The Archi

November 2003

Fraternalism in architecture and the allied arts
FRATERNALISM IN ARCHITECTURE AND THE ALLIED ARTS

Fraternalism might seem like a pretty clear concept, at least on the surface... after all, Alpha Rho Chi is a fraternity, so our members—men and women alike—look upon one another as "brothers." It's a way of expressing the special bond that connects those of us who are members of Alpha Rho Chi.

But what does fraternalism mean in the context of the design professions? Is it just a nicer way of referring to the "good old boys" mentality that once permeated the field, or a gender-neutral approach to fostering a greater sense of community? Is it about networking? Loyalties? Ethics?

Reaching out in a spirit of human empathy to others? How can we, as design students, teachers, and professionals, facilitate greater fraternalism in the world around us? Or should we?

This issue of the ARCHI attempts to address some of these questions. In "Expressions of Islamic Architecture in America," Mir Ali explores the complex web of relationships among architecture, art, faith, culture, and identity and inquires how to maintain the transcendental meaning of Islamic architecture while integrating it into Western communities. In "Ethics in Architectural Design," Omer Akin discusses current theories of ethics and their relationship to architecture, highlighting some of the important cases that illustrate the principles of ethical conduct in architecture. In "Planning and Design of Cities," Surajit Chakravarty explores links between such disparate fields of study as urban planning, mathematics, and microbiology. And "Fraternalism in Action" showcases the work of Brother Howard Van Heuklyn, who recently received the prestigious Silver Alpha Rho Chi Medal in recognition of his outstanding contribution to the fraternity.

As you peruse this issue, I hope you'll find food for thought as you consider what you, too, can do to live out the ideals of fraternalism.

Fidelitas, Amor et Artes

Karen L. Marker
ARCHI Editor

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EXPRESSIONS OF ISLAMIC ARCHITECTURE IN AMERICA

TRADITION VERSUS MODERNITY

by Mir M. Ali

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Mosque design and associated art have been the traditional vehicles of Islamic architecture. Mosque, an architectural creation of sacred space, generally plays a key and symbolic role as a Muslim community’s expression of faith. Islamic architecture that evolved since the days of the Prophet Muhammad represents a complex web of relationships among architecture, art, faith, culture, and identity. Mosque architecture has gradually evolved into expressions of spirituality, geometry, and decorative art. The application of geometric principles is a basic feature in Islamic art and architecture. Geometrical design is stressed because of the logic and mathematics involved, which represent the perfection and Oneness of God. Sinan, the great Ottoman-era architect, used geometry extensively for the design of his mosques in Istanbul and elsewhere.

Since images of the living are forbidden in Islam lest they become objects of worship instead of the true God, images of non-living objects and forms as well as inscriptions of the Qur’anic verses in Arabic were introduced in mosque decoration and ornamentation, immensely enriching the art of calligraphy. The ubiquity of calligraphic arts in Islamic architecture has its roots in another source—the revelation of the Qur’an, through the personage of Prophet Muhammad providentially carried through the Arabic language. The “word” of the Qur’an is the central symbol of Islam, in the same way that idols are central icons of some other religions.

Some major characteristics of Islamic architecture are its focus on enclosed space, emphasizing the interior rather than the façade, and its emphasis on calligraphy, geometric shapes, and arches. An Islamic building may serve also as a palace, a mosque, a religious school, a tomb, or even a private home. We can see traits of Islamic architecture in the patterning of the Petronas Towers in Kuala Lumpur, the tallest building of the world at present. Enclosed space—defined by

“Islamic architecture... represents a complex web of relationships among architecture, art, faith, culture, and identity.”
The Islamic Cultural Center (constructed in 1984), Tempe, Arizona: Tall arches emphasizing verticality along with the golden dome in the backdrop emulating the Dome of the Rock. Courtesy of Dr. Omar Khalidi, Aga Khan Foundation Program for Islamic Architecture, Massachusetts Institute of Technology.


Cincinnati Mosque and Islamic Center, Ohio: Pointed arches and pyramidal domes.Courtesy of Mir M. Ali.

King Fahd Mosque in Culver City, Los Angeles: Corner view of the picturesque mosque showing the minaret lodged in a niche. Note the various tiers articulated differently. Courtesy of Aga Khan Visual Archives.
walls, arcades, and vaults—is a remarkable aspect of Islamic architecture.

Some principal grammatical features of mosque design composition are the dome, the minaret, arches, the minbar (pulpit), the mihrab (niche), arcades, the courtyard, the garden, and the fountain. Each has a special meaning of its own. Domes create a symbolic expansive space elevated over the devotees in a congregation, creating a vivid imagery that mimics the sky-dome. This refers to the omnipresence of the Divine. Devotees find this as a metaphor to reach the Heavens. Minarets were originally intended to call devotees loudly to prayer from tall towers. Their functional need is no longer there because of the availability of microphones. The dome and the minaret are also outstanding symbolic landmarks in a locality. The use of minbar started from the practice of the Prophet, who would give sermons from a raised platform during Friday congregational prayers at the first mosque of Islam, near his house. The mihrab, or alcove, with its cave-like characteristics, indicates orientation toward Mecca, the direction to which all Muslims must face during prayer; it symbolizes an inner focus. Pointed arches look up to the Heavens above, while arcades or colonnades create a solemn linear space for the public. The endless repetition of a simple form in the arcade evokes the infinite nature of God. Courtyards create open space for privacy and ventilation. Fountains were necessary for ablution. Gardens metaphorically remind the devotees of the Paradise.

The center of religious life for Muslims throughout the Islamic world, as well as those living in non-Muslim countries, is the mosque (masjid in Arabic, meaning a place for prostration and submission to God). The design of a mosque takes into consideration the fact that it must also function as an Islamic cultural center, accommodating a library, office, classrooms, equipment, facilities for social work and gatherings, specialized welfare projects, etc. It must not only satisfy the spiritual needs of the community but also must foster an environment of friendship, brotherhood, peace, cooperation, and coordination among the community members. In the American context, its architecture must not only have a clear statement of its Islamic identity and character, but should also attempt to demonstrate great sensitivity to its Western setting and to the needs of multi-racial and multi-ethnic harmony.

“Muslim societies have... developed their own vocabulary to express and identify themselves through the medium of Islamic architecture.”
State of Islamic Architecture

Religious structures can exert considerable influence on the human psyche. Emerging from colonial rule by the West, Muslim societies have been going through unrest and upheaval, economically and politically, while simultaneously attempting to maintain their values, cultures, and traditions and determine how to fit into the emerging new world order. Today Islam is the fastest-growing religion of the world. Despite continued new construction, the urban fabric of Muslim countries is deteriorating due to exploding population. Architecture in these societies is undergoing a serious crisis. Forces of globalization of architecture are creating large new modern buildings next to the existing ones, causing visible contradictions in the physical environment.

The Muslim world is in a state of turmoil on several fronts. The event of September 11, 2001 has put Muslims on the defensive. Belonging to the youngest of all major faiths, they are not easily accepted as equal partners in countries where they are indigenous but form a minority. They feel threatened and repressed by the majority, who are imposing their own culture. This leads to a yearning for independence worldwide, even through armed struggle after peaceful means have failed. In countries where Muslims are the majority, their rulers are autocratic, tyrannical, and corrupt. The people are repressed by their own rulers and are resentful of continued Western domination of their countries and their resources, and they perceive American foreign policy as apathetic and unfair. All these factors coupled with and aggravated by the September 11 event and the recent Iraq War have created a state of confusion in Islamic communities that they have never experienced before.

Some Muslims have suggested a solution that will take them backward to an earlier time, one that is “pure”—neither polluted nor adulterated—less competitive, more understandable, and hence manageable and comfortable. They are resentful of modernization of their societies, which they equate with Westernization. On September 11, 2001, the extremist philosophy of this group came to a head with the World Trade Center disaster. Their fundamentalist counterparts in the West were quick to blame Islam as a whole for this. Other Muslims have embraced outright modernist, Western solutions to the problems. In the process, they are willing to do away with much of their past tradition. The vast majority of peace-loving moderates, however, are seeking a middle ground between these two polarities.

In the realm of Islamic architecture, the issue of tradition versus modernity is also equally applicable. Muslim societies have, in the past, developed their own vocabulary to express and identify themselves through the medium of Islamic architecture. The minaret of the Malwiyyah Mosque in Samarra reminds one of the pre-Islamic ancient Babylonian ziggurats. A few Malaysian mosques have curved triple roofs, symbolic of Triloka, or the three entities of the Heaven, Earth, and the Underground, a pre-Islamic local concept. Mosques in Iran and the Indian sub-continent have onion-shaped domes unlike those in Arab countries. Those in China have roof edges curved upward following local traditions. Others in Southeast Asia are strongly influenced by the form of pagodas. Ottoman architecture of mosques borrowed ideas from the conquered lands in Europe. Mosques in Islamic Spain borrowed features from Roman architecture and classical antiquity, and those in Africa have clear imprints of local traditions. The Central Asian mosques use the tiled cupola that is traditional in that region.

Traditionalists value symbols, whereas modernists want to move forward with new images that are necessary for the
**Expressions of Islamic Architecture in America**

Islamic Center of Greater Toledo, Perrysburg, Ohio: Turkish-style minaret and dome. Courtesy of Islamic Center of Greater Toledo.

Islamic Cultural Center, Northbrook, Illinois: The large voids of the arches dominating over the solid minimalist dome. Courtesy of Dr. Akel Ismail Kahera, University of Texas at Austin.

Islamic Center of Greater Toledo, Perrysburg, Ohio: Decorative stained glass used for wall openings replacing the traditionally carved patterns. Courtesy of Dr. Akel Ismail Kahera.

