, not merely or chiefly by the mechanical impulse of curiosity, not by a restless desire to arrive at the final solution, but by the pleasurable activity of the journey itself’” (Krog 376).

Much like poetry, the experience of the urban landscape can be considered a forum in which the story of the city can be expressed in a variety of methods and materials. “A garden path can become the thread of a plot, connecting the moments and incidents into a narrative” (Moore, et al. 35) in the same manner a winding river connects the countryside and a busy major street connects the fabric of the city. “The narrative structure might be a simple chain of events with a beginning, middle, and end. It might be embellished with diversions, digressions, and picaresque twists, to be accompanied by parallel ways (subplots), or deceptively fork into blind alleys like the alternative scenarios explored in a detective novel” (Moore, et al. 35). The exedra can provide that crucial viewpoint from which to experience the landscape narrative.

Equally important to the expression of the landscape narrative is the concept “of the *landscape conversation*: how we discuss our surroundings, the words we use, the manner of our discourse” (Sucher 169-170). “The major task for interpretation in the urban context is the effective guidance of residents and visitors towards opportunities for discovery and experience” (Goodey 29). The implications of providing a programmed place are clear: a design should rely on the context, the experience of place, the action in and around the place, and appropriate provision of information to be considered successful. The physical structure is merely a means to enhance the experience, not a substitute for the experience itself, and should stimulate discussion and interaction by participants.

Landscape architects should design for a more interactive response at physical and mental levels. “Cities that support and emphasize their urban form are increasingly appealing to people making choices about where to live and work. Cities can learn from their suburban counterparts, yet continue to foster their traditional strengths: predictable and coherent architectural rules, mixed uses, sidewalks, grid patterns,

inviting public places, windows, and front porches. These simple elements make places more livable” (Norquist 203).

Unfortunately, as is realized by the gradual removal of the exedra from the streetscape, “form and function rarely coincide for very long in any environment, no matter how conscientiously it may be designed. There eventually occurs what the French term a *décalage* (literally, an unwedging)—a kind of disharmony between the two that calls for remedy” (Jackson 366). One approach to addressing this unwedging is to replace the landscape designer’s dominant aesthetic focused on objects, with one in which the designer’s aesthetic is based on experience of place.

### **3.3. Relationship to Other People**

In the public realm, “[. . .] the great American longing for something more humane, intimate, stable, and satisfying goes on” (Meinig 183). “We are also witnessing through America an increasing boredom, a feeling that life in today’s world has become gray, lacking color, pageantry, and style. The human spirit craves plumage, and we are getting less and less of it as time goes on” (King 198). William H. Whyte, in his essay on the use and patterns of street activity, noted the value of an “[. . .]external stimulus [which] provides a linkage between people and prompts strangers to talk to each other” (Whyte Street 69).

Whyte advocates the creation of highly active streetscapes and public places, where the vitality is renewed by impromptu performances and crowds, as places where people “[. . .] go there by choice, not to escape the city, but to partake of it” (Whyte Street 69). Public use means people; “What attracts people, [. . .] is other people. [. . .]; People like to sit in the mainstream [. . . and] what they rarely choose is the middle of a large space. [. . .]; People tend to sit where there are places to sit [both] [. . .] physically comfortable [and] [. . .] socially comfortable [with] [. . .] a fine view of the theater of the street” (Whyte Street 65-66). “Unlike most other arts, landscape architecture has always known what it is about: the adaptation of the land to the functional demands of human use. Landscape architecture is more social: frequently it strives to accommodate the gregarious” (Krog 375). “A gregarious nature is not simply a peculiar idiosyncrasy of the human race; it is a fundamental part of humanness” (Deasy 32). The human need to be in contact with other people is often exploited without being fully understood by the design professional. “The failure to provide adequately for our urge to get together is not found at the ‘macro’ scale of formal assembly but at the ‘micro’ scale of every day life” (Deasy 32).

### **3.4. The Meaning of Public Use**

Whyte, when speaking of the benefits of public open spaces which people can enjoy, asks “If such places are so felicitous, why are there not more of them? The reason is the ‘undesirables.’ They are not, themselves, much of a problem. The problem is the measures taken to combat them. Many businessmen have an almost obsessive fear that if a place is attractive, it might attract undesirable people” (Whyte Street 69).

By creating places unattractive to one negatively-perceived group of urban dwellers, the rest of the city residents have to suffer the loss of attractive urban spaces as well. “The best way to handle the problem of undesirables is to create an area attractive to everyone else. [Such areas] are probably as safe a place as you can find during the times that people use them” (Whyte Street 69).

### **3.5. Public Groupings**

How many people are necessary to form a successful group? “While groups of eight or more can function well when they are brought together for a common purpose, the informal, self-generated, social groups that might be observed in public places are generally even smaller than this,” (Deasy 33) with a large majority of groups consisting of only two to three persons.

“In relating these facets of informal human behavior to the conventional settings we find in the urban world, it seems fair to say that the design professions and corporate and institutional administrators alike have tended to ignore them or misinterpret them. The need for assembly is usually recognized only in the formal terms of a conference room or assembly hall” (Deasy 34). In Design for Human Affairs, the author notes that “[. . .] these facilities are generally designed to accommodate large groups, which occur infrequently, and are ill-suited to small groups, which occur all the time. It is not a question of challenging the useful social function of large meeting areas, but of recognizing the needs of the much more prevalent small group” (Deasy 34). The author goes further to state that, “If a choice has to be made, it seems clear that the first priority must be assigned to nurturing the small groups that are the natural form of human interaction” (Deasy 34).

### **3.6. The Concept of Placemaking**

In Paula Horrigan’s presentation on placemaking at the 1999 ASLA conference in Boston, she emphasized her belief that “Landscape architects are uniquely poised to provide leadership in designing place-based projects that simultaneously reinforce and enrich social, cultural and environmental relationships” (Horrigan 248). Her first concept of placemaking practice “[. . .] celebrates site and landscape phenomena as generators of form. By integrating the cultural and natural realities of the site it tries to reconnect or enhance relationships between inhabitants and the natural or built environment. Designs relating to the sacred and spiritual, the ecological rhythms of life, the biocultural region and its local and regional patterns reinforce attachment to place” (249). “Great cities weave their urban elements together in a seamless fabric, so that they function for their residents, while also providing them with elements of delight” (Johnson 8).

Other researchers have developed additional criteria for creating a sense of place. “In our search for an understanding of place experience, a search which has led to the analysis of perceptions, behaviours, histories and spatial patterns, we have continually excluded the transitory or deep-seated emotional relationships which may link a person and a place for a second or for a lifetime” (Goodey 23). These emotional

relationships are developed in the exedra by participation in the narrative expression of the streetscape, the commemorative nature of the exedra, and the willing participation of exedra users.

### 3.7. Art in Landscape Architecture

Art in its many forms is crucial to the human experience, providing outlets for expression which define each successive generation. “Works of art, as religious or ceremonial objects, have been part of the urban experience since the earliest cities were established. They remind people of their importance in the community. They remind them of the importance of *others*” (Johnson 8). In answering the question of whether or not landscape architecture is art, the response Steven Krog gives is: “Landscape architecture has a self-proclaimed singular capability to marry art with technology, social and environmental concerns with political and physical reality” (373). He further states that landscape architecture as “a work of art is a product which provides sensory or other stimuli [. . .]; which are felt to be beautiful, pleasant, interesting, or emotionally moving—objects of direct experience” (Krog 373).

However, in his essay on the true purpose of landscapes, J.B. Jackson cautions landscape designers against thinking of the landscape as only a work of art. “But we are *not* spectators; the human landscape is *not* a work of art. It is the temporary product of much sweat and hardship and earnest thought; we should never look at it without remembering that, and we should never tinker with the landscape without thinking of those who live in the midst of it—whether in a trailer in an oil field or in a city tenement” (Jackson 342). There are places in the urban environment that are appropriate for installing work which demands attention; there are many more places for which the design should be focused on creating a contextual relationship within the urban fabric.

