

SOCIOLOGY and ARCHITECTURAL DESIGN



CURRICULUM DEVELOPMENT SECTION 4.0

INDEX:

	Page:
I. Abstract	3
II. Preamble	3
III. Component Initiative	5
IV. Component Course Materials	6
V. Instructional Strategy	7
VI. Student Activities	7
VII. Assessment Method	8
VIII. Common Essential Learnings	8
IX. Environment	9
X. Materials and Resources	9
XI. Course Text Outline	
Introduction	11
1.0 The Context of Society	13
2.0 Cultural Traits	17
3.0 Individual Social Aspects	23
(1) Self-Worth/Friendship Formation	26
(2) Group Involvement	27
(3) Personal Space	29
(4) Personal Status	31
(5) Individual and Group Territory	35
(6) Communication	40
(7) Personal Safety and Security	47
4.0 The Role of Architectural Design	49
XII. New Text Definitions	61
XIII. Appendix 'A': List of Illustrations	62
XIV. Appendix 'B': Bibliography	64

ABSTRACT:

A structure achieves meaning through the way in which its form relates to the contextual surroundings and the human persona that inhabit it.

Architectural design is at its basis, ideological in the manner by which it may promote and enhance social positions and ideals. The design of our environment, with the exception of some current trends, has largely been essential in defining our culture and sub-cultures, while providing a long-term replication of cultural ideals in built form.

PREAMBLE:

Architectural design provides the means to interpret societal values, goals and concepts in a built form. The History Section of this curriculum discussed the manner in which buildings may be “read” relative to a specific culture. Architectural design is a process in which the needs of society are erected in a built form which subsequently defines the goals of the society itself.

Society provides the cultural basis for design and interpretation. Culture within a given society is often not a simply categorized element, being entwined on differing levels through many social instances. The practice of architectural design captures the cultural and societal influences relative to the specific design problem and translates these influences into a structure which embodies the culture.

The sociological position of architectural design deals not only with society as a whole but also with society at the level of the individual. Design relative to individuals must provide for their basic needs as well as respond with a language that they may accept as defining their place within society. This idea of place carries meaning on two levels; place as a built entity, and place as a component of social order. It is at the level of the individual that people will seek out housing to suit their needs (local and social order) and will choose to work in locations which reflect their ideals of social position.



Figure 1: Courtyard, Medici Palace, Florence, Italy

Individuals bear a great deal of influence on architectural design in the manner by which they interact, behave, occupy and control space or ignore it. Safety and security are related to personal feelings that can be affected by the space that the individual inhabits. The feeling of security, or the perception of danger, will be affected by the built environment, and thus will affect the individual in that location. These feelings carry a great deal of influence in how an architectural design solution is viewed relative to its surrounding society.

COMPONENT INITIATIVE:

The goal of this section is to provide students with an understanding of the holistic interpretive elements of architectural design.

Architectural design incorporates both the available technology towards construction and the known societal initiatives into a built form. It is not enough to view the Parthenon in Rome as a structure, as to some it may merely look like an old building. A building such as the Parthenon must be viewed relative to the context in which it was constructed. It must be fully appreciated with regard to the society that constructed it, the design rationale that conceived it, and also with regard to the citizens of the specific culture that inhabited it.

True works of architecture are not fully understood without the inclusion of knowledge of the culture that surrounded these designs. The cultural influence is the “personal” sense of time and place that contribute to the building’s place. It is an interesting note that buildings are designated “heritage” properties within our cultural society. Heritage designation relates to the design elements of the structure as well as historical time placement of its erection. Quite often, historical sites no longer serve their original function within our current society.

An initiative contained herein is to promote a greater understanding of our societal (North America) behavioral roles and norms. An understanding of the concept of personal space is important within architectural design in order to create an environment that can respect the individual as well as groups. This initiative is explored within the concept of space to promote awareness of the nature and context of ourselves and those around us. While we may take societal behavior as a given through our daily lives, architectural design must be able to create environments respectful of those behavioral aspects that we take for granted.

COMPONENT COURSE MATERIALS:

The component course materials for this section seek to provide awareness for the students of the society and world around them. This awareness will be such that it can give them the tools and technique to observe social structure and behaviors within their own environment, and discuss the differences between theirs and other cultural sub-sects of the world. By providing this knowledge to the students, they will be more able to “read” architectural design solutions relative to the specific society (time and place) in which it was constructed.

This section relates to observation and participation as a means of learning. The concepts of space and context of society are best experienced on a personal level as a means of instruction. Through this understanding, students will be better able to visually and emotionally experience the affects of architectural design via space, flow and perception.

This section also deals with the theory of society (culture and sub-culture) as it relates to architectural design. Society becomes embodied in regional architecture, and architecture as a whole worldwide, by embodiment of values, roles and place within the built form. An understanding of the basics of societal initiatives and influences will aid in the ability to understanding the meaning of a built form.

It is a holistic method of application towards society that enables architectural design to achieve a greater purpose than that which is provided by simple utilitarian structures. The essence of perception towards the holistic inclusion is a part of this section’s goals.

INSTRUCTIONAL STRATEGY:

- Direct Instruction
 - Lecture series with written material handouts.
 - Slide/visual presentation of specific instances and observations towards societal standards.
- Indirect Instruction
 - Guidance into specific experiences relative to the initiatives of the section.
- Independent Study
 - Student research on situational instances.
 - Student observations and reporting on specific experiences.
- Interactive Instruction
 - Field trips and excursions to locations of observation.
 - Role playing opportunities relative to societal and behavioral constructs.

STUDENT ACTIVITIES:

- Oral
 - Presentation on observations and experiences
 - Class discussion relative to society and historical changes in behaviors.
- Visual
 - Graphic reproductions on situational experiences.
 - Illustration of personal site interpretations.
- Kinesthetic
 - Interaction in role playing activities
 - Individual experiences in assigned experimental tasks relative to behavioral aspects of society.
- Written
 - Analysis (graphic and written) on social constructs, behavioral influences and personal experiences relative to architectural design solutions.

ASSESSMENT METHOD:

- Pencil & Paper Method
 - Graphic submission of experiential research.
 - Report submission of influence of society and behavioral activities relative to various time and place studies.
- Performance Assessments
 - Participation in class discussion.
 - Participation in interactive activities.
 - Participation in individual research efforts.
- Personal Assessments
 - Observation in student interaction.
 - Understanding of societal requirements, barriers and differences between societies.

COMMON ESSENTIAL LEARNINGS:

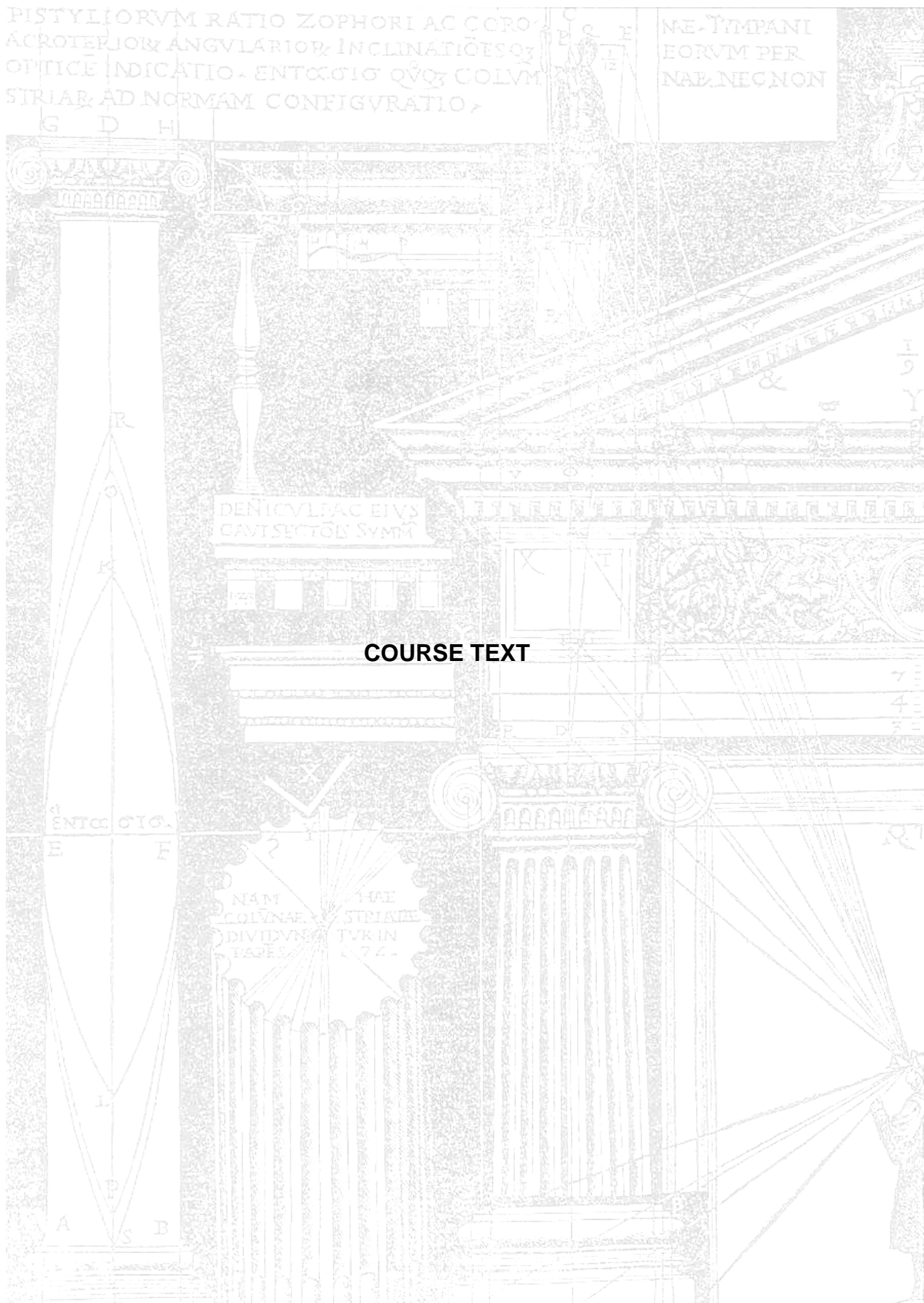
- Communication
 - Enhancement of non-verbal communicative skills through observation.
- Creative and Critical Thinking
 - Understanding the nature of societal structure.
 - Understanding the rationale behind architectural design principles and the environmental resolution.
- Independent Learning
 - Independent research (text and on-site) relative to human study.
- Numeracy
 - Study of group philosophy.
- Technological Literacy
 - Reading of built form relative to construction in time and place (availability within society regarding construction techniques.)
- Personal & Social Values and Skills
 - Enhanced knowledge of society (culture & sub-cultural definitions).
 - Greater understanding of personal space.
 - Greater understanding of behavioral attributes relative to local society.