Inside the Islamic Cultural Center of New York: A gracefully illuminated interior with suspended lighting creating a halo on the ornate floor design. Courtesy of Dr. Omar Khalidi.


Inside the Islamic Cultural Center of New York: A gracefully illuminated interior with suspended lighting creating a halo on the ornate floor design. Courtesy of Dr. Omar Khalidi.
expressions of Islamic architecture in America

contemporary world order and for practical reasons. Just as for any building, a mosque can be minimalist or intricate, traditional or eclectic, austere or ornate. It is universally recognized that the principal symbol for Muslims is the Kaba (cube) in Mecca, illustrating the essential spiritual nature of architecture underscoring the simplicity of form. Architecture of mosques around the world is undergoing major transformation. Muslims in the West are building new mosques as their numbers grow through immigration, birth, and conversion. Some of the notable mosques built in the United States during the last few decades include the Islamic Center in Washington, DC, the earliest-known American mosque purposely built, which embodies Egyptian neoclassical architectural style and a dose of the Moorish architecture of Spain; the dazzling Islamic Center of Greater Toledo at Perrysburg, Ohio, which employs Ottoman-style architecture with two rocket-like minarets; the ISNA Mosque in Plainfield, Indiana, which emphasizes geometric rather than traditional dome-like or arch-like expressions; the Islamic Center at Cedar Rapids, Iowa; the Albanian Islamic Center at Haper Woods, Michigan; the Islamic Center of Greater St. Louis; the Cincinnati Mosque and Islamic Center, which employs flamboyant decorative work with the ninety-nine Beautiful names of God inscribed prominently in the prayer area; and King Fahd Mosque in Culver City, California, to name a few. More mosques have recently been built or are being planned at this writing.

Islam is a religion of simplicity and egalitarian values. Devotees pray humbly on the ground. When Muslims die, they are buried in the simplest fashion. Pomp and grandeur are discouraged. Islam is also a people’s religion, in which the community is emphasized. Prayers can take place at individual or collective levels. The Prophet lived a simple life, and devout Muslims are expected to follow his example.

A saying of the Prophet relates: “The important thing is not the mosque but the quality of the prayer.” Magnificence is usually a statement of the powerful and the rich and is not necessarily representative of the human spirit or a measure of the depth of that spirit. The functioning of the inner space, which evokes spirituality, serves a more useful purpose than the outer shell that contains it, although they may complement each other if they are integrated for the common goal of evoking spiri-
tuality and elevating a feeling of sanctity of space. Islamic tradition emphasizes that it is the spirit of man that is of value, not the physical body or the material world. Greater importance should be assigned to essence rather than form. The Qur'an states, “make your dwellings places of worship and establish regular prayers; and give glad tidings to those who believe” (Chapter 10:87). Thus the nature of a physical structure, even if it is intended for worship, should not prevail over an attitude of humility, which is more reflective of virtue and sacredness, and amenable to Divine acceptance.

The Muslim community of the United States (about 6 to 8 million people) has been in a state of shock and unease over what happened on September 11, 2001. The catastrophe caused by a few of their co-religionists motivated by extremist politics has tarnished their image unwittingly. Muslims all over the world are looking inward to find out what went wrong. In America’s tolerant multicultural society, they have received enormous support and help from others. However, many Islamic Charity organizations have been banned. Some Islamic research institutions have been raided, and it has been suggested that some of the mosques are being used by terrorists to carry out future terrorist operations. Many mosques are under surveillance. This vilifies the faith even further.

How do all these factors influence the architecture of future mosques in America? There has already been a trend to build mosques that will be contextual, so that people can get a sense of place. Perhaps under the umbrella of universal Islam, there is a need for a new look at Islam in the new world, rather than the Islam of the old world, and an attendant development of Islamic architecture in America. Transformation in Islamic architecture should take place by considering local sociological and climatic conditions. As members of the Muslim community and their descendents will gradually integrate with the local populace, so should the architecture of future mosques blend with the local setting. There is no need to discard Muslim traditions. That tradition and modernity can co-exist and yet be complementary is exemplified by the Haj Terminal in Jeddah, Saudi Arabia, where Teflon-coated fiberglass tent-like roofs protect pilgrims from the searing sun. The Haj Terminal is a modern version of the traditional Arab tent dwelling.

Since the form of the mosque is not as important, in accordance with the Qur’an and the Prophet’s traditions, as is humility or the quality of prayer, the architecture of mosques should emphasize the functional needs and evoke the spirit of prayer rather than artificially project external flamboyance. Some of the essential features of Islamic architecture should be retained to respect tradition, but they need not be highly conspicuous or be overemphasized. The more future mosques blend with the local setting, the more contextual they will become. The same attitude of adaptability that the earlier Islam embraced during its initial stages of growth and expansion in diverse regions needs to be nurtured if Islam is to remain relevant in the American context. Islamic architecture must, however, retain its transcendental meaning, its distinct character, and the uniqueness at its core during its growth and expansion in America. That is to say, the transformation of Islamic architecture in America should meld the old and the new. In addition to catering to practical needs, American mosques should evoke spirituality and create a sense of serenity and tranquility for the devotees, and that’s all they should do in terms of their visual imagery, whether viewed from outside or inside.
Throughout history, architecture has been considered a venerable field of practice. It owes this partially to the fact that practice in general and professionalism in particular are fundamental to ethics and moral conduct. This article provides a brief overview of the current theories of ethics, the emergence of the architectural profession in the United States of America, and some of the important cases that illustrate the principles of ethical conduct in architecture. The principal goal is to show the basic relationship between ethics and architecture and to emphasize the basic ethical tenets relevant to the field.

The field of ethics is known as the philosophy of morality in the general domain of philosophy within which it belongs. Evident in its various dictionary definitions, the concept is closely related to morality, a code of moral conduct or the morals held by the participants in a field of practice. The word moral (a Latin term by origin) means "characterized by excellence in what pertains to practice or conduct; right proper; dealing with establishing principles of right and wrong behavior" (Webster’s). It is clear that while the terms have been used interchangeably in some contexts, they hold different meanings. While "ethical" is a broader term referring to the value of different kinds of life and activity, "moral" refers more specifically to rules, obligations, and experiences (Williams 1995, 546).

Moral philosophy attempts to describe human morality, both in terms of actions and the judgments that govern these. Most of us have a good sense of what this means in practical terms. We try to avoid under most circumstances to lie or cheat, and under any circumstance to maim and kill. We try to behave as responsible members of society and raise our children to follow similar tenets.

The difficulty arises—and this is what moral philosophy tries to resolve—when we attempt to describe the underlying principles of these actions and judgments, or deal with more adverse circumstances where the morality of these actions and judgments are in question.
Do we consider the use of taxpayer’s funds in one government program or another morally appropriate?

Would it be moral to divert illegitimately obtained funds to support a democratic movement somewhere in the world?

To make a more severe case: should we feel morally justified to sacrifice one human’s life by transplanting his or her organs to many others, thus saving them from almost certain death?

It is evident that the difficulty in answering these questions lies in the difficulty of agreeing upon a commonly accepted set of principles and theories that can help us differentiate the moral from the immoral, not only for these questions but also for thousands of others. Even in the event that we find a set of coherent principles that answer these questions adequately, chances are the next person looking at these principles may have objections on “moral” grounds.

These difficulties point to the ongoing discourse both on the principles themselves (ethics) as well as on higher-level considerations that organize the domain of such principles (meta-ethics). Should we be interested in describing the moral tenets that we all have to live by; should we be interested in the results that we must obtain through our actions regardless of the tenets; or would it suffice to ensure moral qualities in individuals and then let their actions represent the standards that we all can abide by?

It is clear that there are individual values and interests at stake as well as those that pertain to the extensions of the individual (belongings, family, friends, etc.) and finally those that pertain to the context within which the individual exists (city, nation, society, culture, mankind, etc.) It is not that these are necessarily distinct interests. Individuals hold these interests simultaneously, and they govern their own motivations and reasons for action or judgment. The interaction between the interests of different individuals is another factor to consider. This is not just an unrelated circumstance but also one that constitutes the structure of the very individuals whose interests are at stake—through their extensions and their context.

The theories of ethics that attempt to resolve the dilemma of the individual have been based on a handful of fundamentally different approaches. Some are interested in the principles. Through the application of a set of sound principles of morality, they argue that the individual can ensure moral conduct. Alternatively, others argue that the intuition of the individual is the key. By considering moral conclusions delivered by conflicting outlooks, individuals can chose between them using their moral intuitions. Finally, those who have attempted to integrate the combined effect of the morally correct principles and morally informed intuition of the agents propose the reflective equilibrium approach. They argue that the principles must be applied to cases through the intuition of the agent. They also point out that if the way a case is presented can often obscure the relevant moral imperative, thus necessitating the consideration of moral psychology as a guiding construct.

**Types of Moral Theory**

Principal theories of morality have been categorized into three sets in Bernard Williams’ chapter entitled “Ethics” in the text *Philosophy*, by Grayling (Williams 1995). These are based on three fundamental ingredients of human actions and judgments, respectively: consequences, rights, and virtues.

**Consequence-based Theories of Morality**

These theories focus on the ethical results of actions and judgments. They have been dominated by a movement called utilitarianism, which clearly focuses on the end results of actions and judgments. These theories recognize that those who act tend to act on behalf of themselves or those close to them. They also argue that the individual is capable of acting on behalf of a larger group, or even the “greater good” of society. These tendencies are described as the intent to maximize welfare, which has to take
into account the welfare of the individual as well as society.