In his critique of the current trend in architecture, Learning from Hollywood, Hans Dieter Schaal bluntly states, “Despite styles and fashions that keep reappearing - Post-Modernism, Deconstructivism, etc. - our cities are boring, nerve-deadening in their banality. There is no elegance and no ruined areas, there are no Science Fiction upsurges and no areas of ghostly gloom. Cities have no language. They are silent and monotonous. They are dominated by tautologous one-dimensionality” (122). He goes further, harshly exclaiming the failing of physical urban design in contrast to the flood of engaging images of modern media, saying there is “no excitement, no entertainment, no art, no staging, no questioning, no traps, no dialogue, no superstructure. Even car and clothes design is more exciting than architecture” (Schaal 122).

Why is it so important to have engaging public art? “Art should articulate insights to make actual landscapes more accessible to our understanding” (Penning-Rowse 118). “The important part of public art in public spaces is its larger message: some person, some individual, has passed this way before and has put some of his or her life, time and attention into making what we see before us” (Sucher 157-158). “Art articulates feelings of which we were previously unaware, and these feelings in turn modify the way we think about landscapes” (Penning-Rowse 118). In his landmark works studying the social life of the urban public realm, Whyte indicates we need to give people a reason to communicate to each other, to

experience and form an impression of a positive experience of place. Artistic expression can supply the reason; “Public art functions in one more way: as a conversation piece to foster the casual human exchange that is at the heart of the city’s purpose” (Sucher 158).

### **3.8. The Value of Ambiguity**

Another method of generating a response to the commemorative landscape experience is to provide a certain level of ambiguity. The working elements of the exedra in their definitive form—backed seating, commemoration, sculptural elements, and contextual relationship—do not preclude the use of ambiguity in function. A landscape which receives positive interpretation is “[. . .] one which evokes aesthetic response while also satisfying economic and practical purposes, its multiplicity of uses all co-ordinated with an integrated whole. For this reason single-purpose landscapes, for instance those designed solely for transport, forestry or horticultural display, tend to be unsatisfactory except to the direct beneficiaries. Equally, solely aesthetic purposes rarely outlive changes of taste from one generation to the next” (Morridge 107).

In his Arcosanti project, architect Paolo Soleri utilizes the ambiguous nature of the exedra form. He indicates that the semicircular form defines the place, and with “aspects of garment architecture, [the exedrae] generate spaces between them which are neither indoors nor outdoors, where temperature, light, wind, and rain can be modified” (Soleri). Whether in architecture or the landscape, ambiguity in design function allows the place participant to develop a personal awareness of the experience and provides a flexibility for changing public needs.

Maya Lin, in her controversial design of the Vietnam Veterans Memorial, utilized this concept of functional ambiguity to create a personalized experience that is functionally unique for each visitor, based on their frame of reference; Lin provided clear and concise spatial definition for this experience. Without this clarity of form, the experience of the memorial would not be personal or evoke such strong emotions” (New York 13). Since the introduction of the unique personal experience in memorial design, efforts to define other memorialization processes have become defined in comparison to whether or not the final design should illicit a similar “profound experience” (New York 13) based on the participants’ own perceptions and background.

### **3.9. Summary of Emotional Factors in Exedra Design**

All of these emotional factors, when considered by the landscape designer, can be exploited in a positive manner to create a dynamic commemorative experience which promotes active memory perpetuation of people and events. Creating a place where a small group can sit, hold discussions, with aesthetic embellishments and flexibility in function, provides a distinct place in the urban fabric which will enhance the experience of the landscape over time and create a dialogue between past and future urban dwellers.

The human element can be successfully integrated into exedra design by cultivating an awareness and understanding of several emotional factors, including addressing the need to preserve the urban memory of

events and people, the experience of the landscape over time, and the underlying concept of public use and ownership in a particular urban setting. Without memorials, we have no past; memorials can be found in many forms, but few are as widely available to all types of urban dwellers as commemorative public places.

Key to developing the successful exedra design is understanding how people relate to other people in public settings and into what size groups people naturally congregate. People are the most important element of urban design; the exedra should be designed to attract everyone in the urban environment, allowing them to participate at various levels in the pageantry of the street. People most often gather in public places in groups of two or three rather than in large groups; a small group, rather than a large group, will most likely engage in a meaningful and intimate public conversation if provided impetus such as an exedra in which to do so. The design of place-based projects supports and enhances social, cultural, and environmental relationships that are otherwise lost in overscaled memorials or streetscapes barren of interactive features.

The form and structure of landscape is a temporary composite of function, use, perspective and intangible values, combined to stimulate participants' imagination and evoke response; designers should be constantly aware that form and function as originally intended rarely continue to exist over time. Public art, especially when used in a commemorative capacity, reminds people of the importance of other people, engages the imagination, and has always been part of the urban experience. Ambiguity in function, not in spatial definition, allows maximum flexibility for present and future landscape experiences.

People have a need for creating memorials for several reasons, including the desire to remember a special person or an important event in their life. In both contemporary and historical urban culture, people also have a need to leave a legacy of themselves for future generations; the designer has the opportunity to take advantage of this philanthropic urge and can provide a more personal public place in memorium.

## CHAPTER 4. GUIDELINES FOR DESIGN DEVELOPMENT

To successfully create an exedra for contemporary use in the urban streetscape, the design must include the four factors of the successful exedra, which include: a well-defined contextual relationship with the street and adjacent structures; a clear and understandable structure of entry, enclosure, and seating; decorative features to stimulate interest and provide for commemorative opportunities; and most importantly, considerations for comfort and conversation among pedestrian users. Depending on particular project goals and needs, the exedra as a design tool can provide the opportunity to address and resolve multiple issues in the development of a successful, small-scale public place.

“Landscape designers who would have landscapes change by taking on new meanings have to help make those meanings manifest. [. . .]; stretching meanings opens up possibilities for shifting values” (Eaton 27). The landscape designer should be able to review the design issues discussed below in comparison with those of an individual project; each of these issues can be addressed through the use of the exedral form and function, providing a framework for finding a viable project design solution.

Based on the historical forms and functions of exedrae and the emotional considerations for successful designs in the urban landscape, the guidelines following each issue discussion are recommended for development of the exedra in the public realm with a contemporary form and function.

### 4.1. Environment

The exedra should have a well-defined contextual relationship with the street and adjacent structures. This is especially true in today’s urban environments, where more often there is little provided in terms of positive relationships. The landscape is an experience over time; not simply an attractively drawn two-dimensional plan on paper, but a complex web of personally relevant experiences based on individual sites and contextual relationships.

“To be sympathetic to what came before you as a designer does not mean you cannot add your own interpretation and some of your own personality. [. . .]; the real challenge for us as designers, however, is to reinterpret our world [. . .] to achieve a balance between continuity and evolution, change and growth” (Wells 80). Designs in the urban landscape should reflect the sense of connection to the urban environment. This includes a relationship to the built environment, as well as the natural elements found throughout the city.

How important are precedence and context? Most historical forms in the urban environment, such as the exedra, emerged from centuries of refinement and evolution by use. These elements are sometimes given shape by non-designers with natural talent and a more complete understanding of form and function in their particular environment and civic structure. Landscape architects should be willing to explore historical forms, giving credit to their source of inspiration while remaining confident in their adaptation and treatment of historical forms. “Somewhat surprisingly, landscape architecture tends to deny (or ignore) its own history as a relevant source of information and motivation [. . .]; search as you may, historical allusions

will be scarce” (Krog 374). Perhaps through exploration of precedential forms, designers of landscapes may help bring back some of that sense of connectedness the people of historical cultures seemed to have with their environments--a connection we seemed to have lost.

In most cases, designs are merely pieces of consciously or subconsciously observed relationships between time, space and material reassembled into different associations. “To be sympathetic to what came before you as a designer does not mean you cannot add your own interpretation and some of your own personality. [. . .]; the real challenge for us as designers, however, is to reinterpret our world [. . .] to achieve a balance between continuity and evolution, change and growth” (Wells 80).

Landscapes evoke emotions from human beings, emotions which can be positively exploited to develop relationships between people and the experience of place. According to the Project for Public Spaces, “[. . .] a place is created when sociability, multiple activities, and use intersect with comfort, image, and access. While these are the key attributes, various intangibles—charm, proximity, diversity, and amusements—also exert an important influence” (Hines Part One). There are other “[. . .] measurable factors like traffic data, crime statistics, and property values [. . .] [as well as] the number of women, children, and elderly people gathered in one spot” (Hines Part One). All of these factors, when combined into a functional place, allow identification, imagined interaction, and observation from outside the field of action to create for its inhabitants an urban storyline and forum for interpretation of the urban environment, its people and their actions.