ENVIRONMENT:

- Classroom Climate
 - Visual accessibility for lecture and presentations.
- Physical Setting
 - Open area, flexible for varied settings.
 - Public space access for observation and activity.
- Flexible Student Groupings
 - Required for role playing.
 - Used in behavioral example situations.
- Extensions Beyond Classroom Setting
 - Building experiences through observation and participation in social experiences.
 - Visual observations within classroom and community settings.
- Community Experiences
 - Community observational studies.
 - Site review of behavioral situations.

MATERIALS / RESOURCES REQUIRED:

- In-Room Supplies
 - Audio-visual resources.
 - Physical materials for behavioral examples.
- External Supplies
 - Access to building public space for observation and experience.
 - Access to community areas for experiential learning.



INTRODUCTION

The social nature of architectural design covers behavioral and societal concepts relative to the current place and time of a structure. It is important to have an understanding of how society influences design in order to be able to view the inherent influences in the design solution. This understanding will come only through continued observation, research and experience of the individual. This section of the curriculum seeks to provide the student with the basis of understanding towards these influences which will allow the student to carry it further via their own experiences and observations.

Students in Grades Seven and Eight are reaching a period of growth which provides a greater awareness of their world. Younger students, primary grades, lack the conceptual ability to perceive the larger reality around them. The concept of younger students relative to the “world” is limited to their immediate (and extended) families, without clear regard for the environment. Students in our study group are moving out into the larger context of society and creating their awareness of human behavior and structured environment.

The thrust of this section covers three segments of socialization. These segments are:

- context of society,
- concept of personal and group space, and
- role of the architect in design to respond to social ideals.

The proposal document illustrated the intent towards approaching these three segments, as follows:

- The Concept of Space: Review of personal versus private spaces. A review of spatial separation, comfort zones, and applications for each type. Discussion and analysis of spatial separation. Item will review personal security and comfort;
- Context of Society: The concept of societal values specific to the North American model of public and private relationships as they relate to architectural design of public spaces;
- Role of the architect: A review of the influence of architects relative to building design and city planning. Discussion relative to communicative and coordinative role of the architect to service the clients' requirements. Discussion related to design compromises, aspects of sacrifice, and key reasons for including specific design elements to suit program requirements.

For the purposes of the curriculum text, the “personal space” and “context of society” categories have been switched. This switch will allow review of the global, societal concepts prior to discussing the personal, intimate perceptual concepts. It is felt that this method will allow for better comprehension at the student level. Independent educators may wish to review and revise the delivery sequence to best suit the auxiliary curriculum being put forth at that time.

1.0 The Context of Society

The context of society section deals with the concepts of culture, sub-culture, and individual societies. A review of these definitions begins this section in order to provide a basis of understanding of the terms and their application.

Society as a function of daily life is defined by James Teevan in **Basic Sociology** as “a group of people who reside in the same geographic area, who communicate extensively among themselves, and who share a common culture”.



Figure 2: The Spanish Steps

Society, by this definition, may be broad enough to encompass Canada and the United States as a whole, or it may be seen as the individual countries alone. The level of communication is not limited and therefore subject to wide interpretation. To consider each individual country as an independent society works in theory for North America, however this modality cannot be globally applied. Independent countries such as Russia, China, India or concentrations of high populations may present conditions where the basic conditions of society cannot be met. Society as a definition proposed relates primarily to the North American model.

The concept of society contains the element of a “common culture” consistent for all members of that group. Culture is an amalgamation of the common norms, beliefs and ideals present throughout all sects of the individual society. Culture is a fairly global term in this instance. Its impact can be seen in the example of same-sex marriage within the Canadian context. The former cultural institution held fast that marriage was defined as a union between women and men. This article is now being challenged as a common cultural trait of our society.

When the society as a majority comes to agreement relative to a set of norms (behavioral attitudes) or values that regulate expectations related to daily life, then those items are considered a “cultural institution”. In the example discussed previously, the debate rages on regarding the “institution of marriage”.

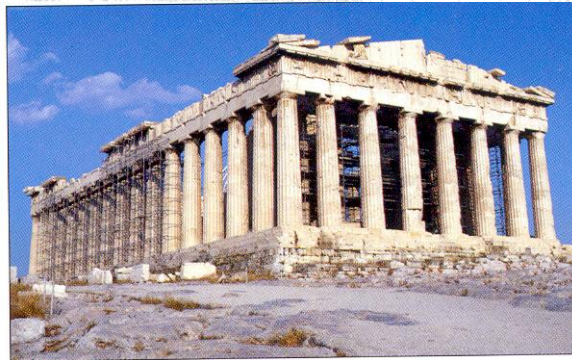


Figure 3: Greece - The Birthplace of Democracy

The overriding cultural institutions govern society by means of social acceptance. This governing principle expects all members of that society to behave and interact in a manner consistent and accepted as appropriate for the specific situation. This principle is seen throughout our daily lives in the manner by which we wait our turn in line, respect our environment and respect the rights (assumed or legal) of others.

Laws are constructed using the basis of social institutions as a framework, thus creating an enforceable principle of behavior. It is not enough to say that it is unacceptable to steal; we have laws in effect that govern the punishment and retribution of those found guilty of theft.

It is a complex matter in society to know how one is to follow the social roles ascribed by that culture. Conflicts in behavioral expectations may arise which pit contradictory roles against each other, requiring the participant to make a conscious choice in behavioral response. The participant may be judged based on the manner through which they respond.

The difficulty in prescribing clear social expectations and roles for our culture and daily life lies in the fact that all social roles present in our society are merely definitions of expectations. In this manner, all definitions are subject to interpretation due to their arbitrary nature. The ability to interpret within the cultural role bias stems from our upbringing and example. We are taught from a young age in our culture that it is not proper to steal, thus we have the awareness that theft is wrong and there are societal punishments awaiting those who broke the social norm.

This example presents a clear illustration of the social institution of theft. The illustration is less evident in other roles; for example, when to give up one's seat on a city bus. The generally accepted social role is for able-bodied persons to offer their seat to the elderly or encumbered occupants. If a person fails to respect this norm, other participants may judge the behavior as unacceptable. If a person offers his/her seat but the offer is declined, then is he/she required to re-take the seat or offer it to another?

The interpretation of the roles and expectations are entirely subject to the established norms within a given society. This example illustrates a simple situation where norms, roles and expectations may be set by society, but interpreted by the individual. It is not “wrong” for an individual to reclaim the seat, but is it the “right” choice? It is not law that one offers the seat to another but it is considered the “polite” or “right” action to take in this circumstance.

The final item of note relative to societal explanation is that sub-cultures exist within every cultural group. A sub-culture consists of a group of persons within a larger cultural society (Canada) that possesses or shares distinctive traits, beliefs or norms that identify them in some way. This idea may best be explained by the example of Irish-Canadian; a person who is Canadian by birth and Irish by heritage. This person may follow the ideals of the Irish but conform to the social norms of Canada.

The concept of culture is applicable throughout the world however the norms, ideals and values of individual cultures are not consistent on a global basis. Enormous variations in the sub-sets of culture are present, for example – the regard and treatment of women; the social hierarchy of jobs, the approach towards family, or even the cultural views toward other foreign cultures.