A central problem with this approach is that individuals when they act are acting with limited knowledge and may not be able to weigh the complex welfare implications of their actions. How much environmental damage are we subsidizing when we purchase any consumer product? What harm would we suffer by not purchasing some consumer products? Other problems include the unrealistic assumption that all individuals will act in the interest of the greater good. Individual values and integrity may be violated if one adheres to the strategy to act on behalf of others thus behaving without principle or consistently. Finally, some things of great value to individuals, such as aesthetics and environment, are not always expressible in terms of the end result and its utility.

Finally, some technical difficulties exist: is the collective utility simply equal to the sum of the utilities of each individual, and can justice prevail if the demands on individuals are not permitted to be equal either objectively or subjectively?

RIGHTS-BASED THEORIES OF MORALITY

These theories are based on the nonfungibility of agents’ interests. That is to say, my interests cannot be substitutable by your interests. A cannot do certain things to B even if this is in the interest of the collective—such as take his or her life. Also, there are certain things that A is obligated to do on B’s behalf under certain circumstances, such as aid him or her in events of emergency. Many of our laws and religious beliefs attempt to govern by similar notions of morality.

The immediate conflict that arises is that these rights of individuals can be in mutual conflict. Without a notion of the larger good, it is difficult to manage the individual rights. Opinions on the solution of this problem differ. Some hardliners hold the rules or the contractual principles sacrosanct, while others argue that such level of purism is tantamount to moral frivolity.

In an attempt to solve similar problems, I. Kant has argued for the notion of “the kingdom of ends,” which stipulates that everyone is obligated to lay down laws to benefit both themselves and others. The question remains as to who has the moral right to lay these laws down. Are governments and religions of sufficient moral power and generality to hold individuals in ethically good stead? John Rawls (1971, 1980) argues for the “veil of ignorance,” which would distance individual interests from a contractual agreement, thus making the larger good the principal motive of such actions. Even egotistical individuals would be compelled to look after the interest of others if they perceived their own interests being served likewise. Alternatively, Gauthier (1986) argues that individuals also have moral interests that go beyond their egotistical ones.
The Pruitt-Igoe public housing project in St. Louis, Missouri, occupies a significant niche in the annals of architectural disaster. Designed for low-income families, the complex comprised 33 high-rise (11-story) buildings containing 2,870 apartments on 57.5 acres. As with most "conventional" public housing (that built, owned, and managed by a governmental agency) of its period, Pruitt-Igoe was part of the larger post-World War II slum clearance and urban renewal efforts launched by the partnership of local municipalities and the American national government. These efforts were aimed at the decaying, poverty-ridden slums of central cities where severe overcrowding and considerable housing stock deterioration existed. Consistent with this orientation, most American public housing projects like Pruitt-Igoe tended to be built in a ring within a few miles of the central business district.

Hailed at its opening in 1954 by Architectural Forum for its innovative cost-saving and community-building design features (Slum Surgery 1951, 128), Pruitt-Igoe in slightly more than a decade came to be described by sociologist Lee Rainwater as "an embarrassment to all concerned... a household term... for the worst in ghetto living... no other public housing project in the country approaches it in terms of vacancies, tenant concerns and anxieties, physical deterioration" (Lessons 1967, 116).

By the 1970s, rising maintenance costs, excessive vandalism, high vacancy rates, increasing crime, and a world-wide stigmatizing of the project forced a simple solution from a complex decision-making process: Pruitt-Igoe must be destroyed. This ultimate act was preceded by an experiment in 1972 in which three of the buildings were demolished by use of explosives to test theories ranging from whether the structures could be efficiently razed in this way to whether they could be altered vertically or horizontally for possible renovation. The wide coverage given the experiment by the world's communications media led most people to assume that the project had been completely destroyed in that year. As a matter of fact, the remaining thirty buildings continued to stand empty for several years until they were demolished during the summer of 1976—demolished not with a bang of explosives, but with surprising ease by the headache ball. In a final irony, the rubble from Pruitt-Igoe was trucked to a giant rock quarry in suburban St. Louis, adjacent to one of the most affluent fringe-area communities in America.

The ethical problem in Pruitt-Igoe and many other similar projects, such as Laclede Town, is not whether we know what to do but whether we have the moral resolve to devote funds, talent, and compassion to our fellow human beings and solve their problems. This clearly falls under the rights-based ethical theory, in which one segment of the society needs to be motivated to save the other simply because it's morally essential to do so.

VIRTUE-BASED THEORIES OF MORALITY

Perhaps the oldest approach to morality, one that has been overpowered by the previous two, remarkably has made a comeback. This approach originated in Aristotle’s theories about human virtues, which can also be traced back to Socrates, his teacher and mentor. According to Aristotle, human virtues—such as justice, modesty, courage, self-control, prudence, generosity, benevolence, duty, and the like—determine ethical character. They are the very disposition of human character acquired through training, displayed by action and emotional reaction.

These theories are motivated by the general belief that ethical behavior is what one expects from "good, decent persons"—although in Aristotle’s case, slaves and women did not make the cut! While, as suggested in Aristotle’s exclusions, one can argue that this kind of virtue must be inborn, proponents have argued that other reasons underlie these characteristics, such as motives, beliefs, and obligations.

According to Williams (1995), problems with this approach are due to four categories: grounds, content, unity, and reality. The ground of the theory being based on
genetics and gender is fundamentally flawed. Next, the specific virtues are temporally biased. In Aristotle’s original list, fairness is expressed only in the form of justice, kindness is nonexistent, and truthfulness is treated only as a function of boastfulness or modesty. Next, the dependence between many of these virtues, such as justice and generosity, courage and self-control, necessitate thinking of these virtues as all-or-nothing propositions. Finally, the realism of such a theory is suspect, since it reeks of context dependence (generosity in one situation is not the same as in other situations) and stereotyping (appearance-based judgments about individuals).

Today virtue-based theories have been revived in some circles through the movement called value ethics. In this case virtue is the basis of morality, not due to the rightness of judgments of individuals, but because of their essential role in the wellbeing of the agent. Virtues derive from the flourishing of individuals. Since through these virtues we can infer judgments about actions, they constitute the basis of our morality (Statman, 1997).

**EMERGENCE OF THE ARCHITECTURE PROFESSION IN THE UNITED STATES**

Architecture as a field of practice, like others in medicine, law, education, and so on, is subject to a full treatment of ethical consideration both in its practice and in terms of the judgments it supports. Before we can speak about the entity we call architecture and individuals who engage in its practice, we need to better understand its composition and character. Since there are great differences between its manifestations in different countries (Saint 1983), we will presently consider it in the United States only.

As recently as the first half of the 19th century, there was no profession of architecture in the U.S. to speak of. In 1804, while counterparts in Europe and England were enjoying significant rewards, Latrobe, one of the pioneers of the profession in the U.S., wrote:

> Had I in England executed what I have here, I should now be able to sit down quietly and enjoy olim cum dignitate... Here I am the only successful Architect and Engineer, I have had to break the ice for my successors, and what was more difficult to destroy the prejudices the villainous Quacks in whose hands the public works have hitherto been, had raised against me. (Saint 1983, 72)

It was not long before properly educated architects emerged in the scene, such as Charles Bulfinch, John McComb, Jr., Ithiel Town, A.J. Davis, Richard Upjohn, and Richard Morris Hunt, and the “correction” of their image was afoot. In distinguishing themselves from the builders and “villainous Quacks,” they emphasized a new agenda for architecture: efficiency, safety, appearance, and economy (Saint 1983). Hunt, the only Beaux Arts–trained of the bunch, championed the...
“extreme artistic” view to the detriment of all other agendas, setting up the next three-quarters of a century as the period of artistic excesses for the profession. Incidentally, this coincided with the emergence of the professional identity of the American architect. Consequently, we owe much of the excess baggage that the profession has to bear in terms of irresponsible behavior to the legacy of R.M. Hunt.

Boston, New York, Chicago, and to a lesser extent Philadelphia and Urbana, Illinois, played important roles in the emergence of American architecture during the next half century. These centers of urban and intellectual growth were the sites of the first professional businesses, professional organizations, and educational institutions. The firms that emerged have all left lasting legacies on our profession. H.H. Richardson, a student of Hunt, has been the most influential American architect emerging from that era. McKim, Mead, and White on the other hand have dominated architecture in New York through their large volume of work and professional excesses. In Chicago, Adler and Sullivan and Burnham and Root benefited greatly from the “Chicago Revolution,” which rebuilt the city after the Great Fire. Probably the two most influential architects that shaped our profession came out of these firms: Adler and Burnham.

Their agenda included three important items: (1) developing effective rules for architectural competitions, (2) registration of architects, and (3) sharing in government commissions. Adler developed the guidelines for competitions. He and Burnham were instrumental in getting legislation prepared for architectural

Table 1
An abbreviated chronology of significant events in the emergence of the architecture profession in the United States.