How will this project relate to the street? People are the most important element of urban design; the exedra should be designed to attract everyone in the urban environment, allowing them to participate at various levels in the pageantry of the street. “The area where the street and the plaza, or open space, meet is a key to success or failure. Ideally, the transition should be such that it is hard to tell where one ends and the other begins” (Whyte Street 69). “A setting intended to accommodate floating audience behavior should have certain definite characteristics. It should be adjacent to a concentration of traffic for the greatest exposure. It should be approachable from several sides. It should accommodate a [wide variety of group sizes, achieved by going vertical with seating surfaces]” (Deasy 100).

It may be that the distances involved are proportionally different from those of historic cultures, since we now have automobiles, trucks and buses to contend with in terms of noise, yet still integrated into the complete urban environment. Two contemporary facilities which could easily be designed as an exedra include bus stop stations and information kiosks, two functions which often involve a need for seating. Other appropriate functional locations can be found outside hospital, courthouses, and other areas where there is a great deal of pedestrian traffic and the element of waiting involved. Additionally, exedrae can be used as designated smoking areas, providing a separate and comfortable area for smokers to sit and hold conversations away from the front entrances of buildings.

Are natural elements to be included? “Like a place to sit, the other major elements of a good urban space are basic, and while it might seem a contradiction in terms, they are natural elements. Sun, light,

trees, water—nowhere is nature more important than in cities, where it is so marginal” (Whyte Street 67) In larger cities, it is well-known that the sounds and sights of water are beneficial to its inhabitants; humans have a biological need for water as sustenance. When access to private areas is limited in the urban environment, public use of water is even more important. “In cool and windy climates, you may want to create sunny, sheltered corners in lee of the wind. Where it is warmer, and particularly where the air is clammy and humid, you can create shaded, open-sided, elevated places—pavilions, gazebos, summer houses, and eyries—to capture the breezes.” (Moore, etal. 39)

#### **4.1.1. Guidelines for Taking Advantage of Available Spaces**

Designers can use the exedra to round corners and soften rectilinear spaces, as well as take advantage of the space between support columns in existing or new buildings. This is especially important with modern skyscrapers, which often ignore the potential for pedestrian-scale uses at their base. One of the most readily available sources of public space is found in unused interior space; by knocking out non-structural walls and turning the interior space into an exterior one, the designer can create an exedra with both a roof and an immediate sense of context.



Figure 12. Exedra, Heidelberg, Germany

For new buildings, designers can use the architectural design to create exedrae at the street level. For those small, vacant spaces between buildings, an exedra can be developed to create a continuity in the urban pedestrian experience. For larger open spaces, the freestanding exedra could be used to provide a place for pedestrians to sit within the context of the larger space while enjoying a somewhat protected and elevated position. This could be accomplished by communities and public agencies encouraging such spaces by providing tax or development incentives, in plazas, parks or other public areas.

#### **4.1.2. Guidelines for Accessibility to the Street**

The exedra user must be able to visually participate in the pageantry of the street; likewise, providing the exedra user with that sense of specialness of place requires the pedestrian to be lifted off the level of the street. The maximum elevation should be no more than approximately eighteen inches or three steps above the level of the sidewalk; as shown above in Figure 12, this simple exedra is an elevated viewing stand used to watch pedestrian begin or end the long climb to visit one of Heidelberg's spectacular castle ruins.

Creating this type of viewing stand does not mean the designer should exclude any mobility-challenged user; instead, the creation of a single type of access to elevate all users from the street level in the same manner will create a similar sense of arrival to a special place. The amount of space available can be used to determine the maximum elevation above street level, using ADA standards to ensure accessibility while providing the same sense of entry and movement relating to the exedra.

From another perspective, the exedra must be visually accessible from the street; this provides a sense of security for the users inside the exedra, while providing the necessary impetus for additional visitors to participate in the experience at that time or at a later date.

#### **4.1.3. Guidelines for Addressing Security Issues**

To create a measure of privacy without sacrificing the safety of exedra users, the landscape designer can utilize a permeable fence or a trellis in the exedra rather than a high seat wall. To generate a positive perception of other security issues, the design of the exedra should include decorative safety lighting, a clear and open relationship with the street, and well-secured elements. Security cameras, if utilized, should be inconspicuous and contribute a positive aspect to the enjoyment of the exedra. The most responsible measure which can be taken is to provide preventative maintenance on all exedral elements; if the public perceives the exedra as a well-kept place, they will continue to utilize it.

#### **4.1.4. Guidelines for Designing with Vegetation and Shade**

When designing the exedra, consider the provision of shade by using a fabric covering, well-placed trees, arbor or latticework; as shown in Figure 13 below for the exedra open to southern exposure, shade can also be created by designing the exedra as a roofed structure with a deep enough recess for summer shade that allows winter sun penetration.



Figure 13. Blue Exedra, Pompeii, Italy

The seat wall can double as a planter for turf or other vegetation, including trees and shrubs. Appropriate irrigation and drainage would need to be installed to keep water from collecting on seating. For projects with limited construction budgets, consider using shaped and pruned vegetation to provide spatial definition of the exedra, similar to the topiary hedges of the Villa Lante mentioned above or the arcade of the Villa Gamberaia shown below in Figure 14 . Portable chairs can provide lower cost seating and maximized ability for users to capture sun or shade depending on individual preference.

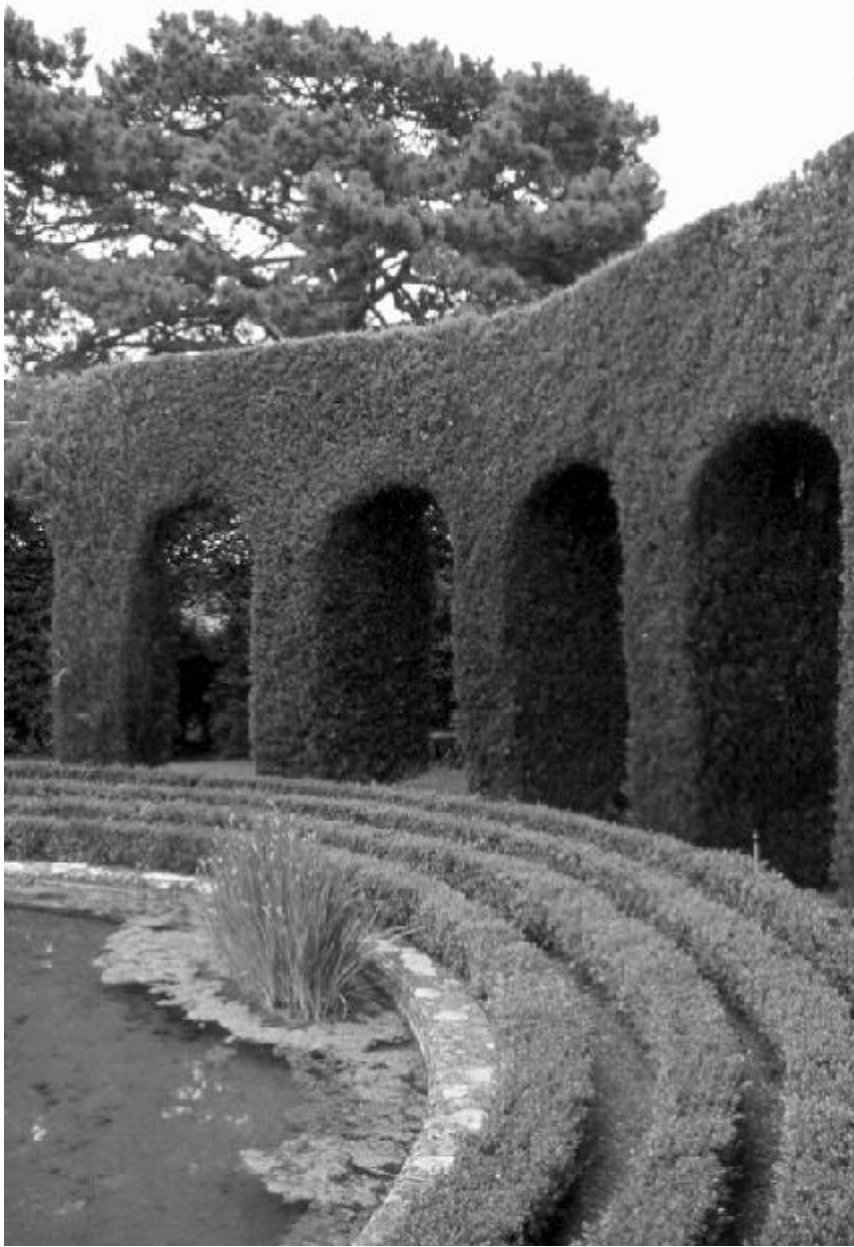


Figure 14. Exedra Arcade, Villa Gamberaia, Italy

#### **4.1.5. Guidelines for Designing with Water**

As a soothing and calming effect, a water feature can be installed as a feature of the exedra. In the example shown in Figure 15 below, the water fountain is the central and dominant feature of this exedra, located at the crossroads in the heart of the town of Malers in Switzerland. Water in fountains and pools can be used to define the entrance, serve as a backdrop, or focal point within the exedra. Use water, especially in hot climates, to attract users into the exedra and then allow them the opportunity to physically engage the water, by either trailing their hand in a small pool or taking off their shoes and cooling their feet in a clear stream of running water