It should be made clear that although we live in a “global village”, it is far from homogenous. There are very few cultural elements that are common to distinct societies. The common mistake that people make is to ascribe to a condition of ethnocentrism. This condition of belief is one where you feel the norms, beliefs and values of your society/culture are universal between cultures. The term ‘ethnocentrism’ also applies to situations where one feels that the cultural belief system of their society is in some ways superior to others.

The manners by which societies and cultures exist are governed by their individual institutions. It will be these local institutions (norms, beliefs and values) that are applied to anyone in the region; quite often causing extreme embarrassment to tourists or guests.

Architectural design relevant to cultural norms and institutions must incorporate aspects of the specific culture or sub-culture in order to provide the aesthetic and functional resolution required for a successful facility.

2.0 Cultural Traits

Cultural traits are the characteristics which define the culture or sub-culture. These are the social norms which govern their actions, how they view their place in the world, and their approach to social issues. These traits are the common characteristics passed on to new members either parentally or by new association. The overall culture is defined by the sum of the individual cultural traits present. The three most common trait definitions are cultural values, norms and roles. Additional cultural traits exist in every sub-sect, though these characterizations are consistent in a majority of corresponding cultures.

A cultural value is a general governing principle about a statement of preference or cultural determination about what is deemed acceptably right or wrong relative to one's actions.

A cultural norm relates to specific social expectations within a culture relating to behavior; what is acceptable behavior or not.

A cultural role relates to the specific value system of a society. The role category may be viewed in some sense as the stereotyping of a culture relative to family, personal values, and accepted or assumed norms.

These three items may be used as a cursory definition of a cultural entity.

Architectural design must be able to understand the cultural traits specific to both the client and the governing societal body in order to successfully resolve the requirements into a solution that embodies and evokes the cultural traits. It is through successful integration of these items that a structure may be deemed as a cultural artifact; embodying the civilization of the time as architecture. In this analysis, it may be explained that structures which fail to incorporate the essence of their time and place are viewed as buildings, while those that do capture the culture are viewed as architecture over the long term.

Cultural institutions are embodied in architectural works, thereby creating a “movement” in time. Buildings become cultural artifacts by this process, thus are deemed architectural works.

These cultural influences are applicable to all types of structures (homes, factories, churches, and offices) as well as the urban fabric of our planned settlements.

The ability to resolve the cultural influences on a design solution begins with the understanding of:

- what the cultural influences are;
- how these influences relate to the client and public;
- who the design is meant to serve and in what fashion; and
- a concept of the time period for the project. This statement does not serve as a limitation for the building's lifespan; it is meant to create the sense of permanence relative to the design. Permanence is an aesthetic concern relative to perception of the structure in relation to time.

As noted in the History curriculum section, architecture is the product of all sorts of factors – social, political, economic, scientific, technical, and religious beliefs.

These factors clearly indicate a sociological view of architectural design since four of the six listed (social, political, economic and religious beliefs) relate directly to the society and cultural institutions they foster. These factors, stemming from the society's cultural traits, create the design language of the architecture.

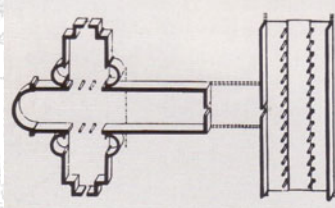
The language of architecture is permeated with a culture's sense of what it should do, where to do it, when it should be done, how important it is, and how these actions relate to the rest of the community, the material world and the supernatural world. Architecture communicates to the community the meaning of its actions as well as how these actions relate to the human, material and spiritual worlds.

It is through knowledge, study and interpretation of a culture's traits that architectural design can successfully capture those elements to be reflected in the built form. This statement may seem particularly global relative to the North American environment; however differences abound within our own cultures and sub-cultures of the individual societies. Canadians are notably defined as different from Americans. Canadian-Sikhs possess different sub-cultural traits than Irish-Canadians. Canadians of differing religions, while belonging to the same societal group, possess differing social norms, values and roles. This influence is felt in every design problem since the solution must respond to the needs, values, goals and desires of the client.

Rural elementary school design differs from urban school design because the majority of rural students are bussed to school. This difference has been shrinking in recent years due to the working family norm escalating in our society with more urban students now lunching in at-school programs.

Architectural design is required to respond to changing social traits, even within constant societies. Examples of these changes include:

- (1) School design which now incorporates holistic entities to provide a wide range of opportunities for each student. These entities may include police resource officer, behavioral consultants, health professional, second language consultants, and arts consultants. These requirements are different than that which was experienced within our society even 20 years prior.
- (2) Societal roles have changed within our culture, moving from sole-earning to dual-earning households. The preference for both adults to hold jobs remains in fluctuation as there is a minor shift back to stay-at-home parent concepts. The dual-earning scenario changes social requirements for child care opportunities.



- (3) Values systems of accepted institutions change over time, such as the Catholic Church with the publication of Vatican II in 1969. This document doctrine altered the acceptable design limitations for worship areas (the main church nave), bringing the parish closer to the celebrant; effectively changing the required configuration of new churches. The cross-shaped plan of Milan (Edict 381 a.d.) is no longer required, changing the stereotype of the form typically regarded as a “church” layout.

- (4) Social norms change with time, resulting in a subsequent change in architectural design. This item may be seen in a simple example of personal hats. Earlier generations even within the most recent century wore hats as a common article of attire. These hats required a space within the design of a public institution so as to allow “hanging one’s hat” upon entering a building. It used to be socially unacceptable to wear a hat indoors, though this behaviour is accepted by many persons today.

With the decline in the fashion statement of hats, there is a subsequent revision in architectural design to no longer include the “hat room” within designs; a space which typically afforded a gathering space for facility participants. We’ve lost the hats en masse, but we have also lost the space in design and thereby can no longer take advantage of the social opportunity presented by gathering there.

These examples represent only a few brief illustrations related to how social change in norms, values and roles is reflected in changes in architectural design. Examples of this type can be seen in the manner and type of housing we use as well as our ideology related to business and government.



Figure 4: Apartments, Florence, Italy

Housing needs remain constant throughout time – shelter and security. The manner in which housing design has evolved is specific to the region of study as well as advances in technology related to construction materials and techniques.

Housing in today's market varies depending on individual tastes. The changing family societal system bears an impact on residential design. Children, once considered subservient family members, are being considered as equal members with the parents, enjoying increased space in bedrooms, family rooms, and play areas. Women, once considered stay-at-home persons, are now working outside the home and considered as equal with the male parent. Even the design of functional spaces has changed; where the kitchen and bathroom functions were secondary to living and sleeping areas, they are now the two most important spaces in house sales.

All of these items relate to the cultural traits of a specific society. Architectural design must investigate the anticipated functions of a building during the design process in order to properly incorporate and evoke these characteristics in the solution.

This section has reviewed societal influences on architectural designs as an overview concept. Every society is made up of individuals, who carry with them needs and requirements which must be addressed on an intimate scale. The individual person aspects are reviewed in the following section.

3.0 Individual Social Aspects

Architectural design involves the concept of societal initiatives on a large scale and the social aspects of the individual on a small scale.

The individual person is reflected through the architectural design in many fashions. It is the individual that is the common denominator through all architectural design; regardless of location, building type and size. The human element is the most important factor to consider in design. This element supersedes the additional elements related to building codes, technology, economics, site, materials and time scheduling. Failure to respond to the human element will result in a failure of the design.

Vitruvius noted the three key factors related to architecture as firmness, commodity and delight. While firmness relates to the structural/technical aspects, and delight to the aesthetic considerations, commodity relates to the ability of a facility to respond to the human element. It is this response to the human element that comprises this section of the curriculum.



Figure 5: Human Proportion according to Vitruvius

The human condition is one that has been often studied, yet not clearly identified. It has been possible to categorize and analyze physical aspects as anthropometric data; we know the average height, reach, mobility, and range for humans of types. We are not yet able to accurately predict the emotional aspects relative to behavior and actions. This emotional aspect is the crucial element to address in architectural design.

The constructed environment can influence behavioral characteristics of humans. Our public and private spaces can either facilitate or detract positive behavioral aspects within individuals and groups. The difficulty in the task of addressing this aspect in design is that human behavior cannot consistently be predicted or anticipated.



Figure 6: Luxembourg Palace, Paris, France

Architectural design can address the basics of this issue by designing facilities that enable users to complete their tasks or activities with the greatest efficiency and effectiveness. A facility that impedes or restricts will likely generate a negative emotional response, thus providing a negative experience for the user or occupant. It is this principle that challenges design to use known elements of human behavior in the attempt to create spaces that assist users in accomplishing their purpose. It should be noted that this principle is applicable in all types of facilities – homes, institutions, retail, business, religious, and recreational.

Architectural design principles have to consider elements of known behavioral tendencies in resolution of the design. Basic human needs (physical and emotional) include:

- sustenance (food and drink);
- security (personal safety);
- affection; and
- self-actualization.