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<th>DATE</th>
<th>EXPLANATION</th>
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<td>First trained architect</td>
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<td>Charles Bulfinch in Boston</td>
<td>1820</td>
<td>First architectural office in Boston</td>
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<tr>
<td>John McComb, Jr. in New York</td>
<td>1820</td>
<td>First architectural office in New York</td>
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<td>Town and Davis in New York</td>
<td>1829</td>
<td>First partnership</td>
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<td>Academy for the Fine Arts in New York</td>
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<td>New York Ecclesiological Society</td>
<td>1848</td>
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<td>Richard Upjohn</td>
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<td>Richard Morris Hunt in New York</td>
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<td>1881</td>
<td>Second school of architecture, in New York</td>
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<td>The Inland Architect and Builder</td>
<td>1883</td>
<td>Influential Chicago journal</td>
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<td>Adler and Sullivan</td>
<td>1883</td>
<td>Influential Chicago firm</td>
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<td>McKim, Mead and White</td>
<td>1883</td>
<td>Largest practice in New York</td>
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<td>Tarnsey Act for government commissions</td>
<td>1886</td>
<td>First legislation to enable architects to obtain government jobs</td>
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<td>Licensing examination passed in Illinois</td>
<td>1887</td>
<td>The first legislation for licensing with the help of the school of architecture</td>
</tr>
<tr>
<td>AIA office moved to Washington</td>
<td>1897</td>
<td>Nationally recognized professional organization</td>
</tr>
<tr>
<td>AIA raises fee scale from 5% to 6%</td>
<td>1908</td>
<td>Opposed by politicians</td>
</tr>
<tr>
<td>Commission of Fine Arts of the US government</td>
<td>1912</td>
<td>Primary channel for commissions</td>
</tr>
<tr>
<td>Passing of licensing legislation completed in all 50 states</td>
<td>1951</td>
<td>Reciprocity between states not completed till 1970s</td>
</tr>
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Sir Joseph Paxton (1803-1865), a self-made botanist, designer, and engineer of greenhouses, and a recipient of Knighthood due to his accomplishments, was the principal designer of the Crystal Palace, the structure inside of which the Great Exhibition of 1851, a world’s fair of technology and production of the times, was held. At the time, this was the largest international exhibition held anywhere. It marked the culmination of an extraordinary confluence of forces emanating from international commerce, technology, architecture, and politics. Its impact on the engineering of buildings, not to mention the architectural world is, surprisingly, remarkable. By some miracle of history, the first great exhibition glorifying modern industrialism was housed in a structure that more perfectly expressed its potentials than any that ever followed it.

During the design phase a public competition was held, for which a total of 248 submissions were received. While the jury members were exercising their self-declared right to create a final design from some of the features of the submissions, Joseph Paxton, through his contacts and influence, was leveraging his own design solution into the process. Paxton succeeded—and Crystal Palace went on to become one of the most admired buildings of the modern era.

The ethical question here is whether or not Paxton’s end-run to the commission violated professional, ethical conduct and shortchanged the efforts of the 248 competitors. Here we see a classical conflict between consequence-based ethics, which would agree with Paxton’s conduct, and rights-based (as well as virtue-based) ethics, which would not.
carry out their own in-house design and construction work, eliminating many jobs for the open market. These problems are remedied to a certain extent due to the large number of registered architects who are hired by these agencies.

Characteristics of professionalism in the U.S. are a result of the alliance that was forged between architects of an artistic inclination and businessmen (contractors, developers, and builders) at the expense of artisans and craftsmen. This has had a profound impact on the values held by architects even today. The primary agenda of an architectural commission is still characterized by the overemphasis that is placed on the artistic and business aspects of the practice. While today there is sufficient diversity in architectural practice, the charters of professional organizations and influential firms and institutions of education continue to emphasize a limited agenda: shelter, activity, aesthetics, and economics (Hillier et al. 1984)—one that closely resembles that of the early practitioners of the first half of the 19th century.

**A PHILOSOPHY OF MORALS IN ARCHITECTURE**

Let us now consider a philosophy of morals against this broad-brush backdrop of the history of architectural professionalism in the U.S. Even though we would be on thin ice to even suggest that ethics regards national or continental boundaries, the self-imposed geographical limitations here are merely one of practicality.

Based on the definitions we provided at the outset, ethical practice of architecture is the exercise of morally defendable “action and judgment,” where moral is that which is “right” or “proper.” What constitutes right or proper can be gleaned from two distinct sources: that which is right in the context of the special domain of architecture and that which is right in the domain of the larger society within which architecture exists. In the former case, we need to base our inferences on the history of architectural practice, which we just reviewed. In the latter case, we need to revisit the general ethics theories within which those of the profession are subsumed.

**ETHICS ACCORDING TO PROFESSIONAL ORGANIZATIONS**

AIA regards the responsibilities of the architect as stemming from obligations to the client and to society. The first paragraph of the “Introduction” to The Architect’s Responsibilities by H.L. Murvin states that:

> The architect is responsible for imparting distinctive esthetic qualities to our buildings, yet his realm is not buildings alone. The proper fulfillment of the architect’s responsibilities requires competent, ethical, and impartial service, not only on behalf of the client, but also in the public interest. Seldom does a building affect only its owner, nor does it stand alone. For this reason, the architect is responsible for designing buildings that protect the health, safety and welfare of all who use them and also enhance the environment by taking due regard for the natural environment, existing physical factors, and circulatory patterns. In addition, the architect designs a building for efficient and economical operation and utilizes materials and equipment most appropriate for their particular application. In this way, our communities develop logically and intelligently; their architecture has a positive impact on society and is a source of satisfaction to the client and all who use it. (Murvin 1982, xi)

This is a clear indication of two categories of moral responsibility for the architect: one toward the client and the other toward society in general. The statement suggests both the end results that must be achieved (such as health safety and welfare) and the means with which they can be achieved (such as providing competent, impartial service and showing due regard for the natural environment and existing physical factors). Thus the philosophy of the AIA represents both the utilitarianism and the rights-based philosophies of general ethics. In fact, the latter of these is carried into much greater detail through the dozens of contractual forms that AIA issues to regulate the fee structure, conduct, and conclusions of the design delivery process. From time to time it also issues policy and guidelines to regulate ethical forms of practice—i.e., the objection to design-build, which was later dropped in the face of concerted objection from architects.
Conspicuous in its absence from the approach of the AIA is the *virtue*-based theory of ethics. There is no specification of individuals’ qualities and qualifications to ensure moral conduct. This is an interesting point since early practitioners such as R.M. Hunt and R. Burnham, who have had a tremendous amount of influence on the inception of the AIA, were ardent proponents of the individuality of the architect. One explanation for this state of affairs is that any attempt to define an *a priori* list of acceptable virtues would potentially constitute an offense to the principle of individuality.

ETHICS ACCORDING TO PROFESSIONAL FIRMS

While AIA represents the practice of architecture in national and international contexts, the conduct of architectural firms represents a great deal of independence from the rules and regulations of the AIA. In fact, a majority of the licensed architects in the U.S. are not members of the AIA. Consequently, the ethical issues raised through the conduct of professionals are worth considering on their own merits.

During the early part of the 19th century, architects were by and large left to their own means to fend for themselves. Most of them were both designers and builders—leaving the client without any mechanism of protection from financial exploitation. In this form of practice, there is no advocate of the client with the technical knowledge to prevent unnecessary or incorrect construction practices. Also, general principles of conflict of interest were not observed. Architects such as Bulfinch in Boston would purchase land based on the development plans prepared by themselves or by peers, thus benefiting greatly from the speculative ownership of land. The factor that justified this kind of behavior was the absence of professional fees—which in itself constituted unethical conduct on the part of the client.

In a climate of such mutual exploitation, one is hard pressed to find many rules of moral conduct. In fact, the principal right to own copyright for a design did not exist either. Builders, owners, and architects indulged in freely replicating others’ designs without hesitation. If there was any moral fiber holding the practice together at that time, it was a form of utilitarianism. In the end, designs were made,
The history of the profession is full of examples of how architects’ ambitions for greatness in aesthetic terms can override the clients’ ideas for the facilities they are purchasing. Crystal palace is one example, since the designs previous to Paxton’s all aspired to greatness through neoclassical features, while, all along, the problem demanded exactly the kind of technically sophisticated innovation that Paxton was able to deliver. Perhaps an even more poignant example is Fallingwater by Frank Lloyd Wright.

Edgar Kaufmann, Jr. joined the Taliesin Fellowship in 1934, and shortly after urged his father to support and fund the building of the model for Broadacre City, Mr. Wright’s alternative to urban centralization. Mr. Kaufmann gave his full endorsement... During one of his trips to Pittsburgh the Kaufmanns took him out to the site at Bear Run where they owned a weekend cottage situated in a forest glen abundant with rhododendron bushes and waterfalls. At the very outset that site so appealed to Mr. Wright’s creative genius that he wrote of his first glimpse of it in December, 1934: “the visit to the waterfall in the woods stays with me and a domicile has taken vague shape in my mind to the music of the stream. When contours come you will see it.” (Pfeiffer 1986, 82)

In fact this shape was to be one of the most innovative conceptions of architecture, where the building’s natural context became a remarkable form-giver and the basis of Wright’s expression of a completely new set of design principles. In a TV film on Fallingwater produced by Kent State University, Edgar Kaufmann, Jr. recollects that first trip of Mr. Wright’s to Bear Run.

When my parent invited Wright to visit the property with the idea that he might design a house for them, they took him around the property and explained why the existing house was influenced and no longer very happily located. They also took him down to the waterfalls and explained that a lot of the family’s time, and of course their guests’ time, as a result too, was spent basking on the flat rock at the base of the falls, walking in under the falls, getting a massage, sliding down into the potholes, and having fun. And the falls, including the drama of the water’s movement and the charm of the noise that it made, were something that everybody appreciated a great deal. This was a focus for us. Wright took that in, he didn’t make any comment, but he once said that since we wanted to move farther away from the highway than the old house, that somewhere nearer the falls might be quite agreeable. Eventually when he designed the first scheme for the house, which was also the last scheme for the house, he placed it as we all know directly above the waterfall, which I do not think had ever crossed my parent’s minds. But once having been presented with the notion they had no resistance to it at all, it seemed perfectly good and proper. (Pfeiffer 1986, 83)

“Proper” may not be exactly the correct description, at least in hindsight, as this placement has been the catalyst for Wright’s extraordinary creation more than any other factor, as well as leading to the complications and difficulties the building went through during its stages of design, construction, and occupancy. Some of the early stonework had to be redone, but more seriously the reinforcing work of the innovative cantilevered floor slabs were questioned time and time again and became an incessant source of conflict for the project. Wright was confident in his design; but today, the building’s structure remains troubled due to excessive sagging and is in desperate need of retrofitting. In the end, it is fair to say that the Kaufmanns never got the summer cottage that they hired Mr. Wright to deliver. Instead they got a Modern masterpiece that was so widely admired by architects and students of architecture that at the end Edgar Kaufmann Jr. decided to donate the building to the Western Pennsylvania Conservancy, a nonprofit organization, rather than live in it.