Figure 15. Exedra with Fountain, Malters, Switzerland

**4.2. Structure**

The successful design of the contemporary exedra requires the designer to have a clear and understandable structure of entry, enclosure, and seating. The form and structure of landscape is a temporary composite of function, use, perspective and intangible values, combined to stimulate participants’ imagination and evoke response; designers should be constantly aware that form and function as originally intended rarely continue to exist in harmony in the landscape. Ambiguity in function, not in spatial definition, allows maximum flexibility for present and future landscape experiences.

Is there a need to define a particular space? Whether a freestanding structure or an integral part of a larger structure, the exedra defines its own space, becoming a distinct and separate place with a particular form. In terms of design, “When walls are arranged to form definite enclosures, the space within can be given clarity of shape, proportion, and extent [ . . . ]” (Moore 32). Such an enclosure has a definite boundary, for which “[ . . . ] everything is either inside or outside. The act of drawing a boundary, to distinguish an inner, privileged place from the outer world, carries a special significance” (Moore 33).

What is the scale of the project? Fitting the design to this recognized limitation of self-forming groups is a responsibility of the designer. Working with smaller spaces has many benefits over trying to design large plazas: decreased cost of construction, higher levels of use, lower long-term maintenance costs, and

an easier assumption of ownership by the public. Another “one of the benefits of smaller scale is that conversation is encouraged simply by physical proximity” (Sucher 34).

Will seating be provided? As shown in Figure 16 below, seating is an integral feature of the exedra. “Seats of any kind are an invitation and an announcement: ‘This is a public space. Sit down and give your brain a rest.’ It doesn’t take much. One can create a public realm by simply giving people the opportunity to sit and linger” (Sucher 40). Landscape architects are responsible for providing quality seating in the landscape, “Yet too often benches are sited where no one chooses to sit, or designed such that they are



Figure 16. Exedra and Mosaic Paving, Villa d’Este, Tivoli, Italy

uncomfortable for potential users, or made of materials that are inappropriate to the site, or provided in such excessive numbers that one wonders if the designer has an investment in the bench-making company” (Marcus 128).

Who can sensitively-placed seating benefit? The “[. . .] old man [seen] leaning wearily against a lamp-standard while he waited for a bus outside [the] hospital; residents of a housing scheme for seniors [. . .] who vie with each other to sit on the one short bench at the building entrance where they can watch the passing traffic; [and] students [. . .] who cannot find enough places to sit outside and study” (Marcus 127). Benches with seats at the right height for the intended users are more likely to be utilized than benches on a college campus that “[. . .] are proportioned for grade-school children” (Marcus 127). In most cities where there are ample numbers of tourists, there are few public places for them to sit and absorb the urban environment in a positive manner.

How can this issue of appropriate seating be addressed? It is the duty of “[. . .] landscape architects [to] open their eyes and notice where people sit and where they don’t; that they spend time in public places and learn from experience which kinds of settings are psychologically comfortable and which are not; that they put themselves in the users’ shoes and consider” (Marcus 127) if they are comfortable in their designed space, have they thought about the needs of the users, and whether or not their design makes good sense. It is as simple as remembering that “benches should be generously proportioned and flexibly arranged” (Whyte Street 66) for maximum opportunities for use.

#### **4.2.1. Guidelines for Size**

One of the first issues to address is the amount of available space to determine if an exedra is indeed suitable for the project. Vitruvius recommended the dimensions of the exedra to be twice as wide as deep; if the exedra is roofed, the interior clearance from floor to ceiling should be at least ten feet to maximize the qualities of openness and light. This ratio of height, width and depth also satisfies the preferred proportionality of designed spaces, often called the Golden Mean or Golden Section, which works well regardless of the design style or time period. In the freestanding exedra, this proportion will provide the maximum visibility of both street activity and the interior features and occupants of the exedra.

Illustrated in Figure 17 below is a wonderful example of a proportionately scaled exedra located on the grounds of Chatsworth House in the English countryside of Derbyshire; the small structure can accommodate a group of two to four people within a space which is deep enough to create a physically separate place in the landscape without removing the visitor completely from the visual and auditory experience of the garden meadow directly opposite the path.

#### **4.2.2. Guidelines for Shape**

The shape of the exedra can be rectilinear, circular, hexagonal, octagonal or any other geometric configuration; the important aspect of the geometry is to place people into a framework which develops a



Figure 17. Exedra, Chatsworth House, Derbyshire, England

conversational relationship. The shape should also encourage a higher degree of public intimacy than would be typically be found on the street or in other open spaces.

#### **4.2.3. Guidelines for Proportion and Scale**

Regardless of the area the exedra occupies, the scale of the exedra should encourage conversation and intimacy, as well as relate to the pedestrian scale of the surrounding streetscape. In addition, the various elements within the exedra should related directly to the scale of the structure and seating, to provide a harmonious experience for the exedra visitor. Seating should be designed to accommodate adults as the primary users of the space.

#### **4.2.4. Guidelines for Integral Seating**

The most important element of the exedra is seating. If ownership or security is an issue, permanent benches with backs should be installed or designed as integral features of the exedra. Benches should face each other or be geometrically arranged to promote a conversational relationship among users. Designers should provide comfortable, proportionate seating of suitable material; for example, in hot climates, metal seating in a full sun placement is not considered appropriate. Most cities have local or imported materials

which have withstood the test of time in the urban fabric; these materials should be the first choice of designers. Scaled for adult users, seating surfaces should be at or just above knee height, approximately 20 to 22 inches from the floor of the exedra.

#### **4.2.5. Guidelines for Portable Seating**

In the exedra which does not have integral seating, portable chairs and tables can be used can be brought in for dining or other activities. “A space becomes more meaningful when people are allowed to create this personal and temporary territoriality with movable chairs. One might fear the hassle and loss from loose seating but the comfort level is worth the cost” (Sucher 42). This type of seating is most appropriate when the exedra is in a highly visible and easily patrolled location, such as on a busy street corner or adjacent to a popular restaurant. Portable seating would also be appropriate in a larger exedra, providing the opportunity for users to create their own conversational groups through rearranging the furnishings.

### **4.3. Commemoration**

Decorative features provide the designer opportunities to stimulate interest and provide for commemoration. However, commemoration serves an additional purpose other than memorialization; it provides an excuse for visitors to the exedra to talk to each other. Additionally, the exedra user is relying on the designer to increase this awareness of the person or event to which the exedra is dedicated; the designer should indicate the original purpose for construction of the exedra without limiting flexibility for future uses for the exedra which may evolve over time and through changing use patterns.

#### **4.3.1. Discussion of Commemoration**

Does the project involve commemoration? Recent commemorative efforts have raised questions regarding the resulting memorial, including concerns over whether the memorial should “be regarded as sacred ground, public land, or private property” (New York 13). One particular principle emerging from this collective effort states that “The memorials should be conceived in the context of a vital community” with a “[. . .] desire for a beautiful, calming, neutral place of sacred ground (New York 13). The memorial in contemporary society is conceptualized “[. . .] as both commemoration and continuing process (New York 13), an experience that is social and fluid, a place for stories.

Commemoration is key to understanding and remembrance; in his study of rural cemeteries with close community ties, Bruce Hannon determined a two percent “rate at which people seem to drop from remembrance” (Hannon 17) by the community each year.