The first two needs relate to the physical sense of our existence. It is entirely possible to exist as an individual without interaction with others while satisfying these first two needs. The latter two needs deal with our emotional conditions as humans.

These needs can be further categorized into separate components with the exception of sustenance (a basic human need). The breakdown of needs is categorized as:

- (1) Self-worth / friendship formation
- (2) Group involvement
- (3) Personal space
- (4) Personal status
- (5) Individual and group territory
- (6) Communication
- (7) Security and safety



Figure 7: Courtyard du Murier, Ecole des Beaux Arts, Paris

Architectural design should provide settings that encourage and enhance these needs through positive experiences, rather than detract or disable the possibility via negative environments. Architectural design cannot solve social ills, nor prevent negative experiences from occurring. As it was noted earlier, human behavior cannot be accurately predicted at all times.

The essence of design strategy applicable herein is to understand the needs of the users. It will be through this understanding that the architect can design the specific building and individual spaces to facilitate the overall experience. It is imperative on the design solution that opportunities for personal and group success exist. The resulting actions of the users will ultimately determine the behavioral outcome, likely positive if the design environment has considered their needs.

(1) Self-Worth/Friendship Formation

Personal self-worth stems from awareness of your contribution to the environment (business, social or personal around you). The ability to efficiently contribute to tasks and activities is enhanced by a positive design solution. In this manner, the opportunity to affect one's perception of themselves in relation to their society can be enhanced by the architectural design.

Friendship formation stems from the ability to align one's self with other members of the culture or sub-culture. Friendships occur when people share a common interest or goal, creating a group of like-minded persons. The bulk of friendship formation takes place in institution or cultural facilities including schools, religious institutions, or the business culture. Forming friendships facilitates development of one's self-worth, the critical component of this section.

In designing facilities that will consider these aspects of social existence, it is important to note critical factors that enhance these items – proximity and opportunity for interaction.

Proximity is important since human behavior has indicated that the closer one is to another person, there is a great likelihood for friendship formation. The ability to experience common elements and ease of communication between closely located persons stimulates the potential for friendship. This item relates to proximity of any type, including residential (neighbours), institutional (classroom layout), business (office configurations) and recreational (grouping of spectators).

Opportunity for interaction includes provision of spaces within the design solution to allow for spontaneous, unplanned interaction. The design elements may take the form of widened corridors with seating areas, separation or breakdown of large seating spaces (cafeterias) for privacy, and allowances for seating or meeting at various locations throughout a facility.

(2) Group Involvement

Group formation stems from the concept of friendship formation. A group is merely a larger contingent of friends sharing like-minded thoughts and/or experiences. The potential to facilitate group formation is dependent on the actual facility design; whether the intent is to house large or small, organized or ad-hoc groups, and the nature of the individual function.

Personal, informal groups typically evolve from a growth in friendships. There is noted evidence that informal groupings generally consist of smaller numbers of people where as formal groupings tend to gather as larger assemblies.

C. M. Deasy reviewed statistical evidence of informal social groupings, arriving at a breakdown in percentages of:

- 71% groups – 2 individuals
- 21% groups – 3 individuals
- 6% groups – 4 individuals
- 2% groups – 5 or more persons

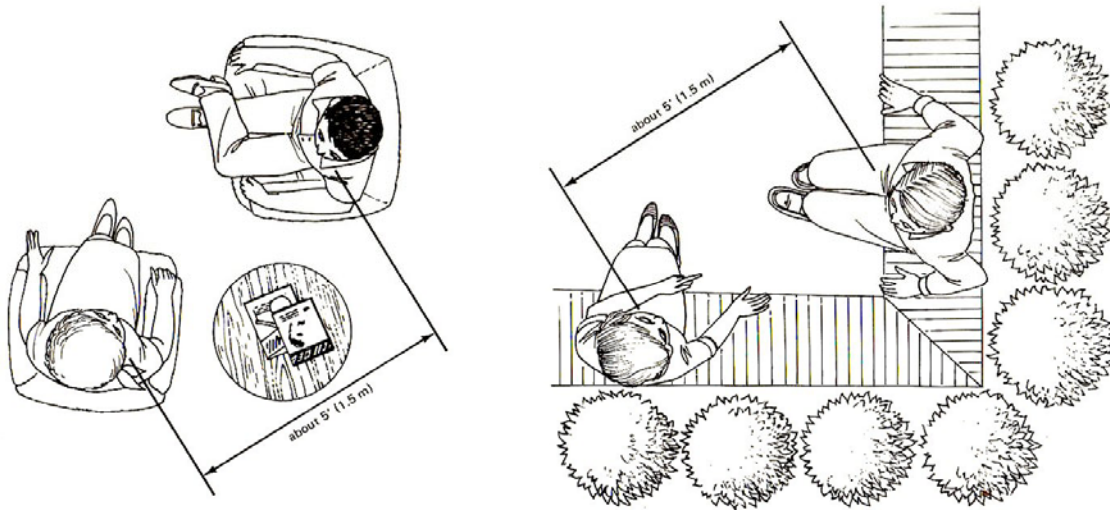


Figure 8: Conversational Distances

It was deduced that the smaller group size facilitated easier individual interaction, providing a positive experience in opportunity and participation.

Architectural design, in considering this aspect of socialization, should provide opportunity for group interaction through seating areas, private spaces away from main traffic routes, and the ability to move between spaces, should the group size change.

These group allowance areas should follow the following design principles where possible:

- Locate seating areas at key travel or pathway points.
- Offset the seating area from the main circulation routes.
- Provide flexible seating arrangements to allow for group ownership and alignment within the space.
- Consider that the lighting of the area (be it natural or electric) should allow for clear visual representation between the participants.
- Seating arrangements, if fixed, should allow for ease of conversation at normal spoken word volumes (up to 5 feet maximum distance), keeping the participants within contact range to maintain their focus.

(3) Personal Space

Personal space relates to an individual's comfort zone when in the presence of others, either known or foreign. Personal space relates to the social and public separations between people wherein we are able to comfortably share a common area.

An overriding factor related to personal space is the bond that can be shared between two persons. Members of the same family, people involved in relationships, and even friends, are able to encroach on the standards of special separation due to the emotional bond created in the relationship. No matter how close a person gets to another, personal space is typically not broken until physical contact is made.

Exceptions to the personal space theory are made in many instances, particularly relating to public transportation and elevating. Persons typically waiting for an elevator will maintain appropriate distances to one another. When the elevator arrives, these same persons relax their personal space boundaries and will load the car to capacity with scarcely room to breathe. Persons on buses or trains will relax their boundaries in crowded conditions, while they maintain the boundaries if the space is available.

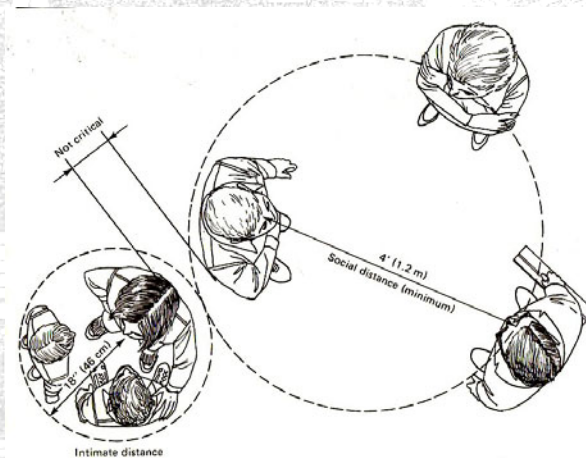


Figure 9: Conversational Space

The normal distances for personal space, the area around an individual, socially acceptable to maintain within Canadian cultural standards are:

- Intimate - up to 18" (45 cm)
- Individual distance - 18" to 4'-0" (45 to 120 cm)
- Social distances:
 - 4'-0" to 7'-0" (120 to 210 cm) for work associates and group social settings; and
 - 7'-0" to 12'-0" (210 to 360 cm) for formal social settings, strangers, and unfamiliar surroundings.
- Public distances - 12'-0" to 25'-0" (360 to 800 cm)

Architectural design principles have to consider the personal and public spatial allowances in order to provide functional and comfortable spaces for living and working. Office designs have to take into consideration the individual and social distances in order to allow for privacy and individuality, while recognizing the business need to make maximum use of the floor area. This consideration exemplifies a “trade-off” of design in order to appease the personal (employee) needs while serving the goals of the business (employer).

Gathering spaces (cafeterias, restaurants, churches) have to balance these considerations also in an effort to accommodate the greatest amount of patrons within the most efficient floor area.

(4) Personal Status

Personal status relates to the means through which we define our personal and social status. It is the method by which individuals affirm their definition of themselves within the given society and culture. Personal status also involves the method of relationships with others as a means of self-actualization.

Personal status is evoked in architectural designs on all levels; our homes, offices, churches, and even the respective clubhouses or recreational/volunteer organizations. The method of using architectural design for status dates back to the first structures and monuments ever erected. Egyptian pharaohs and priests erected monuments to themselves while living so that their glory would be evident long after their death.