The ethical question then is whether it is right to override the needs/wishes of a client for the sake of creating a celebrated design of symbolic/iconic distinction to be admired by generations to come. This dilemma is in the heart of architectural education and practice. The adjudication of this matter resides in subsuming societal responsibilities in institutional or professional ones. Clearly this would appear to be a reversal of the context-content relationship between society and design. Architects seem to have reversed priorities of morality by including those that are external to the field in those that are internal.
The purchase of a new building design involves one of the most complex product delivery processes, starting with design and ending with occupancy. While there are a variety of standards that are intended to regulate the orderly progress of such processes, there are many important procedural as well as ethical ambiguities. One such ambiguity is the conflict between the client’s right to decline services offered by the architect and the necessity of including all aspects of the delivery process, such as site supervision, in order to ensure safety and the success of the project.

On July 17, 1981, two suspended walkways within the atrium area of the Hyatt Regency Hotel in Kansas City, MO, collapsed, leaving 113 people dead and 186 injured. In terms of loss of life and injuries, this was the most devastating structural collapse ever to take place in the United States. On July 20, 1981, the National Bureau of Standards was asked to investigate the case and determine the probable cause of the accident. After extensive laboratory tests and on site inspections, NBS issued a report summarizing its findings. They concluded that the walkways that collapsed were designed and constructed in a substandard manner directly contributing to the collapse. No other factor was linked to the disaster. (Marshall et al. 1982)

In this case the client had exercised its right to decline site supervision by the architect. A design change that was executed through the approval of shop drawings made it through the construction process and was ultimately the principal cause of the greatest building collapses in North America. Had there been site supervision of the construction, it is conceivable that the mistake would have been discovered in time to mitigate the disaster.

This is a classical conflict between interests of one individual (or group) and another. Such moral conflicts can be resolved with improving the state of knowledge of all parties about the possible consequences of their actions. One way of accomplishing this is to widely publicize the details of cases like the Hyatt Regency to make parties aware of the consequences.

Another ethical conflict illustrated by the Kansas City Hyatt Regency disaster is the prevalence of one mistake over the others in the event that multiple mistakes occur. While the principal cause of the collapse was due to going to a two-rod detail from a single rod, in supporting the box beams of the walkways connecting the two wings of the building, the original design was not free of errors:

The box beam–hanger rod connections would not have satisfied the Kansas City Building Code under the original hanger rod detail (continuous rod). (Marshall et al. 1982)

This raises another classical moral conflict. Is the original designer of the structure culpable, even though someone else beat him to actually causing the disaster? A similar problem is, if someone is hit by a car and is still alive but is run over by another car, who is responsible for the death? Is the responsibility for an error mitigated when another one supercedes it?  

buildings were built, and architects made a living. It is difficult to say whether or not these behaviors adhered to any moral code of conduct or whether the architects were held to any strict moral standard. In a peculiar way, this state of affairs has been a predictor of certain practices that are still prevalent today, as highlighted in the case studies in the sidebars.

Today we have principles governing conflict of interest, fair fee schedules, protection of design rights, and guidelines regulating the practice of design–build, alongside many other ethical standards, such as ADA, building codes, etc. These are enforced by authority of a plethora of laws, ordinances, bylaws, guidelines, and informal codes of conduct, both internal and external to the architects’ office. What is most instructive is to examine some of these more informal codes of conduct through examples.
Dana Cuff in her book *Architecture: The Story of Practice* (1992) cites several interesting examples. On the matter of jobs and architect-client relations, she cites the following three quotations, which bring to the fore three distinct points of view: one of an architect “in the trenches,” the other of Michael Graves, and the third of Michaelangelo.

It is fine to say you’re going to do award-winning work, but you can’t do it without a client. We’re trying to do really good work when we get the chance. The trouble is, the only way to do better work is to have better clients, and the only way to get better clients is to do the better work. We only used to do development stuff—all our clients were developers. Some of them are good you know,.... Sometimes you have to admit the project is going to be a D-O-G. Then instead of pressing hard and putting in a lot of effort for little improvement, you get it out as fast as possible. Everybody designs a few dogs. It’s inevitable. On each project, you just have to decide whether it is possible and worth it to do battle for something better. (anonymous, cited in Cuff 1992, 68)

This example displays no real code or rules of conduct. The end result, that of keeping the office occupied and the employees fed, appears to be the determining factor. These are the perceived obligations of the boss. His intention to do better work is not an edict that he cannot deviate from, so long as the office is functioning. We see exactly the opposite in Michael Graves’ case. His conduct seems to be driven by the quality of the work.

We don’t have a marketing plan at all, except to say yes or no to the things that come in. We have never gone out to get anything—not because that was the plan, it’s just that there hasn’t been time to do that... If we get an RFP today in the mail, Karen will come to me and say, “Do you want to go after a museum in Tuscon? Here’s the rap: you have to have a local architect, it’s $30 million, it’s schedule is that, you have to go for three meetings, you have to do this and that. Should we go after it?” I’ll say yes or no. If that’s a plan that’s as serious as it gets... It’s not as frivolous as that because as the office gets older, and the people in it get older, we want them to stay desperately. [We] want the office more or less as it is, with the kind of talent we’ve got... And if somebody makes X dollars with me and can get 2X across the street, I’ve got to make sure that the office makes enough money so that that person isn’t going to make just 2X, but 2X plus something... (Graves, cited in Cuff 1992, 219)
One suspects that this reversal of opinion by and large parallels the same in terms of his fortunes, both literally and figuratively, as he is in the fortunate position to pick and choose the jobs that come to him. One does not have to go far in Cuff’s text to realize that there is no moral principle at stake here. When asked about his appearance in a magazine ad for shoes, Graves replies:

For all the people who say “You shouldn’t have done it,” I have to tell you that it paid for my daughter’s wedding. And, it’s not immoral. Therefore, I’d do it again.

(M. Graves, cited in Cuff 1992, 219)

The true expression of the moral imperative in the matter of getting and holding a job can be found in Michaelangelo’s words to cardinals who found the lighting in St. Peter’s Cathedral inadequate:

I neither am nor will be obliged to tell your lordship or any other person what I intend or ought to do for this work; your office is to procure money, and to take care that thieves do not get the same; the design for buildings you are to leave to my care.

(Michaelangelo, cited in Cuff 1992, 72)

These illustrate the different forms of obligation that the architect has to manage at all times, which includes those to clients, employees, and personal relations. As can be seen from the following quotes, management of a diverse set of obligations can become tricky.

**Architect 1:** A few years ago, I had a big job that fell through, so I borrowed money to make payroll when I should have let people go. Now I know you’ve got to be ruthless and make these tough decisions. I’d lay them off if it happened again. You can’t get too people-oriented or you’ll lose your firm.

**Architect 2:** I think you have to identify who you’re willing to carry and who’s expendable.

**Architect 3:** But that will leave you with a top-heavy organization [because lower-level staff is most expendable], which is exactly wrong in a finical crisis.

**Architect 4:** There’s a big investment in every employee in terms of training them, so it’s bad to lose them.

**Architect 2:** But the cost of training differs, and draftsmen are very cheap.

**Architect 1:** You’ve got to have a survival instinct.

**Architect 5:** I did the same.
HANCOCK TOWER AND USING UNTESTED BUILDING TECHNOLOGIES

Design innovation goes hand in hand with innovation in technical specifications and ultimately the construction of the building. Notable innovations in the design of the office tower—buildings of 50 stories and higher—have been realized with some cost of failure. Notable cases include the structural and enclosure flaws of the John Hancock building in Boston and the near-collapse of the Citicorp building in New York.

"A high wind blew in Boston on the night of January 20, 1973," writes Robert Campbell, who has published a Pulitzer Prize-winning expose on the travails and triumphs of the John Hancock Tower. This building is clearly the most celebrated building of the 70s, due both to its failures and to its successes. What happened in January of 1973 was the breaking of dozens of the 4.5’ x 11.5’ plate glass windows of the building, showering dangerous shards onto the sidewalk below.

The building, arguably a masterpiece in terms of formal composition, strove to realize many innovations and take some design risks in order to achieve its place in the history of modern architecture. Among its innovations, one needs to cite its massing, its reflective skin, and the tuned mass damper to keep its movements to a minimum. Yet these did not prevent the building’s design from being flawed; some would argue this is the case because of some of these innovations rather than in spite of them.

There were four major problems:

- Settlement causing structural damage in the adjoining Trinity Church by H.H. Richardson and underground utilities below Copley Plaza
- Risk of excessive and structurally risky oscillation along the short direction of the building's footprint
- Risk of toppling of the building in the long direction of the building's footprint
- Breakage of the plate glass window units

Eventually all of these problems were resolved. Today, having received numerous design awards, the building stands as a safe and distinguished neighbor of H.H. Richardson’s masterpiece, on Copley Square. The ethical issues raised by this case include the weighing of benefits that apply to the corporation as opposed to society, as well as the critical responsibility the expert must bear as the agent of both. Mediating the damages accrued by those external to this project and revealing the causes of such damage are the two moral burdens the expert carries.

In the following passage, the obligation to balance one’s personal and professional life comes out loud and clear. The means for reaching such a balance is not specified, but there is no question about what the desirable state of affairs could be.