Future landscape participants are dependent on people in the present to provide adequate and appropriate commemoration of important people and events, enhancing understanding of how the urban environment has developed over time. How do we get people to participate in the construction of the com-

memorative exedra? By giving people the opportunity. “They really don’t need much encouragement: only an outlet. And it works out for the common good. As people grow older and more able to be philanthropic, their urge to be remembered in their old age and after their death becomes more compelling” (Sucher 51). “[. . .] ‘After incomparable loss of people and places, [cities] find ways to plan, design, and reconstruct the life of the city.’[. . .] Memorial design and construction has become an almost automatic part of the grieving process, yet many people remain unaware of the vital role landscape architects play in memorial design, or even what a memorial design process should be” (Young, B ).

Will the project include public art? Public art reminds people of the importance of other people, engages the imagination, and has always been part of the urban experience. “There is sufficient ambiguity, uncertainty and confusion in the world for us to be able (with little loss) to forego having the artist insist on sharing it with us. Public art should expand consciousness, not further confound it” (Sucher 160). The distinction between art and streetscape elements should be minimized; “Art should not be apart from life on an altar in a museum as if done by gods but part of daily routine, to experience every day. The artist’s imagination can be a good baby-sitter. Build it sturdy and safe so children can play with it” (Sucher 164).

#### **4.3.2. Guidelines for Commemoration**

For projects which involve the commemoration of events or individuals, the exedra should be developed with a focus on engaging the pedestrian both mentally and physically. There should be a sense of entry into a separate place, often achieved through low steps or ramp. The designer can promote active memory perpetuation of a person or event through sculpture, inscriptions, mosaics, murals, altars, plaques, or other types of commemorative artwork.

#### **4.3.3. Guidelines for Public Art**

Designers should be very careful to utilize an artistic dialogue which people understand denotes commemoration. The exedra is not a landscape form and place which should be used to challenge or confront the urban inhabitant. It should instead be a well-crafted place which reflects local culture, materials and talent. For instance, the exedra located within the context of a larger plaza or garden should be considered an extension of the garden, with thematic decorations of garden scenes and mythical imagery, such as those seen in Figure 18 below. Due to its inherent public nature, any artwork within the exedra should be permanently secured or protected from elemental exposure.

#### **4.3.4. Guidelines for Decorative Elements**

Decorative elements are a crucial element to the success of the urban exedra and contribute to the positive urbanization of the street. The exedra should be considered a piece of public art which is function and composed of several well-crafted smaller elements, such as statuary and carved pieces, fountains, urns and planters, lighting and other decorative elements. Without decorative elements and benches which



Figure 18. Frescos, Ville Lante, Bagnaia, Italy

have a conversational relationship, the exedra will not likely be a successful public place. Decorative elements suitable to the exedra include commemorative columns, altars, tables, vases, planters, sculptural friezes, statuary, painted walls, vaulted or painted ceilings, and mosaic floors; these features should be well-designed, permanently installed and easily maintained. Materials selected for use should work in context with each other and with surrounding uses, depending on the purpose of the exedra.

#### 4.4. People

The primary consideration for the design of the exedra should be for the users who will visit the place. The features and components should be developed with respect for comfort and should create the opportunity for conversation among pedestrian users. The size of the exedra and its placement are directly affected by its use as a destination for visitors, as are the physical elements which comprise the exedra, including decorative and functional features.

What group size will this project accommodate? The design of place-based projects supports and enhances social, cultural, and environmental relationships. People most often gather in public places in groups of two or three rather than in large groups. “While there is some disagreement concerning the precise number, the literature of the behavioral sciences is in general agreement that somewhere between

eight and twelve is the maximum number of people who can work effectively together as a group, communicating easily and experiencing a sense of unity and common purpose” (Deasy 33-34).

Are there concerns regarding security? Designs such as those found at the small park by the Picasso museum in Paris in Figure 19 below and the proposed plan for the West Hollywood Veterans Memorial, where the user must descend at least eight steps from the street level into a shaded, visually remote place are not conducive to participation in the pageantry of the street. These secluded sites can be a potentially serious security risk. “It would be naive to assert that some street people present no problem; and it would be heartless to deny any social responsibility for the truly homeless. [. . .]; removing public seating does not solve the problem but only denies the rest of the population its due of an inviting city” (Sucher 26-27). Creating a sense of ownership can help overcome the issue of street people. “Communities are not announced by planners but emerge out of places which people make their own. Spaces to sit and chat allow such ownership to develop. People gain such a sense of ownership by lingering at a spot” (Sucher 42).

#### **4.4.1. Guidelines for Addressing Group Size**

As Deasy states in Design for Human Affairs, the successful design of a public conversational place should accommodate groups of eight or less; designers should keep in mind groups of two or three will be



Figure 19. Small Sunken Park near Picasso Museum, Paris, France

the primary users (33-34). As in the Chatsworth example above, more than three persons occupying a small exedra become quite a crowd; a more pedestrian and slightly larger scale exedra will likely provide more frequent opportunities for positive public interaction and dialogue for small typical groups of two to five persons than will a large urban park or plaza which does not provide intimate public spaces.

#### **4.4.2. Guidelines for Addressing Security Issues**

To create a measure of privacy without sacrificing the safety of exedra users, the landscape designer can utilize a permeable fence or a trellis in the exedra rather than a high seat wall. To generate a positive perception of other security issues, the design of the exedra should include decorative safety lighting, a clear and open relationship with the street at or above the sidewalk grade level elevation, and well-secured elements resistant to most vandalism efforts. The most responsible measure which can be taken is to provide preventative maintenance on all exedral elements; if the public perceives the exedra as a well-kept place, they will continue to utilize it.

#### **4.5. Summary of Guidelines for Design Development**

To successfully create an exedra for contemporary use in the urban streetscape, the design must address the four factors of the successful exedra: environment, structure, commemoration, and people.

Incorporating the exedra into the urban environment involves developing a working relationship with the street while bringing natural elements into direct contact with people. This can be accomplished by taking advantage of underutilized structural space in buildings or existing larger open spaces; a universal entry quality and precautionary safety design can mean the difference between a successful and unsuccessful exedra. Vegetation, shade and water are all crucial elements which provide a beneficial experience for the exedra visitor and which can be easily and safely incorporated into the design of the exedra.

The successful design of the contemporary exedra requires the designer to have a clear and understandable structure of entry, enclosure, and seating. The exedra should define and designate a particular place in the urban fabric scaled for the pedestrian user; it should comfortably accommodate seated conversation among groups ranging from two to eight persons. It can be of any size or geometric shape, but a good rule of thumb is to have an open side twice as long as the exedra is deep. Ambiguity in function, not in spatial definition, allows maximum flexibility for present and future landscape experiences.

The exedra should involve some aspect of commemoration--it provides an excuse for strangers to talk to each other. Commemoration provides future users with an understanding of the urban environment as it has developed over time; public art and decorative elements can be used to create an artistic dialogue between local culture, materials and talent.

The primary consideration in exedral design should be the pedestrian users. By providing a well-planned experience, the visitor can enjoy the urban environment and have a positive experience. This will require an attention to security issues and design details, maintenance of materials and cleanliness, and a

conscious effort to maximize the sense of ownership for users and nearby property owners in order to minimize the presence of undesirable street people.

Depending on particular project goals and needs, the exedra as a design tool can provide the opportunity to address and resolve multiple issues in the development of a successful, small-scale public place. This urban exedra can celebrate the urban experience while providing a valuable refuge for the pedestrian visitor to relax, converse, and gain new contextual perspective.

## CHAPTER 5. CONCLUSIONS AND RECOMMENDATIONS

Understanding the inherent relationships between the elements of the exedra provide the design framework for creating the contemporary form and function of the exedra in the modern landscape.

### 5.1. Historical Evolution

The exedra has evolved from a commemorative burial place, which urbanized and energized early Greco-Roman cities, into a sculptural form used without understanding of its reliance on contextual relationships and conversational purpose. The historical forms of the exedra include: the large outdoor semicircular or rectangular seat with a solid back; the Greco-Roman honorific monument often found on roadsides and near temples; a room for conversation formed by an open or columned recess; a place of education; a throne; a simple rectangular or semicircular recess; a porch or chapel projecting from a larger building; the space between the buttresses of a large church, cathedral or mosque; and, a defining architectural and topiary form.