Churches have long been a means of asserting personal or societal status. The church of Florence, reviewed in the History section, famed for its dome at the outset of the Renaissance, was conceived as a monument for their society to erect the most beautiful church of its time. Not only was it to serve as a place of worship, it was also to serve as a symbol of the status and wealth of their society.



Figure 10: St. Maria del Fiore Cathedral, Florence, Italy

Examples abound throughout history of architectural designs used as means to display status including the Arc de Triomphe in Paris (Napoleon Bonaparte), the castles of Europe, St. Peter's in Rome, and even the Grecian temples. Status at the personal level deals primarily in the residential sector (housing design, size and finishes) and the corporate culture of Western Civilization.



Figure 11: Arc de Triomphe, Paris, France



Figure 12: McCallum Hill Towers, Regina, Sask.

In today's marketplace, it is the corporate supremacy that is defined by the massive structures and towers erected. The tallest structure, the largest area of floor space, the most unique design are all items touted by our civilization as achievements of status and adoration. Corporations are the main stimulant in this process, continuing in their efforts to go higher and unique in headquarters. This effort goes against the realization provided by David Childs, Managing Partner of the international architectural firm Skidmore, Owings, & Merrill (SOM)

*"Above sixty-five to seventy stories, you lose the logic. The size of the core in relation to the floor plate, the amount of bracing you need to overcome the overturning loads, and all the other investments, stop making sense above that. The rest is just ego."*¹

¹ David Childs/SOM, Architecture Magazine, Dec. 2002

The North American practice of hierarchy is well established in our business world. The design and planning of work environments may either facilitate or eliminate the availability for personal and professional status. Status within the workplace may be defined in a number of ways, including office size (the bigger implies status), office locations, the availability of windows, the use of open office partitions (landscape partitions), which are also judged on size, location and prominence. It is not unusual to have equitable status employees of a corporation measure out the spaces of their peers to ensure no one gets more space than another.

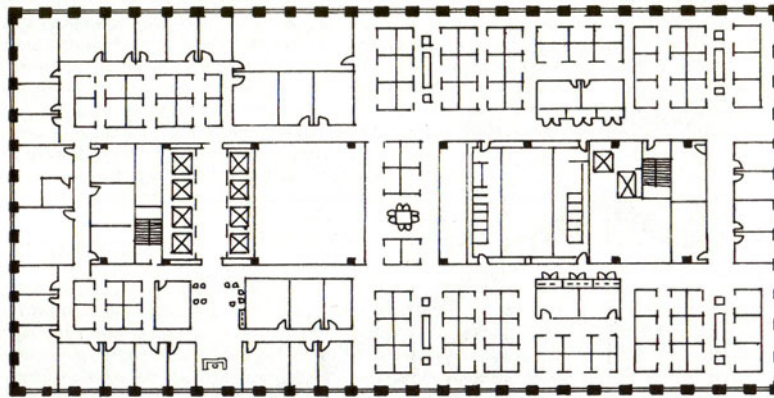


Figure 13: Typical Corporate Floor Plan

The process of architectural design must respect the inherent ideology of the corporation, responding to the mandate of hierarchy. It is incumbent upon the architect to research the nature and social structure of the client in order to determine how personal space is allocated and perceived. The design resolution must be able to capture and properly reflect this status for both the employees and visitors to the facility. As in the 'Art in Architecture' curriculum, research on this item deals with finding the essence or true nature of the corporation, rather than merely accepting the program of spaces required for offices. The architect must fully understand the nature of the client in order to successfully resolve the needs.

(5) **Individual and Group Territory**

The concept of territory is a further investigation into the phases of personal space and personal status. Territory is also defined through the group theories, belonging to more than one individual; all individuals sharing a common theme or goal.

Territory is the destination between ownership and responsibility for given spaces. It is understood that the occupants of a given space will typically claim that space as their territory, though there may be legalities in existence that could easily prove contrary.

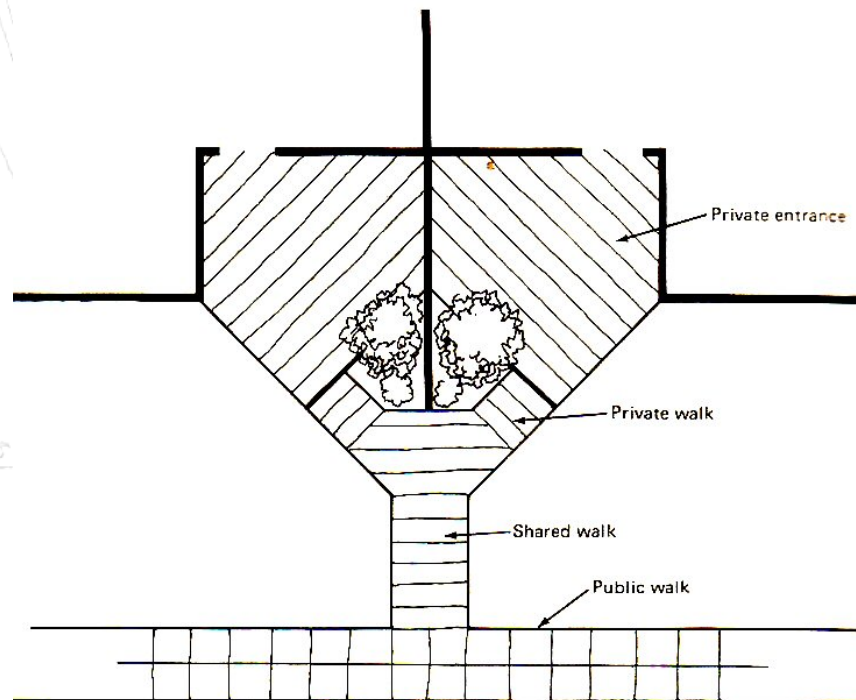


Figure 14: Residential Territory Designations

Territory and responsibility for a given space defines our boundaries within the context of society. Territory is the social distinction, based on accepted norms and roles between private, group, and public areas of the environment.

Private territory relates to the immediate personal spaces we inhabit. These spaces include our homes, yards, and even office areas (desks, rooms, or cubicles). It can easily be justified that the office area remains group territory belonging to the employee but a distinction is made at the personal level relating to the individual's workspace. Territory is marked in the animal kingdom by scent; territory is marked within the business kingdom by possessions – photos of family, personal artifacts, signage, or other decorative elements.

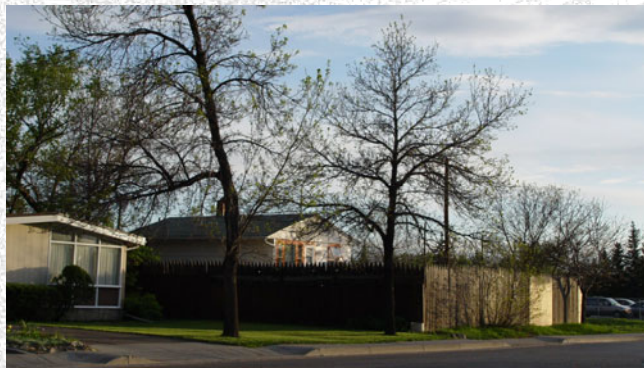


Figure 15: Territory defined by fencing

Private territory relates to the small-scale areas within our homes. We each have our rooms (bedrooms, den, etc.) which are considered personal, while the activity areas (kitchen, washrooms, living and dining rooms) are considered group territory shared among family members.

Group territory relates to the structures and spaces shared by persons of like-minds or employers. Group territory also refers to shared areas within the home. Responsibility for the group territory falls to the larger assembly of individuals who claim that area as their own. This type of territory is experienced whenever two or more individuals occupy a shared space. Each Elementary or High School is defined as a group territory; the responsibility of all who use the facility, but not falling to a specific individual.

Group territory leads to the formation of community structure. As defined in the earlier text, a group is an association of like-minded individuals. By asserting their group status, the individuals are able to define themselves relative to a defined space, thus creating a visual definition of their group.

Group territory may be singular, such as an individual building (church, school, office, apartment), or it may be an assembly of various elements (a neighbourhood, civic district such as the Regina's Market Square which is the downtown group), or it may even encompass the entire urban district (civic representatives).

Public areas of the environment relate to the civic and public zones that are not claimed by individual groups – areas such as parks, public play-grounds, swimming pools, and skating rinks. Public areas are defined as those areas or spaces which are governed solely by social traits of the given society. These areas fall under the established laws of the community at large, not one specific corporation or entity.



Figure 16: Social Rule Designation

This distinction is important since many of our spaces are deemed “public” spaces when in fact they do not meet the criteria of that definition. Shopping malls, movie theatres, grocery stores, and restaurants all fall to the public realm and are governed by civic bylaws (such as the ‘no smoking’ rule). These entities are in fact group territory since there is a separate individual (manager) or corporation (investor) who is responsible and liable for the continued operation. These spaces belong to entities other than the societal structure and may be subject to separate rules and regulations, such as mall security or independent organizations.