It was midnight, there were only twelve more hours before the project was due, and the studio was packed. It was the end of the first...
semester of architectural grad school. After a solid week of charetting this friend of my friend was nearly burnt out on beer, then coffee, and too many cigarettes. He had almost finished inking his drawings, which were really beautiful, when his wife walked in. He hadn’t been home for days, and he was so bleary-eyed that he hardly recognized her. But she looked mad, and before he could say a word, she took his coffee cup and poured its remains over his drawing, and then she dumped the ashtray in the same place and ground the cigarette butts into the paper with her fist. All she said was, “I want a divorce.” (Cuff 1992, 132)

Finally in Cuff we find several passages that illustrate the rights-based approach to morality in architectural practice. In the first one, architects are discussing rules of conduct in the office.
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One of our principal goals is to keep everyone in the office happy.

We discourage moonlighting, because it drains people from office work.

We never take calls during meetings with clients.

When someone [a potential employee] comes in to interview, we’d rather see loose sketches in their portfolios than hard-lined, agonized sheets. Loose drawings, soft pencil drawings, have so much more personality and communicate so quickly with people. If I had my way, I’d take away all the 2H pencils—I wouldn’t even let them have pen and ink. (Cuff 1992, 115)

There is an obvious effort to articulate the underlying rules that would lead to the desired results, thus an attempt at a code of conduct based on rights; however, it is evident what is driving the discourse: results, or utilitarianism. Similarly, in the following exchange between a fire consultant and architects, the consultant is hard pressed to apply the rules of the game without compromise on the moral ground that loss of life may occur. But even in this case, the Machiavellian approach wins over.

I thought you guys were different [from other architects]—that you were really trying to make this place work. [After a bit of massaging by one of the architects] If we’re going to be safe, can we move this building a few feet away? [But only a little while later, after making a concession, he returns to the moral imperative] Now, how am I supposed to justify pulling burning bodies out of the building when you don’t even have access roads? [The architects assure him that they really need his help, and the fire consultant is the first to agree. Eventually he gives them advice about what can be slipped past the review panel, what can be pushed through, and what will never wash.] (Cuff 1992, 87)

The pattern is clear. Even though there is evidence that practicing architects feel compelled to come up with rights-based ethical approaches to their conduct, they very rarely succeed, if ever. Their behavior seems to be driven by an overwhelmingly utilitarian approach. Also there is no sign of a virtue-based ethics that can be detected anywhere in this evidence.

Academics have been much more generous in
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describing the purposes of architects and architecture. This is not surprising since most of the treaties of the past and the present deal with normative descriptions. They talk more about the way things ought to be than the way they are. In a way this is perfectly suitable to the discussion of ethics, since moral tenets are all about the way human conduct ought to be rather than the way it is.

So, let’s begin with the earliest of the architectural treaties: Vitruvius’ *Ten Books on Architecture*. Vitruvius sees architecture as a basic human endeavor that gives expression not only to basic human characteristics but also to his very humanity:

> [T]he manual dexterity that distinguishes man from animals enabled him to construct shelters. (Vitruvius, cited in Smith 1992, 29)

In accordance with early humanist philosophy, in many of the early writings about architecture, including those by Alberti and Ruskin, we find similar approaches to morality. Architecture, specific forms, scales of buildings, and architectural styles are considered on a moral basis. There is a prevailing discourse that anthropomorphizes architecture to the extent that its morality turns out to be a function of the virtues of the architecture itself. This is a rather curious deviation from the fundamental premise of ethical philosophy, which attributes morality exclusively to humans. The justification apparently is in the fact that the various manifestations of architecture, such as forms and scales, can represent moral attributes, such as boastfulness, modesty, generosity, and so on (Smith 1992, 47–51).

This approach represents the strongest evidence yet supporting a value-ethics approach to architecture. This view of architecture, interestingly enough, has prevailed in the writings of many academics who have considered various architectural styles and movements. Motivation in most instances for this approach is to find theoretical bases for incorporating specific approaches in the design studio or the high-style practice circles of the profession.

One of the most remarkable treatises on architecture to deal with the value-ethics approach to architecture is Ruskin’s *Seven Lamps of Architecture*. His contribution clearly gave impetus to movements to follow, including Modernism. In his preamble he states:

> I believe architecture must be the beginning of arts, and that the others must follow her in their time and order; and I think the prosperity of our schools of painting and sculpture, in which no one will deny the life, though many the health, depends upon that of our architecture. (Ruskin 1981)

This is a simple affirmation of the important role of architecture as the branch of the arts that connects aesthetics with the domain of ethics through the cultural context within which architecture exists.

Ruskin’s treatise puts forth a set of characteristics that architecture has to fulfill in order to meet its moral obligations. The seven lamps—sacrifice, truth, power, beauty, life, memory, and obedience—clearly derive from the Aristotelian notion of virtue. Ruskin anthropomorphizes architecture in the process of attributing these virtues to it and not the architect. This is in the tradition of the early humanist philosophers and has been instrumental in passing on this approach to later generations of ethicists in the field.

In discussing the lamp of truth, for example, Ruskin begins his discourse by stating that “There is a marked likeness between the virtues of man and the enlightenment of the globe.” Ruskin uses the metaphor, which is pursued throughout the book, to bolster the anthropomorphic approach. Later he speaks of the principal of truth as it applies to the building design, as if the building’s morality is exhibited in behavior attributed to the inanimate materials from which it is made:

> Architectural deceits are broadly to be considered under these three heads.

1st, the suggestion of a mode of structure or support, other than the true one; as in pendants of late Gothic roofs.

2nd, the painting of surfaces to represent some other material than that of which they actually consist. (As in the marbling of wood).

3rd, the use of cast machine made ornaments of any kind. (Ruskin 1981, 39)
Ruskin establishes a principle of moral imperative through each of his lamps. At once he is arguing for a virtue-based ethic in architecture while he is also establishing principles like the “honesty, or truthfulness, of the use of materials.” This principle in particular became one of the flags of the Modernist movement and has been hotly debated ever since.

In describing the Modernist ethics, for instance, Royston Landau in his 1997 article talks about several key ideas: freedom from convention, social responsibility, and, of course, honesty of expression of materials. He points out that one of the basic tenets of Modernism has been the freedom from the “tyranny” of classical architecture and its archaic patterns. Landau’s approach harkens at once to the Aristotelian and Platonic virtue ethics, for instance, Royston Landau in his 1997 article talks about several key ideas: freedom from convention, social responsibility, and, of course, honesty of expression of materials. He points out that one of the basic tenets of Modernism has been the freedom from the “tyranny” of classical architecture and its archaic patterns.

The only conclusion reasonable people can reach is the need to educate the professional community about the importance of understanding the diversity of ethical models that are available for adjudication.

Furthermore, professionals must also be educated to understand the distinctions between institutional ethics and the larger societal one. Academic degree-giving institutions often confuse this distinction. Ethical conduct is equated with professional conduct. One grows to understand in the studio culture that “moral” behavior for the designer is the same as “moral” posture towards the design product. It is as though if designers are true to their edicts and principles as designers (not necessarily as members of society), then they can commit any moral sins. It is when they face the “selling” of their beliefs that they face the possibility of immoral conduct (a la Ayn Rand’s Howard Roark). This is quite an oversimplification.

Architectural design is a situated process. It is situated in society, on a site, and in time. It continues a lineage of practice in time and space and at the same time impacts its context through its intervention in space and time. Moral conduct in design must take into account all of its consequences as it affects individuals, society, and ecology. The metrics that have to be used here cannot be limited to those of “design integrity” (or more accurately, “designer integrity”). They must also include a sense of responsibility toward the entire context of architecture.

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Planning is often termed a multidisciplinary field. It is not often, however, that this conventional remark is meant to include life sciences and microbiology. It seems incredible at first attempt to imagine how microorganisms can hold lessons for urban planning. This paper seeks to review and explain the link between these seemingly disparate fields of study. Further, the paper will probe for knowledge relevant to the fields of planning and design from the rather esoteric literature that has been produced on the subject. This line of work further intersects the mathematical concepts of "fractals" and "cellular automata." The scope of this paper has been limited to concepts related to microbiology and life sciences.

In 1961, Jane Jacobs wrote in *The Death and Life of Great American Cities*, "It takes large quantities of the 'average' to produce the 'unaverage' in cities... They (unaverage quantities) are often the only announcers of the way various large quantities are behaving" (442–43). In the absence of sophisticated equipment such as is available today, this observation assumes special importance. Jacobs adds, "This awareness of 'unaverage' clues—or the awareness of their lack—is, again, something any citizen can practice" (ibid). Not only does this observation provide the point of origin for the line of thought that will be pursued further in following discussion, but it also indicates that such clues are visible upon careful scrutiny even in the absence of microprocessors. Jacobs also wrote about the kind of problems cities are. She articulated the comparison of cities with life sciences. It is ironic that the life sciences may play such a major role in supporting and validating Jacobs' theories.

Studies have shown a remarkable correlation between the behavior of microorganisms and cities.
and cities. Moreover, there are behavioral characteristics of more evolved species that are analogous to decision-making in response to situations faced by people in cities. Let us take a look at the various concepts that contribute to this frontier of knowledge.

**THE CONCEPTS**

A preliminary foray into the world of slime mold and its relation to urban planning reveals a multitude of complementary terms. *Emergence, self-organization, complexity, chaos, cellular automata, decentralization, and bottom-up action* are some. In this section we will take our first look at these concepts. This would serve to build a base before we delve into the arguments that have been constructed around these terms.