Revivalist designers since the eighteenth century generally have focused on the sculptural elements—statues, busts, and carvings—and create primarily visually-oriented, isolated exedrae for memorial purposes with the resulting form lacking the vitality and interactive quality of earlier forms. Few contemporary designers understand the dynamics of the exedra and its reliance on the street for its purpose. The exedra is often considered merely an architectural element used to dramatize a particular garden area or to serve as a tombstone in a cemetery.

### 5.2. Contemporary Uses for the Exedra

Contemporary uses for the exedra include several traditional uses which can be modified to suit contemporary needs. One form which would not require modification is the use of the exedral form to define space through architectural form or topiary. The enclosure of space and pedestrian relationship can be enhanced through attention to details, security lighting, seating provisions and other architectural features. Through formed topiary, a smaller space can be carved out of a larger plaza or park; seating can be on benches or turf seatwalls. Materials selected for either application should be appropriate for the urban environment in terms of weather and long-term maintenance capability.

The urban environment has evolved to accommodate mechanical modes of transportation, yet the urban experience still depends to a large extent on pedestrian traffic. Suggested uses for the exedra include: serving as waiting stations for public transit; designated smoking areas; rest stations in retail malls and along busy pedestrian commercial corridors or streets; outdoor classrooms for schools; integrated memorials oriented towards pedestrian visitors; display areas for public artwork; and tourist information centers. In this sense, the re-introduction of the exedra as a memorial place is one of the most appropriate uses in the contemporary landscape; integrating the memorial feature into the modern interpretation of the exedra provides users a higher level of interaction with and education about their environment.

Seating with a solid back, whether stationary or mobile, should be designed to accommodate modern physical characteristics; the exedra can be placed as a freestanding unit in the streetscape or integrated into the existing urban fabric by utilizing found space in the ground level of urban buildings. Lighting should be designed to highlight the decorative features of the exedra while providing the necessary level of illumination to maximize perceived and actual physical security. Material selection for the exedra should incorporate durable and easily maintained products, including local natural stone, metals or plant species.

Water, appropriate to climate and location, can be included as a design element; although this may pose a long-term maintenance concern, a cooperative agreement between municipal and private interests can help provide and maintain this dynamic experience. Artwork and decorative features should be foster conversation and public interest; controversial work will likely cause a detrimental effect to exedra usage and effectiveness.

### **5.3. Function of the Exedra**

The exedra can be defined by its purpose through the three actions which it promotes: observation, conversation, and commemoration. Historically a form associated with honoring events and persons, the exedra provides a lasting tribute for future urban dwellers to understand the importance of their own past. By entering, the visitor can explore the exedra and then use the available seating to visually participate in the streetscape. The exedra has historically been a place for holding conversations; it provides a valuable contemporary urban pedestrian the opportunity to develop a conversational relationship with strangers. Creating a place where a small group can sit, hold discussions, with aesthetic embellishments and flexibility in function, provides a distinct place in the urban fabric which will enhance the experience of the landscape over time and create a dialogue between past and future urban dwellers.

### **5.4. Commemorative Aspect of the Exedra**

A place of commemoration in which each person should be given the opportunity to develop their personal understanding of the underlying commemorative purpose, the exedra and the implications of its contextual nature in terms of the development of the urban environment can be used by contemporary designers to develop an interactive and commemorative public place. Current criticism of large public memorials is that the design and constructed features offer little in the way of personal comfort, are isolated from their surroundings, and diminish the experience by lacking personal dialogue and human proportions. By creating large public memorials, the commemoration of people or events becomes lost as an important and vital feature of the evolution of urban dwellers environment. These oversized monuments are not valuable to the community because they are removed from the daily experience of life.

Landscape architects are significant contributors to the commemorative design process; “[. . .] through research, outreach, and determination, a vision can be achieved and implemented. Focusing grief, energy, and imagination into an open and inclusive memorial process under public leadership will yield compelling

memorials, meaningful for present and future generations” (New York 13). By understanding the historical and commemorative nature of the exedra, landscape architects can utilize the form to create freestanding or structurally-incorporate exedral forms as a solution to the identified need for the development of human-scale, urban places which commemorate people, places, and events for current and future urban inhabitants.

### **5.5. Form of the Exedra**

To successfully create an exedra for contemporary use in the urban streetscape, the design must include the four factors of the successful exedra, which include: a well-defined contextual relationship with the street and adjacent structures; a clear and understandable structure of entry, enclosure, and seating; decorative features to stimulate interest and provide for commemorative opportunities; and most importantly, considerations for comfort and conversation among pedestrian users.

Although there are many types of exedra, the freestanding or structurally associated exedrae have common physical factors regardless of classification. It is a place which relies on its context to provide its purpose. The exedra is geometric, generally rectilinear or semicircular in nature, with backed seating provided for visitors. Sculpture, decorative artwork, and well-crafted furnishings are used to attract passersby. Dimensionally, the exedra should incorporate one open side which is twice as long as the exedra is deep.

Understanding the necessary ingredients needed to create the successfully designed exedra involves the landscape designer taking time to study the street and the people who utilize it. People provide the impetus and energy for the exedra. The structure and form are sized and shaped to create a place where total strangers feel at ease conversing with other people about the honorific elements of the exedra, the passing pedestrians, the weather, or any other subject. Everything in the exedra should be scaled to fit the urban dweller; it should be a place for which the user feels a sense of ownership while providing the platform from which to comfortably enjoy the pageantry of the street.

### **5.6. Guidelines for Design of the Exedra**

The successful design of the contemporary exedra requires the designer to have a clear and understandable structure of entry, enclosure, and seating. Incorporating the exedra into the urban environment involves developing a working relationship with the street while bringing natural elements--vegetation, shade and water--into direct contact with people. Public art and decorative elements can be used to create an artistic dialogue between local culture, materials and talent, while attention to safety and maintenance issues are crucial to the visitors' positive experience.

Depending on particular project goals and needs, the exedra as a design tool can provide the opportunity to address and resolve multiple issues in the development of a successful, small-scale public place. This urban exedra can celebrate the urban experience while providing a valuable refuge for the pedestrian visitor to relax, converse, and gain new contextual perspective.

## 5.7. Recommendations for Further Study

Several topics emerged during the course of this investigation into the exedra and its many permutations which would be suitable for additional research. Questions which could be addressed in a research-oriented exploration include:

- What ancient culture originated the freestanding exedra?
- How has the exedra been depicted in the visual arts throughout Western history?
- Are there places with similar purposes of the exedra which have developed in other cultures?
- What is the current condition of the exedrae in Edith Wharton's Italian Villas and Their Gardens?
- What materials would be considered appropriate for particular locales and climates?

Site specific studies can be used to examine the feasibility of incorporating one or more exedra in a particular project, addressing the design issues recommended guidelines of Chapters 3 and 4.

## 5.8. Exedra: Form and Function in the Landscape

The exedra is more than just a bench; it is a specific and easily identifiable place for small groups in the urban landscape with a flexible purpose and a strong contextual relationship with its environment. Most historical forms in the urban environment emerged from centuries of refinement and evolution by use, given shape by non-designers with natural talent and a more complete understanding of form and function in their particular environment and civic structure. Landscape architects should be willing to explore historical forms, giving credit to their source of inspiration while remaining confident in their adaptation and treatment of historical forms.

The implications of providing a programmed structural place are clear: the design should rely on the context, the experience of place, the action in and around the place, and appropriate provision of information to be considered successful. The physical structure is merely a means to enhance the experience, not a substitute for the experience itself, and should stimulate discussion and interaction by participants.

People are the most important element of urban and exedral design; landscape architecture in the public realm should be designed to attract everyone in the urban environment, allowing them to participate at various levels in the pageantry of the street. People most often gather in public places in groups of two or three rather than in large groups; public places should be therefore designed to accommodate this natural grouping tendency.

The design of place-based projects supports and enhances social, cultural, and environmental relationships. Public art reminds people of the importance of other people, engages the imagination, and has always been part of the urban experience.

Ambiguity in function, not in spatial definition, allows maximum flexibility for present and future landscape experiences. Future landscape participants are dependent on landscape architects in the present to provide adequate and appropriate commemoration of important people and events, enhancing understanding of how the urban environment has developed over time.