Boundaries are the means by which territories are defined. These elements are critical to establish the order, responsibilities, and area of space within our society. Boundaries may be physical elements (fences, walls, sidewalks, landscaping) or they may be assumed elements (in case of an office cubicle where no physical door is present). To cross the boundary is to enter the space of another (be it personal or group territory) and thus be subject to the rules present within that territory.

This explanation appears to be black & white, yet we live in our western society with these elements every day. We move through our homes, offices, schools, and institutions with great ease and comfort, even though we cross multiple territories all the time. It is the social norms, values and roles that we accept as our governing principles that keeps implied order throughout these territories. The difficulty with boundaries lies in the creation of areas and spaces which may fall to the definition of vacant territory.

Vacant territory falls to the responsibility and control of nobody, thus the rules and governing principles of these areas are typically absent. Nobody's territory may be seen in urban areas as the easements between subdivisions, the expanses of land between developments, and the unused or abandoned areas within a specific district. These areas are normally owned by an entity (civic, corporate, or individual) that may not provide responsibility for the upkeep and monitoring of the area. Nobody's territory is the areas which you will notice around the city as unsightly, abandoned or unused. These areas may eventually be claimed by groups such as gangs or community groups who voluntarily take on responsibility for the zone.

Vacant territories may start the blight that eventually may lead to overall deterioration of the area.

The definition of territory and understanding of the implications and responsibilities comprise a component relative to the architectural design process. Territoriality is a facet of human nature as persons will naturally define themselves through the spaces they inhabit. Effective architectural design will provide clear direction in understanding the boundaries of space, thus allocating responsibility for the territory.

(6) **Communication**

Communication of the architectural design is a multi-level facet for every building. The finished structure must be capable of communicating its purpose, function, and presence in the community.

Communication through architectural design must use the visual, tactile and social areas available to present the design solution as a means to “speak” to society. This process of communication seeks to resolve five key questions for individuals approaching the building as defined by C. M. Deasy. These questions are:

a) *What is it?*

The building form, materials, presence, layout and signage may be used as elements to define the function. Stereotypical examples may be found in societal definitions of a church or stadium, though examples exist that are contrary to our norms.



Figure 17: Retail Store, Florence, Italy

b) *What benefit does it offer?*

The benefits of the facility range from the actual reason for the approach (shopping, worship, business, or comfort) to the societal benefits offered (communion with others, need, solitude, relief, etc.). The physical benefits are present in the type of amenities, finishes, layout, and ease of access to opportunities contained inside. Signage is also a means of communicating the contained benefits of a facility.



Figure 18: Main Entrance, St. Maria del Fiore Cathedral, Florence

c) *How do I get in?*

This factor is critical in providing the approaching occupant with a sense of comfort upon arrival. The way in must be obvious either through a clearly defined entry or a pathway/circulation system that will lead the way. Architectural design theory varies on this item depending on the nature of the facility. Frank Lloyd Wright often placed the entry to residential developments away from the main traffic routes, creating an experiential process of following the path through to “discovery” of the entrance. A common complaint of modern design is that the front door cannot be easily discerned from the main elevation.

d) *What is inside?*

This question relates to the unknown elements that the individual may expect to find upon entering. Architectural design theory varies on this item also, providing varied experiences for the entry from small enclosed spaces to large volumes immediately inside the door. The ability to control the experience of entering a building provides the opportunity for a statement of the building's purpose and prominence. This experience often creates the initial perception of the building for the individual.

e) *How will I be received?*

This item requires a response to the user's interpretation of the immediate space. The degree of open space, finishes, and layout contribute to this perception. Other elements include the placement of critical items related to the building function (reception desk or information station), as well as public amenities and design features that serve to placate individuals entering unknown spaces (fountains, seating areas, personal service locations).

Communication through architectural design combines physical and intuitive aspects of way-finding and cue searching in order to provide distinct answers to the questions posed. These two interrelated elements are based on our understanding of the local society and culture.

Cue searching begins with the initial perception of the building, responding to the architectural design aesthetic. Exterior design provides the initial cues through the way it presents the following elements:

- Scale: The volume of the building as it appears to the approaching user creates the initial perception and subsequent responding. Huge towers that sit directly on the landscape are intimidating in size when compared to small entrance vestibules. The perception of scale must be taken in context with the surrounding elements. A large tower amidst a collection of towers may be perceived as “normal”, whereas a small building sitting between two towers has its scale lessened by the presence of taller elements.
- Material Quality: the type, quality and extent of finishes applied to and around the building contribute to the user’s initial response.
- Maintenance: the condition of landscaping, sidewalks, surrounding area, and the building itself will evoke a response in the user relative to the anticipated experience inside. This element is somewhat "judging a book by its cover", similar to the element of materials.
- Presence: the degree by which the building asserts or retracts its presence on the landscape will provide cues to what the user will anticipate inside. This element is a combination of each of the previous elements (scale, materials, and maintenance). It also relates to the actual placement of the building on the site. Setbacks, differing volumes, patterns, and separation from public spaces will assist in conveying the intended experience for the user.

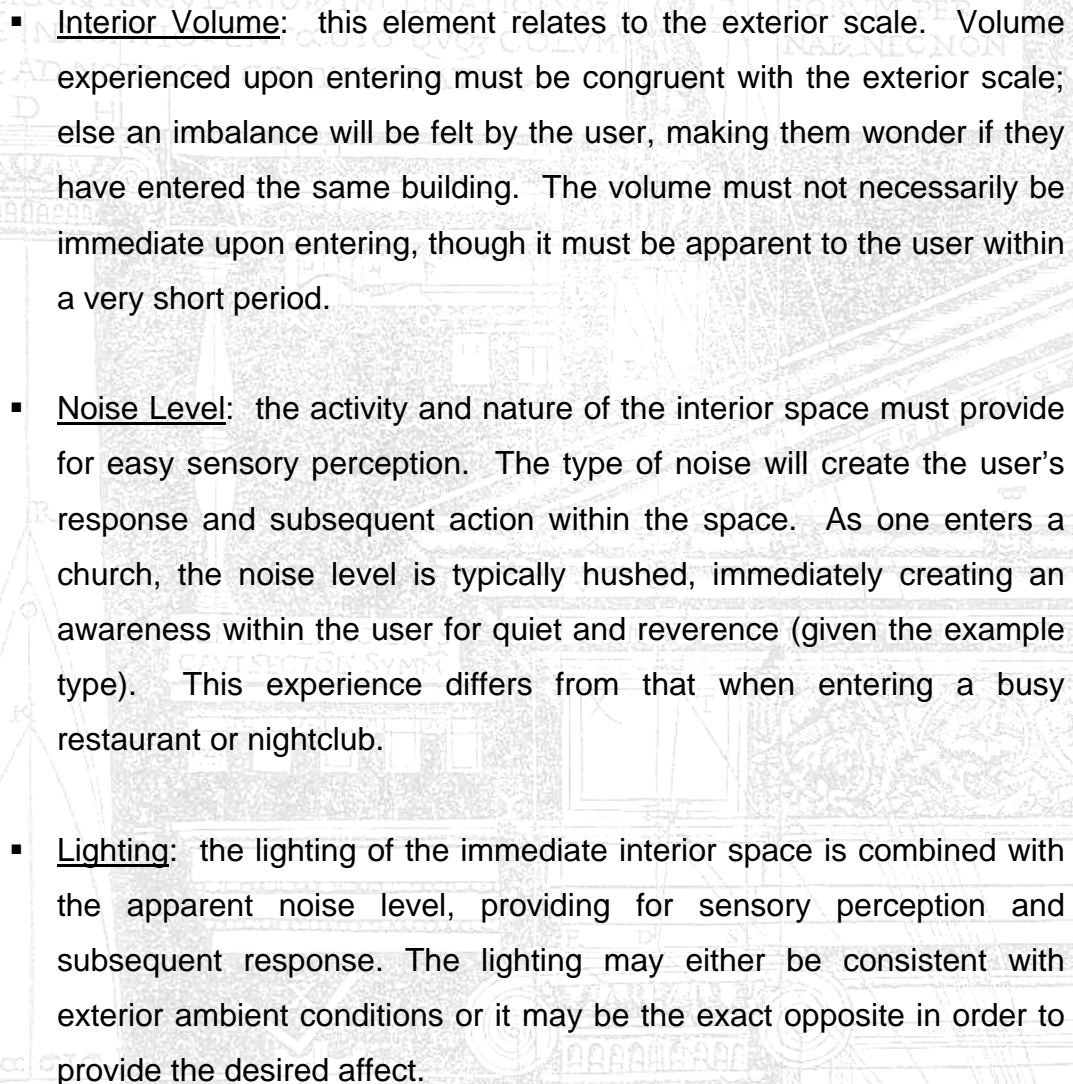


Figure 19: St. Peters Square, Rome

St. Peter's in Rome would present an entirely different experience if it lacked the Baroque forecourt leading to the main stairs. The setbacks and elevations of the Greek temples provided the experience of rising up as one entered the hallowed space. These design elements contribute greatly to the user's perception of the building.