"Complex behavior" is a system with multiple agents dynamically interacting in multiple ways, following local rules and oblivious to any higher level instructions (Johnson 2001). The perception of a city as a complex system is intuitive. According to Steven Johnson (ibid), there are two kinds of complexity intrinsic to a city. The first is the obvious overwhelming complexity causing sensory overloads. Johnson presents noise and senselessness as the aesthetic of the city. Complexity, and perhaps confusion and chaos, are thus integral to today’s urbanism. The second way cities are complex is through their "coherent personality that self-organizes out of thousands of individual decisions" (ibid). The image of a city is not consciously engineered by its residents. Individual residents of the city independently make decisions and behave in a manner that leads to the establishment of the city’s physical and socio-economic character. As a generic term, *self-organization* means the ability of a system to organize itself without the presence of a higher level of control. Self-organization is the central property of, and a theory about, complex systems (Portugali 2000).

Complex behavior becomes emergent when local interactions lead to some discernable macrobehavior. If the macrobehavior is such as to be useful, then the behavior could be termed adaptive (Johnson 2001). Once more, local interactions are not necessarily carried out with the purpose of influencing the macrobehavior. Indeed, the local actors may not even be aware of the bigger picture.

Complex systems such as cities (or subsystems found within them) may display emergent behavior, which further may become adaptive. This principle has been drawn from studies in microbiology. It was mentioned earlier that the individuals in a
complex system are unaware of the larger pattern. An external observer should therefore be able, over time, to map the larger pattern and interpret it mathematically. Further, once understood, the pattern may be extrapolated to predict the future. This belief was the basis for the top-down planning process that assumed that planners were experts. Pure mathematics, however, complicates matters. The mathematical formulation of "Chaos" (a word used earlier with reference to the character of cities) suggests that complex systems may not be easily predictable.

The principal feature of chaos is that simple deterministic systems can generate what appears to be random behavior (Batty 1991). Edward Lorenz made the discovery that the slightest variation in the control of the original circumstances can produce results that are extremely distant (more than proportionally) from what is expected. His discovery was made while experimenting with weather models. However, since 1960, when this discovery was made, chaos has been increasingly believed to be the "rule" of nature, manifest in the shapes of coastlines and mountains among other phenomena.

The development of cities, as discussed before, is a highly complex function. Given the numerous variables that control this function, it is easy to imagine how slight differences in original conditions might make a huge difference in the result. This makes planning as a predictive and future-oriented activity seem fraught with risk and supports the case of "incremental planning."

In this section we will consider the cases of slime mold, ants, and birds to exhibit how emergence is a phenomenon witnessed at various levels of the chain of evolution. The order of the three specimens represents increasingly complex biological systems. We will simultaneously try to apply the concept of emergence to the urban context.

In August 2000, Toshiyuki Nakagaki, a Japanese scientist, "trained" slime mold to find the shortest path through a maze (Johnson 2001). As long as food is plentiful, slime mold cells exist independently as tiny amoebas. They move around, feed on bacteria in the environment, and reproduce simply by dividing.
into two. However, when food is rare, slime-mold stop reproducing and move toward one another, forming a cluster of tens of thousands of cells. At this point they start acting as a unified whole. Rather than behaving like lots of unicellular creatures, they act as a single multicellular creature. It (the single multicellular organism) changes shape and begins crawling, seeking a more favorable environment. When it finds a spot to its liking, it differentiates into a stalk supporting a round mass of spores. These spores ultimately detach and spread throughout the new environment, starting a new cycle as a collection of slime mold amoebas (Resnick 1991, 50). Thus when the conditions require it, individuals, each acting independently, come to behave in a unified manner. As an analogy in the urban context, let us consider the slums of Delhi.

Early government policy for slums had been one of slum clearance. Slums in Delhi, as in most metropolitan areas in developing countries, are populated by labor that migrates from the rural areas. With no education and minimal daily wages, laborers are completely dependent on previous migrants to find housing in the city. They have no choice but to encroach on public land and construct temporary shacks. Once their huts were demolished, the migrant families were dispersed into a thousand nooks of the city. However, as soon as the public “improvement” initiative diminished, dispersed slum communities reconfigured and returned in another lot of public land that they could occupy.

The process in this example is exactly the reverse of the slime mold experiment. Members of unconnected communities dispersed under adverse conditions and came together when conditions were favorable. Individual decisions were made based on financial conditions, location of workplace, and community links. Much like the mold in the experiment, the individual decision-makers in this case were unaware of their macrobehavior. Further interpretation of the concept of emergence with respect to situations in urban planning and design will support this initial comparison.

John Holland (1998) has derived eight principles from the concept of emergence. Three of these are explained here. The principles have been related to pertinent planning and design issues.

1. Emergence occurs in systems that are generated. The systems are composed of copies of a relatively small number of components that obey simple laws. Typically these copies are interconnected to form an array that may change over time under control of the transition function.

This point raises a question, especially in the context of American cities. It is frequently cited that facilities, be they medical, educational, commercial, or recreational, are organized in groups, or clusters. This situation does not comply with the requirements of emergence. We cannot expect any self-organizing behavior to emerge from this arrangement. I would argue that there is a need for a more structured hierarchy in the provision of facilities. For example, commercial facilities need to be divided into corner stores, local shopping, and a higher order facility. People should not have to travel all the way to the nearest big box store for their smallest shopping needs. In the same way, people should not have to go to a big hospital for the slightest medical condition. A hierarchy would satisfy the basic conditions for an emergent pattern to appear and for people to self-organize.

A hierarchy that divides commercial facilities into corner stores, local shopping, and a higher order facility would satisfy the basic conditions for an emergent pattern to appear and for people to self-organize.

Courtesy of Getty Images.
2. The whole is more than the sum of the parts in these generated systems. The interactions between the parts are nonlinear. This is a very important concept and one that Jane Jacobs had picked up as early as 1961.

This concept suggests that it is erroneous to view a city as the sum of its land uses. When the parts of the whole are interconnected (as is the case with land uses), their relationship in itself adds value to the system. We cannot make a decision regarding any one land use without considering its impact on all other land uses. Further, this principle can be thought of at a variety of scales, from lots to subdivisions through neighborhoods to entire cities. Thus the city must be analyzed as more than sum of its land uses. The land uses add value to the city by virtue of their arrangement, configuration, and interaction.

3. Persistent patterns often satisfy macrolaws. Macrolaws are typically simple relative to the behavioral details of the component elements.

As an example I will revisit the example of slums. The persistence of the slum dwellers in appearing on public land provides adequate housing for all urban dwellers. It is this persistence that ensures that there has been no slowing down in the rate of migration of poor labor into Delhi. The simple rule of the city is that labor is required to run the machines and build the towers. The individuals make myriad decisions all toward satisfying this macroeconomic law, of which they are mostly unaware. Looking for macrolaws could help planners and designers understand the needs of the component elements better.

The case of ants provides another example. Contrary to popular belief, ant colonies are not “governed” by a queen ant passing out instructions. Ants have highly decentralized behavior. In a controlled experiment conducted at Stanford University, it was seen that ants dexterously performed organized functions without any formal organized central command. Ants organized themselves, assigned tasks, and even shuffled and programmed the assignment based purely on local knowledge. No one was in charge of their labor management. This was accomplished through chemical signals, of which ants had ten types, each of varying intensity. This range of messages allows the ants to recognize the difference between encountering a few ants in an hour as against many. A foraging ant may encounter more ants on a particular route than it expected to. This may cause it to follow a rule requiring its return to the colony. Ants can at no time be sure of how many ants are working on which jobs, but by following such rules and assessing the type and frequency of the chemical signals they receive, ants can gauge how many and which ones of them are not at work at any given time and adjust their own behavior suitably. Even though the decision-making in this case is spread over thousands of individuals, the decision-making is accurate. With an equal number of ants underestimating their numbers as overestimating them, the expected inaccuracy in decision-making continues to decrease with increasing size of the colony. In the experiment, the ants located the cemetery at the farthest point from the colony and dumped the garbage at the farthest point possible without putting it close to the cemetery. Ant colonies are able to thrive for as many as 15 years while their parts, the individual ants, live a lot less. This persistence of the whole for much
longer than the constituent parts is one of the defining characteristics of the complex system. This experiment offers wisdom for designers of urban space.

Johnson (2001, 77) summarizes five principles from the ant experiment. Of these, three are presented below with interpretations in the urban planning and design context.

1. More is different (has two meanings).

- There exists a critical mass that enables ants to go about resource allocation procedures the way they do. In other words, more is better.

- Extending the logic to cities, we could say that the larger the city, the more marked are the characteristics of self-organization.

- If we consider individual ants, we can be sure that they are not aware of the big picture themselves. They do not create the overall plan by design. It is only upon observing the macrobehavior that we can identify the system at work.

2. Encourage random encounters.

Since individual decision making of the ants is based on their interactions with other ants, such random interactions should be encouraged. It would be advisable to promote this interaction through New Urbanist style development. Principles of mixed use, compact growth, relatively higher density, and public transport will all help to increase random encounters. Further, attention to public spaces and sensitive design of street furniture and accessories (including benches, pavement, and lighting) could give people a chance to interact.

3. Pay attention to your neighbors.

Local information can lead to global wisdom. The most important lesson to be learned from ants is that they learn from their interactions with their neighbors. In the human context, the term “neighbor” will have to be extended to include all people we interact with. All of these persons are our “neighbors” when we interact with them.

As we know from the chaos theory, extreme patterns can appear without extreme actions by the individuals constituting the patterns. Learning from people around us can help us as planning and design professionals.
Birds flying in formation are not following a leader. Most bird flocks do not have a leader at all. Each bird in the flock follows a set of simple rules, reacting to the movements of the birds near it. Orderly patterns arise from these simple local interactions, of which none of the birds has any knowledge or cognizance. This is again organized behavior without an organizer (Resnick 1997). The important aspects of this behavior are simple rules and local interaction.

The birds in formation achieve coherence and structure without complex instructions or procedures. The flock of birds is not unlike a community developing under a design code.