## WORKS CITED

- Alexander Mosaic. Tulane University website. 5 Oct. 1999 <<http://www.tulane.edu/lester/text/Western.Architect/Pompeii/Pompeii93.html>>.
- Cigola, Ricardo. Piazza dell'Esedra F11. 15 Oct. 2000 <<http://www.italyberguide.com/Geography/cities/rome2000/F11.htm/>>.
- "Cubicula." Classical archaeology and ancient history page. The Dept. of Archaeology and Ancient History, Uppsala Univ. 19 Oct. 1999 <<http://www.arkeologi.uu.se/primaporta/cubicula.htm>>.
- Daremberg, Charles et Edmund Saglio. Dictionnaire des Antiquités Grecques et Romaines. Tome Deuxième. Paris: Librairie Hachette et Compagnie. 1892.
- Dauphin, Claudine. "Brothels, Baths and Babes: Prostitution in the Byzantine Holy Land." Classics Ireland 1996 vol 3 online. University College Dublin website. 19 Oct. 1999 <<http://www.ucd.ie/~classics/96/dauphin96.html>>
- Davies, Penelope J. E. "The Politics of Perpetuation: Trajan's Column and the Art of Commemoration." American Journal of Archaeology. Jan. 1997: 41-66.
- Deasy, C. M. Design for Human Affairs. New York: John Wiley & Sons. 1974.
- Eaton, Marcia Muelder. "Responding to the Call for New Landscape Metaphors." Landscape Journal. Spring 1990: 22-27.
- Ellis, Charlotte. "Parc André Citroën: The Rage in Paris." Landscape Architecture. Apr. 1993: 59-65.
- "Exedra." Merriam-Webster On-line Dictionary. America Online. 23 Oct. 1999. Keyword: Merriam-Webster.
- "Exedra tironum" Durenmar website. 19 Oct. 1999 <<http://www.durenmar.de/exedra.html>>
- Goodey, Brian. "Values in place: interpretations and implications from Bedford." Valued Environments. Eds. John R. Gold and Jacquelin Burgess. London: George Allen & Unwin. 1982.
- Hammett, Heather. "A Literate Landscape." Landscape Architecture. Aug. 2000: 20.
- Hannon, Bruce. "The Forgetting Rate: Evidence from a Country Cemetery." Landscape Journal. Spring 1990: 17-21.

- Hines, Susan. "Power to the People: The Project for Public Spaces Specializes in Place Making Part One." *Landscape Architecture News Digest Online*. American Society of Landscape Architecture website. 30 Nov. 2001 <<http://www.asla.org/Members/land/pps.html>>.
- Hiss, Tony. *The Experience of Place*. New York: Vintage Books. 1991.
- Horrigan, Paula. "Placemaking by Design." *1999 ASLA Annual Meeting Proceedings*. Comp. Diane L. Scheu. Washington: American Society of Landscape Architects. 1999. 248-250.
- The Island of Thasos*. Demokritus University of Thrace. 23 Oct. 1999 <<http://www.duth.gr/Kavala/thasos.html>>
- Jackson, John Brinckerhoff. *Landscape in Sight: Looking at America*. Ed. Helen Lefkowitz Horowitz. New Haven: Yale University Press. 1997.
- Johnson, Carol R. "Art and the Urban Landscape." *Landscape Design*. Jan. 1993: 8,11,15.
- Kazhdan, Alexander P., Alice-Mary Talbot, Anthony Cutler, Timothy E. Gregory, and Nancy P. Ševcenko. *The Oxford Dictionary of Byzantium*. Vol. 2. New York: Oxford University Press. 1991.
- Keatinge, Richard W. "The Chimú Empire in Regional Perspective." *Chan Chan: Andean Desert City*. Eds. Michael E. Moseley and Kent C. Day. Albuquerque: University of New Mexico Press. 1982.
- King, Florence. *Southern Ladies and Gentlemen*. New York: St. Martin's Press. 1993.
- Krog, Steven R. "Is it Art?" *Landscape Architecture*. 71.3 (1981): 373-375.
- Landsberg, Sylvia. *The Medieval Garden*. New York: Thames & Hudson. 1995.
- Littlewood, A. R. "Ancient Literary Evidence for the Pleasure Gardens of Roman Country Villas." *Ancient Roman Villa Gardens* (Dumbarton Oaks Colloquium on the History of Landscape Architecture X). Ed. Elisabeth Blair MacDougall. Washington, DC: Dumbarton Oaks. 1987.
- Lowenthal, David. "Age and Artifact." *The Interpretation of Ordinary Landscapes*. Ed. D.W. Meinig. New York: Oxford University Press. 1979.
- . "Revisiting valued landscapes." *Valued Environments*. Eds. John R. Gold and Jacquelin Burgess. London: George Allen & Unwin. 1982.
- McDowell, Peggy and Richard E. Meyer. *The Revival Styles in American Memorial Art*. Bowling Green, OH: Bowling Green State University Popular Press. 1994.
- McManus, Barbara F. "Sample Plan of A Roman House." rev. June 1999. The College of New Rochelle. 19 Oct. 1999 <<http://www.vroma.org/~bmcmanus/house.html>>.

- Marcus, Clare Cooper. "Just a Nice Place to Sit?" Landscape Architecture. Feb. 2001: 128,127.
- Meinig, D.W. "Symbolic Landscapes." The Interpretation of Ordinary Landscapes. Ed. D.W. Meinig. New York: Oxford University Press. 1979.
- Miller, E. Lynn. "To the Portuguese." Landscape Architecture. Dec. 2000: 28, 30-32.
- Moggridge, Hal. "The Delights and Problems of Practice." Landscape Meanings and Values. Eds. Edmund C. Penning-Roswell and David Lowenthal. London: Allen and Unwin. 1986.
- Moore, Charles W., William J. Mitchell, William Turnbull, Jr. The Poetics of Gardens. Cambridge: The MIT Press. 1997.
- Moseley, Michael E., Kent C. Day. Chan Chan: Andean Desert City. Albuquerque: University of New Mexico Press. 1982.
- "New York New Visions: Principles for the Rebuilding of Lower Manhattan." New York New Visions. 20 Oct. 2002 <<http://nynv.aiga.org/principles.shtml>>.
- Norquist, John O. The Wealth of Cities. Reading, MA: Addison-Wesley. 1998.
- "Palazzo a Mare." Welcome to Capri Island, Capri Island Web Site. 23 Oct. 1999 <<http://www.capri.net/home/en/index.php>>.
- Penning-Roswell, Edmund C. "Themes, Speculations and A Research Agenda." Landscape Meanings and Values. Eds. Edmund C. Penning-Roswell and David Lowenthal. London: Allen and Unwin. 1986.
- "The Petra Great Temple." Brown University website. 19 Oct. 1999 <<http://www.brown.edu/Departments/Anthropology/Petra/temple/west-exedra.htm>>
- Pompeii Uncovered: The People. Elike website. 23 Oct. 1999 <<http://www.eliki.com/ancient/civilizations/pompeii/people/>>.
- Ratté, Christopher. Rev. Die frei stehende griechische Exedra, by Suzanne Freifrau von Thüngen. American Journal of Archaeology. Jan. 1997: 181-182.
- Ricotti, Eugenia Salza Prina. "The Importance of Water in Roman Garden Triclinia." Ancient Roman Villa Gardens (Dumbarton Oaks Colloquium on the History of Landscape Architecture X). Ed. Elisabeth Blair MacDougall. Washington, DC: Dumbarton Oaks. 1987.
- Ridgway, Brunhilde Sismondo. "Greek Antecedents of Garden Sculpture." Ancient Roman Gardens (Dumbarton Oaks Colloquium on the History of Landscape Architecture VII). Eds. Elisabeth Blair MacDougall and Wilhelmina F. Jashemski. Washington, DC: Dumbarton Oaks. 1981