Cue searching continues for the user once they have entered the building in a manner similar to that experienced on the exterior. The interior cues perceived include:

- Material Quality: the type, quality, and extent of interior finishes, whether consistent with exterior experience, contribute to the user's response to the contained space.

- 
- Interior Volume: this element relates to the exterior scale. Volume experienced upon entering must be congruent with the exterior scale; else an imbalance will be felt by the user, making them wonder if they have entered the same building. The volume must not necessarily be immediate upon entering, though it must be apparent to the user within a very short period.
 - Noise Level: the activity and nature of the interior space must provide for easy sensory perception. The type of noise will create the user's response and subsequent action within the space. As one enters a church, the noise level is typically hushed, immediately creating an awareness within the user for quiet and reverence (given the example type). This experience differs from that when entering a busy restaurant or nightclub.
 - Lighting: the lighting of the immediate interior space is combined with the apparent noise level, providing for sensory perception and subsequent response. The lighting may either be consistent with exterior ambient conditions or it may be the exact opposite in order to provide the desired affect.

People will consciously or instinctively search for these noted cues in their attempt to answer the five key questions of this section. Cue searching relates primarily to new or temporary users of a building. These users approach the unknown through a process of exploration, awaiting a response to their intuitive questions. Regular inhabitants have already concluded their exploration, now using the facility with the ease of familiarity and habit.

Cue searching is aided in its process through the presence of signs, explaining the facility and critical elements. The process of using signage as cue elements is known as way-finding (finding your way) communication.

Signage is the most versatile and useful method in way-finding, providing that it has been carefully integrated into the facility. The basic requirements for signage include legibility, appearance, location, and lighting. Signage is also enhanced in its perception through the use of international symbols to indicate specific items.



Figure 20: Typical Washroom Designation

Signage may also be used to enhance the appearance, aesthetic and ambience of a facility. The use of graphic imagery to reinforce the facility's function is a common method employed within retail, hospitality, and commercial establishments.

Architectural design principles must take into consideration the elements of perception by the users (one time or habitual) in order to properly reflect the ideals sought. In "speaking" to society with regard to values and norms incorporated into the design solution, the architect must be clear in the manner by which they present the solution.

The personal response related to cue searching and way-finding is an intuitive act on behalf of the user to both complete their intended purpose efficiently and effectively, but also to ensure that they are able to maintain a sense of personal safety and security.

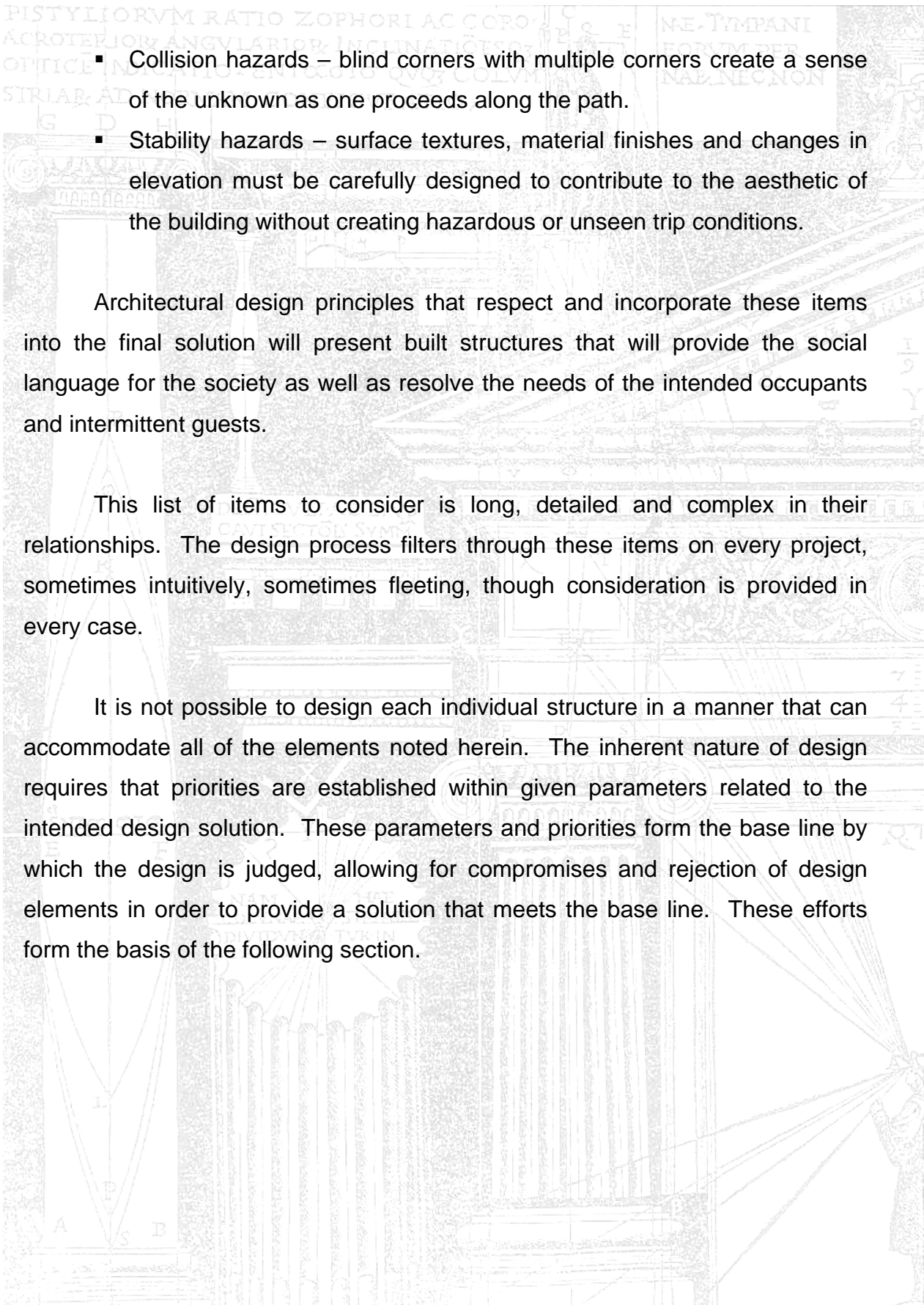
(7) Personal Safety and Security

The ability of a design solution to enable a sense of security and safety is crucial to the long-term success of the building. As the sense of security is validated by more users, the sense of safety in numbers is facilitated.

The sense of safety and security relates to each of the elements discussed in this section. The concept of territory provides a sense of safety being within one's own space. Encroachments or violations of the established territory boundaries create a security violation response within the occupants. If the boundaries are clearly marked or understood, then the violation remains evident.

In addition to territorial definitions, architectural design principles can assist in the overall feeling of personal safety by minimizing the potential hazard conditions. Potential hazards related to personal safety include:

- Clearance hazards – spaces where violators of the boundaries can be concealed. These areas include partial height walls, extended corners, landscaping, or open stairwells.
- Object hazards – elements of the building which could cause injury. This element is fairly essential in architectural design; however projections and articulations in the building form, combined with improper lighting, may create unsafe conditions.

- 
- Collision hazards – blind corners with multiple corners create a sense of the unknown as one proceeds along the path.
 - Stability hazards – surface textures, material finishes and changes in elevation must be carefully designed to contribute to the aesthetic of the building without creating hazardous or unseen trip conditions.

Architectural design principles that respect and incorporate these items into the final solution will present built structures that will provide the social language for the society as well as resolve the needs of the intended occupants and intermittent guests.

This list of items to consider is long, detailed and complex in their relationships. The design process filters through these items on every project, sometimes intuitively, sometimes fleeting, though consideration is provided in every case.

It is not possible to design each individual structure in a manner that can accommodate all of the elements noted herein. The inherent nature of design requires that priorities are established within given parameters related to the intended design solution. These parameters and priorities form the base line by which the design is judged, allowing for compromises and rejection of design elements in order to provide a solution that meets the base line. These efforts form the basis of the following section.

4.0 The Role of Architectural Design

The social role of architectural design remains multi-faceted and complex. An architect must be trained in stylistic composition and theory, study through anthropology and journalism, as well as philosophy and history, steeped in the cultural nuances of the local societal culture and sub-cultures, and knowledgeable with regard to technical solutions. They must be able to synthesize this body of knowledge in a manner that successfully addresses the client's needs, desires, requirements, and resources.

Architectural theory is crucial to the manner through which architectural design is completed. Theory in the profession has changed dramatically within the 20th Century as the means and methods of design and construction have grown. An abbreviated list of the various forms of contemporary architectural design includes:

- Productivism (technically based)
- Rationalism (formal composition)
- Structuralism (anthropological)
- Populism (contextual)
- Regionalism (locality based)
- Deconstructivism (abstract)
- Post-Modernism (similar to Populism)
- Modernism (similar to Productivism)

Each design form brings with it various connotations on the manner through which the design solution is derived. Individual architects who ascribe to a specific manner of design may be sought out by clients. Architectural design changes as the processes evolve, moving between the various streams of theory depending on the nature of the design problem.