Overbearing design review criteria run the risk of violating the First Amendment. At the same time, not being specific qualifies design review ordinances as vague. If the rules are kept simple and designers are given the opportunity to learn from what surrounds their site, a desirable uniformity that is not monotonous can be achieved.

We have considered examples of organisms of varying complexity. They have exhibited the properties of emergence, complexity, and self-organization. We then compared these to human analogies in the urban context. The paper explored possible applications of principles derived from life sciences. There are, however, some limitations to this new alliance between vastly different fields of study.

The concepts related in this study are hard to believe at first. People tend to think with what Resnick calls the centralized mindset. Though often this is the correct approach, it is not always appropriate. Charles Darwin advocated the same concept by refuting the "centralized" theory of a supreme power having created all organisms with his (decentralized) theory of natural selection.

To think in this bottom-up fashion does not come naturally to humans. It takes a reversal of values and perspectives to understand how things will manage to organize themselves, especially if they are complex, if they are left on their own. It is easy to imagine how we alter or update our environment to suit our needs. We are able to do this because we, the individuals who constitute the system, are aware of the configuration and working of the system. The ant colony, however, is an example of a system of individuals who update themselves without even being aware of this phenomenon. It is counterintuitive for humans. Even so, there are lessons to be learned.

There are limits, however, to how deeply we assume our life to be related to that of the life forms described earlier. “Cities bring minds together and put them into coherent slots. Cobbblers gather near cobbler and button makers near other button makers. Ideas and goods flow readily within these clusters, leading to productive cross pollination, ensuring that good ideas don’t die out in rural isolation” (Johnson 2001, 108). This idea seems to suggest that the grouping of like producers or merchants is a manifestation of emergent behavior, a phenomenon akin to the slime mold emergence. It is actually a case of sharing resources in order to minimize variable costs—a simple
strategy of the capitalist market to ensure maximum profit. Cobblers come together intentionally. They are aware of their decisions and the repercussions. Following simple economic principles with premeditated purpose is not emergence.

In *The Wealth of Nations* (1776), Adam Smith argued against central control of the economy. The “invisible hand,” he said, would regulate the economy to its most efficient working. He was propagating the all-pervasive capitalist system that we are familiar with today. The theory of self-organization seems to take off where Adam Smith left off. It seems to support the concept of self-organization, may be compared to a socialist setup, such as depicted in the motion picture *Antz*.

Johnson argues that there is a difference. He thinks that while the ant colony is a bottom-up approach, the socialist setup is an example of command economy. The ants do not follow a defined timetable according to Johnson. This is where he draws the distinction between local rules and higher level instructions. I would like to contest this. Previously defined local rules constitute the same effect as a timetable would. Insomuch, I would argue that ant colonies are indeed like the socialist setup. Johnson says the difference is in how detailed the instructions are. I argue that the similarity is in how the instructions are prefabricated and not made by the ants themselves. Moreover, all ants are equal and act in a uniform and unbiased fashion. It is not so with city dwellers.

This discussion serves to emphasize that though lessons may be derived from these cases, there are limits to which the analogy can be extended. The lesson being taken from the ants is one purely of communication and self-organization and not necessarily of economic or political thought. In fact, it would be a mistake to carry analogies such as these too far, because after a point they become contrived and confusing.

If we are to use new science, it should be able to assist us in real terms. At present the work being done in the field is very technical, and a lack of coordination between professions is apparent. Let us hope that technology can be molded to assist planners and designers, and the relevant vocabulary can be made less esoteric.

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**REFERENCES**


FRATERNALISM IN ACTION

ALPHA RHO CHI HONORS A DISTINGUISHED BROTHER

by Laura Schmidt
Worthy Grand Associate Architect
Alpha Rho Chi

On January 25, 2003, the Alpha Rho Chi Fraternity honored Andronicus Alumnus Howard Van Heuklyn with the Silver Alpha Rho Chi Medal. This honor is awarded to brothers who have made an outstanding contribution to the furtherance of the fraternity—this is only the 16th such medal to have been conferred in the fraternity’s 88-year history.

Now 81 years old, Van Heuklyn has long been a noteworthy figure both within the fraternity and in the professional community. He served the fraternity as Worthy Grand Lecturer, and he was instrumental in the installation of the Daedalus Chapter at California Polytechnic University in San Luis Obispo. He was also a renowned architect in Southern California, noted for his work on churches and auditoriums. (His late wife, a talented opera singer, used to inaugurate each of his performance spaces with a performance.) Since his retirement in 1992, Van Heuklyn has continued to keep busy; most recently he completed the illustrations for a soon-to-be-published book about I Ching.

Whether you recognize the name Van Heuklyn or not, you’ll likely recognize his handiwork: he’s best known within the fraternity for a series of drawings he completed exclusively for Alpha Rho Chi, each one depicting a famous architectural monument designed by one of the Greek architects for whom the chapters of Alpha Rho Chi are named. For many years, these images adorned the covers of the ARCHI, and the drawings continue to be reproduced in the fraternity’s national pledge manual, The Archi Pledge. Perhaps these sketches will look familiar to you…

Thanks to Phil Buckberg, APX Worthy Grand Associate Architect Emeritus, for providing the scans of Van Heuklyn’s work.

The Erechtheion in Athens was designed by Xenocrates during the Golden Age of Greece.
The great Propylaea of the Acropolis at Athens was begun under Pericles about 440 B.C. and completed in roughly five years. According to Plutarch and other writers, the principal architect was Mnesicles.

Trajan’s Forum was an elaborate complex in Rome, consisting of an amphitheater, shops, and temples. It was designed by Apollodorus of Damascus.

The Parthenon, the unrivaled culmination of Greek architecture, was designed by Iktinos and completed in 418 B.C.
The Tower of the Winds, or Horologium, is one of the few examples of Corinthian architecture in Greece. Its architect, Andronicus (6th century B.C.) is credited with introducing this form to ancient Greek architecture.

The hundreds of rooms, hallways, and courtyards of King Minos’ palace at Knossos covered nearly five acres of land and gave rise to the myth of the Labyrinth. The palace was designed by Daedalus.

Do all those names of Greek architects have you reminiscing about your days in Alpha Rho Chi? Good news: you can still be involved in APX, through your chapter’s alumni association! Contact your association president to find out what activities are in the works. If your chapter’s not listed here and you’d like to see it become active again, please contact the APX Expansion Director, Charles Morley, at 703.566.9902 or c_g_morley@hotmail.com to learn how you can help your alumni association reorganize.

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Vitruvius Alumni Association
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The Temple of Athena Nike, constructed around 420 B.C., was the earliest Ionic building on the Acropolis. Its design is attributed to Kallikrates.
In 1931, the Grand Council established the Alpha Rho Chi Medal to “encourage professional leadership by rewarding student accomplishment; [to] promote the ideals of professional service by acknowledging distinctive individual contributions to social life; and [to] stimulate professional merit by commending qualities in the student not necessarily pertaining to scholarship.” Each year the Alpha Rho Chi Medal is offered to more than 100 schools of architecture, whose faculty select the graduating seniors they feel best exemplify these qualities.
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All of us who’ve pledged Alpha Rho Chi, initiated, and become active members share a special relationship—no matter whether we pledged last spring or 60 years ago. That’s pretty cool. But it takes more than good will to keep the fraternity running; it takes money. Money to support the chapters and colonies, to put on the annual leadership conference, to host the national convention, and to put out our publications.

And we’d like to do more. We are determined to become the eminent organization in developing leadership, professionalism, service, and fraternalism in our members and our communities. To realize our vision, however, we need the full support of our membership. The national alumni dues are $50 per year. Consider the impact that Alpha Rho Chi has had in your life. Isn’t it worth $50 to help APX increase its breadth and influence?

Please send your check, payable to Alpha Rho Chi, to Frank Kitchel, Worthy Grand Estimator, 913 Springhaven Drive, Libertyville, Illinois 60048. Only with your support can Alpha Rho Chi continue to be an organization of which it is an honor to be a member.

Note that your national dues are separate from any dues your chapter’s alumni association may charge.

Fraternialism is what the Alpha Rho Chi national convention is all about! This is your chance to reconnect with your brothers from across the nation—and take advantage of some outstanding professional development opportunities as well.

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- Earn AIA/CES credits through tours and professional development workshops
- Be a part of the decision-making process that will shape the future of the fraternity
- Relax and get to know your brothers at the welcome party, roundtable luncheons, and other informal events
- Enjoy more feasting and fellowship at the traditional Saturday night banquet at Pat O’Brien’s Grande Terrace—an elegant 17th-century terrace overlooking the majestic Mississippi
The convention will take place at the historic Radisson Hotel on Canal Street, three blocks from the French Quarter and six blocks from Bourbon Street. Built in 1925, the hotel is listed on the National Register of Historic Places. Amenities include three on-site restaurants, a free shuttle that departs hourly to the French Quarter from 10 A.M. until 12 A.M., a fitness center, and a scenic rooftop pool and hot tub.

A block of rooms has been reserved for Alpha Rho Chi for the nights of March 25, 26, and 27. The cost (including taxes) is $103 per night. Overnight parking is available across the street from the hotel for $6 per night, or valet parking is available for $17 per day, with unlimited in-and-out privileges.

Please contact the hotel directly at 504.522.4500 to make your reservation — mention "Alpha Rho Chi National Convention" in order to get the specified rate. You must make your reservations no later than March 10, 2004. We also have a few rooms reserved for Wednesday, March 24, for those who would like to come in early.

For more information, including convention costs, please visit www.alphahogchi.org for updates. Registration information will be included in the winter edition of the APX Letter, which will be mailed in early to mid-January.
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For more information, contact Vicki Horton at 972.414.5103 or vjhapx@mindspring.com, or visit www.alpharhochi.org.

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