- “San Diego Panama-California Exposition.” San Diego State University website. 15 Oct. 1999  
[http://edweb.sdsu.edu/edweb\\_folder/SDHS/pancal/EXPO/660exedra.jpeg](http://edweb.sdsu.edu/edweb_folder/SDHS/pancal/EXPO/660exedra.jpeg)
- Schaal, Hans Dieter. Learning From Hollywood. Trans. Michael Robinson. London: Stuttgart. 1995.
- Seyffert, Oskar. Dictionary of Classical Antiquities. Eds. Henry Nettleship and J. E. Sandys. Cleveland, OH: Meridian Books. 1962.
- Schinkel, Karl Friedrich. Collection of Architectural Designs. Chicago: Exedra Books Incorporated. 1981.
- Shepherd, J.C. and G.A. Jellicoe. Italian Gardens of the Renaissance. Princeton, NJ: Princeton Architectural Press. 1986.
- Smith, William. Dictionary of Greek and Roman Antiquities. Boston: Charles C. Little and James Brown. 1849.
- Smith & Hawken Design Group. Smith & Hawken Furniture to the Trade. Spring 2000: 37.
- “Smithsonian American Art Museum Research Databases.” Smithsonian Institution Research Information System website. 19 Oct. 1999 <<http://www.siris.si.edu/webpac-bin/wgbroker?10241503564441+1+search+select++1+0>>
- Soleri, Paolo. “The Hyper Building.” Arcosanti website. 23 Oct. 1999 <<http://www.arcosanti.org/arcology/hb/>>
- Spaeth, Barbette. “Floor plan of the House of the Faun.” Tulane University. 19 Oct. 1999 <<http://www.tulane.edu/lester/text/Western.Architect/Pompeii/Pompeii39.html>>.
- Sucher, David. City Comforts. Seattle: City Comforts Press. 1995.
- Sullivan, Mary Ann. “Markets of Trajan.” Bluffton College website. 19 Oct. 1999 <<http://www.bluffton.edu/homepages/facstaff/sullivanm/romantrajan/market.html>>
- Temple of British Worthies. Gardens and Park, Stowe School homepage. 18 Oct. 1999 <<http://www.stowe.co.uk/historic/gardens/worthies.htm>>
- “Terms Relating to Roman Baths.” Pennsylvania State University website. 6 Oct. 1999 <<http://www3.la.psu.edu/cams/Baths/gloss.html>>
- “Texts.” Art History 101, Department of Art History of University of Pennsylvania homepage. 17 Feb. 2002 <<http://www.arth.upenn.edu/101/texts.html>>

Tuan, Yi-Fu. "Thought and Landscape: the Eye and Mind's Eye." The Interpretation of Ordinary Landscapes. Ed. D.W. Meinig. New York: Oxford University Press. 1979.

University of Virginia website. 15 Oct. 1999 <<http://jefferson.village.virginia.edu/pompeii/icbmap.html>>

Vitruvius. On Architecture. Trans. Bill Thayer. University of Kansas website. 24 Apr. 2001 <[http://www.ukans.edu/history/index/europe/ancient\\_rome/E/Roman/Texts/Vitruvius/5.html](http://www.ukans.edu/history/index/europe/ancient_rome/E/Roman/Texts/Vitruvius/5.html)>

Votive altar dedicated to Tutela. MNAT 6702. Museu Nacional Arqueològic de Tarragona website. 24 Oct. 1999 <<http://www.mac.es/mnat/eng/mnat/marq/marq12.html>>.

Ware, Isaac. Andrea Palladio The Four Books of Architecture. New York: Dover Publications. 1965 (1738).

Wells, Roger. "Statement or Context?" Landscape Architecture. Feb. 1998: 80-81.

Whyte, William H. City. New York: Anchor Books Doubleday. 1988.

Whyte, William H. "Street Life." Natural History. 89.8 (1980): 62-69.

Yoch, James J. Landscaping the American Dream: the gardens and film sets of Florence Yoch. New York: Harry N. Abrams, Inc./Sagapress, Inc. 1989.

Young, Beth. "Landscape Architecture in the News." Landscape Architecture News Digest Online. American Society of Landscape Architecture website. 8 Mar. 2002 <<http://www.asla.org/Members/land/clips.html>>.

## WORKS CONSULTED

- Barton, Ian M., Ed. Roman Domestic Buildings. Exeter: University of Exeter Press. 1996.
- Boiëlle, James. Heath's French and English Dictionary. Boston: D. C. Heath & Co. 1903.
- "The Catholic Encyclopedia: Exedra" Catholic Encyclopedia. 1913. Encyclopedia Press Inc. Electronic vers. New Advent, Inc. 1997.
- Chidister, Mark, Robert McNulty, Arthur Cotton Moore, Mark Francis, William Rabben, James A. van Sweden. "Plaza Puzzle." Landscape Architecture. Aug. 1989: 63-67.
- Deiss, Joseph Jay. Herculaneum: Italy's Buried Treasure. Malibu, CA: The J. Paul Getty Museum. 1989.
- Devonshire, Deborah. The Duchess of Devonshire: The Garden at Chatsworth. London: Frances Lincoln Limited. 1999.
- Hines, Susan. "Power to the People: The Project for Public Spaces Specializes in Place Making Part Two." Landscape Architecture News Digest Online. American Society of Landscape Architecture website. 14 Dec. 2001 <<http://www.asla.org/Members/land/pps.html>>.
- Farrar, Linda. Ancient Roman Gardens. Phoenix Mill, Eng.: Sutton Publishing Limited. 1998.
- Jellicoe, Geoffrey and Susan Jellicoe. The Landscape of Man. London: Thames and Hudson. 1995.
- Jekyll, Gertrude and Sir Lawrence Weaver. Gardens for Small Country Houses. London: Country Life Ltd. 1927.
- Jekyll, Gertrude and Christopher Hussey. Garden Ornament. London: Country Life. 1927.
- The J. Paul Getty Museum. The J. Paul Getty Museum Guide to the Villa and Its Gardens. Malibu, CA: The J. Paul Getty Museum. 1992.
- McKay, Alexander G. Houses, Villas, and Palaces in the Roman World. Baltimore: The Johns Hopkins University Press. 1998.
- Low, Colin. The Palm Tree of Deborah: Chapter 1 - Attributes 7 & 8. 19 Oct. 1999 <<http://digital-brilliance.com/kab/deborah/c178.htm>>.
- "Overview" Call for entries: Memorial to honor the victims of the attack on the Pentagon, US Army Corps of Engineers Baltimore District website. 14 Aug. 2002 <<http://memorialcompetition.pentagon.mil/#>>.

- Reid, Grant W. From Concept to Form in Landscape Design. New York: John Wiley & Sons, Inc. 1993.
- Rich, Tracey. Judaism 101: Hebrew Alphabet. 22 October 1999 <<http://www.jewfaq.org/alephbet.htm/>>.
- . Kabbalah and Jewish Mysticism. 22 October 1999 <<http://www.jewfaq.org/kabbalah.htm/>>.
- Sanes, Ken. Contemporary Storytelling: Tales of Life Way After the Fall Page. 21 Apr. 1999 <<http://transparencynow.com/exile2.htm/>>.
- Schröer, Carl Friedrich and Torsten Olaf Enge. Garden Architecture in Europe. Berlin: Taschen. 1990.
- Sennett, Richard. The Fall of Public Man. New York: W. W. Norton & Company. 1992.
- Stierlin, Henri. Islam: Early Architecture from Baghdad to Cordoba. Vol. 1. Köln: Taschen. 1996.
- Wallace-Hadrill, Andrew. Houses and Society in Pompeii and Herculaneum. Princeton: Princeton University Press. 1994.
- Wharton, Edith. Italian Villas and Their Gardens. 1904. New York: Da Capo Press. 1988.
- van Zuylen, Gabriel. Paradise on Earth: The Gardens of Western Europe. Trans. I. Mark Paris. New York: Harry N. Abrams, Inc. 1995.
- Young, Dwight. "The Back Page: Frisky Buildings." Preservation. Sept. 1996: 144.

## VITA

Daniel Warren McElmurray was born in Charleston, South Carolina, and was raised in Beech Island, South Carolina. After a brief stint as his high school mascot, he attended Clemson University and attended a variety of classes which eventually led to a Bachelor of Arts in political science. After further study in city and regional planning, Daniel began his planning career in the Okefenokee Swamp region of southeast Georgia. He later accepted the position of Director of Planning and Development with the City of Hartsville in South Carolina.

Based on professional and social experiences in Hartsville, Daniel made the decision to return to academia and study landscape architecture. He moved to Baton Rouge, Louisiana, with his partner Jeffrey Hamilton in 1997; after completing coursework, Daniel began his new career in landscape architecture in New Orleans, Louisiana. The couple has two Chihuahuas, named Barkley and Dax, and Daniel enjoys taking them on walks through his Bywater neighborhood.