Social norms, values and roles are integrated through architectural design into the built form by the relationships of the building's elements and spaces. These relationships create an articulation of one set of cultural systems in contrast or harmony to other prevalent cultural systems. This articulation of the built cultural identifiers is found through the use of codes in design.

Codes in design are represented by three means of communication:²

1) Codes specific to design establish the relationship between the plan, elevation, and sectional volume of the building. This code is initially used to illustrate the intended solution to the client, and subsequently the built product is interpreted by society as a whole.

2) Codes common to the arts and cultural norms (icons, colours) are used within the design solution to respond to cultural norms that are common within the societal structure. The medical icon is a symbol taken from biblical references that is known within a given society and incorporated into structures serving that purpose.

3) Codes that are non-specific within a culture but accepted as norms are used to reinforce the influence of cultural integration. These codes are subtle, such as rhythm used in music, dance, art, and architecture, which can be shared among the arts and are common to the specific culture.

² Diana Agest, Architectural Theory, Page 202

The implementation of the codes specific to a given culture depends on the architectural theory basis of the architect and the manner through which they employ the codes to resolve the design. The relationships of the codes can be altered during periods when there is great change of society in the form of social elements, economics, technical advancements, functional changes, or symbolic elements. This change will provide a new basis, transforming the original solution's theoretical position, to resolve the design challenge in a manner never seen before.

The challenges to theory may come from within the architectural profession due to the beliefs of individuals or a select group, or it may be stimulated by outside forces. An example of outside force influence can be seen in the development and advancements of concrete and steel. Prior to the ability to construct steel-framed high-rise buildings, construction was limited to a scale more suited to an individual person. Steel and concrete have made it possible, through advancements in engineering, production and design to take structures to heights never before dreamed of.



Figure 21: Scarth Street Elevation, Regina, Sask.

This change in materials revolutionized architectural design with the new capabilities, thereby changing the nature of our society. High-rise design and construction is now an everyday fact, seen as an element of societal growth and prosperity. The City of Regina even utilizes the skyline of the downtown core (high-rise) as the icon of the civic area. In this manner, architecture serves as the icon for the City.

Our understanding of the environment is brought forth and enhanced by the manner through which architectural design takes the established elements of a given code, those elements that have long been established as indicative of a building form, and reproduces them in a new manner. The original form is inherent in the new variation, however it has been modified through design (broken down, reassembled, or re-established) to provide something new. It is in this way that architectural design is able to continually provide the language of structure for a society of constant growth.

Architectural design must grow as an individual element of the cultural entity of society in order to remain a language of its time. This growth is evident throughout history as seen in the changes relative to design during the various critical periods of civilization – Greek, Roman, Gothic, Renaissance, etc. Architectural design relative to society can only operate and speak to citizens of its time and place. It is only able to work with known elements of the time, in order to construct a reality relevant to its culture.

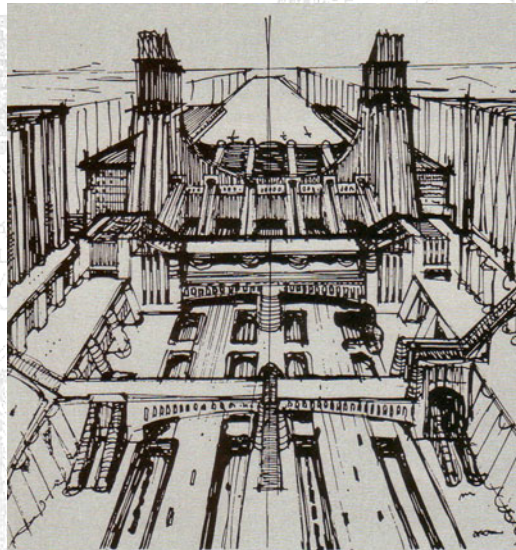


Figure 22: Transportation Centre, A. St. E'lia, Milan (1914)

Architectural design has served as a vision to the future during periods of extreme upheaval in society and technology. Examples of this statement can be seen in the work of Antonio St. E'lia during the early 1900's. Even though transportation systems had not yet evolved to their current state, construction methods had not made full use of the expanding technology he foretold, of a society where machines, travel and movement were key elements in life. His Futurist schemes offered a glimpse into what could be, with the growing knowledge of science and technology.

Upheaval in social structure and cultural expression has generated the extremes in architecture experienced through the 19th and 20th Centuries. The various streams of theory, facets of design, and methods for material use, have all sprung from divisions of architectural design.

Early theorists saw architecture as a means of providing for a better civilization, a better, improved future. Manifestos were published to espouse the new ideals and hope for society using the new design paradigm as its basis. This new design theory was facilitated by the technological enhancements of the materials available (concrete, steel, and glass).



Figure 23: Bauhaus School of Design, Dessau, Germany (1925)

Modern architecture created environments for a new world order, reducing the essence of architectural design to be a pure illustration of the building program, “a logical derivative from functional and technological facts”. It was felt by the proponents of this style that this architectural design theory would be universal for all societies; classifying it as the “International Style” for the way it transcended borders and cultures around the world. We know this style today as that in which our skyscrapers are constructed.

The difficulty in architectural design with regard to a universal approach is that liberties are taken with the basic theorem of design by each individual. As each individual architect accepts a theory, they instinctively modify that theory based on their body of knowledge relative to their own culture. Therefore, as the theory spreads universally, it becomes diffused or “watered down” until it no longer enforces its basic goal.

It is the basic goal of architectural design to provide for meaning in the end solution. In order to achieve this goal, we find the use of the design parti (as referenced in the History section) which illustrates the intended meaning of the design product. Meaning is relevant to the initial concept of design as the parti becomes the philosophical basis for the final solution. Therefore, the meaning or “readability” of the solution is determined at the outset as a component of the philosophical position (parti) towards the design solution. A response to social and cultural norms, values and roles is seen in this manner to be an early part of the architectural design process.

The difference between a cultural meaning or response and a basic structure can be formed through the forms used to illustrate that specific language of a building which elevates it to architecture.

Form is the combination of the expression and structure within each building that provides a specific semantic dimension. This dimension is the relationship of the building's parts to the whole. The semantic dimension is not fixed criteria within any architectural design theorem as it changes with each solution.



Figure 24: House Form Stereotype

The function (structure) of a house is known within society as the personal space of individuals. The form (expression) of a house is not fixed by any theory, changing in widely varying degrees. This aspect of form illustrates the creative aspect of architectural design.

Architectural design is characterized by its capacity to be studied as a system of significations that establish different levels, layers, meanings, and senses and constitutes one of the symbolic spheres instituted by (a particular) society.³

“What you should try to accomplish is built meaning. So get close to the meaning and build.”

Aldo Van Eyck

³ M. Gandelonas, Architectural Theory, P. 116

Architectural design, in order to properly elucidate the meanings, must use the concept of linguistics in the process of discovery. Linguistic theory is propagated through the mechanisms of meaning – pragmatics, semantics, and syntactics.

Pragmatics is concerned with the origins, effects, and uses of signs. 'Sign' in this capacity does not refer to a visual plaque; rather it is concerned with the cultural sign relative to architectural design. An example of cultural sign is the spire of a cathedral which signifies a religious entity. The pragmatic aspect is that which deals with historical reference within a given culture.

Semantics is concerned with the way in which objects (individual) act as signifiers of a concept or physical reality, such as a front door or individual space. Syntactics is concerned with the organization of language (parts to the whole) as a synthesis of the meaning.

These elements provide the components necessary to construct and expose the meaning within design as a part of the final solution. It is through the educated use of this process that architectural design can communicate the client's intended meaning of the solution to its contextual society.

Architectural design, related to its social context, remains an intense and complex process. There remains a myriad of factors to consider, incorporate, analyze, and potentially reject in the process to establish meaning combined with practicality of a structure. Admittedly, it is not an easy task.



Figure 25: SITE Building, University of Ottawa (IKOY Architects)

There remain compromises, sacrifices, and struggles in the endeavour to creatively respond to the client's desires and those that will ultimately serve the society as a whole. Modernism in architecture sought to resolve this struggle through the creation of forms that could be adapted to any use. Examples of this theory can be found in the early works of Le Corbusier as well as recent works around the world. This style relates to the ideology of an infinite, universal spatial method of construction.

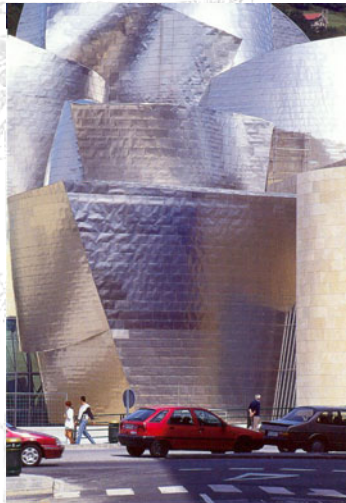


Figure 26: Guggenheim Museum, Bilbao, Spain (Frank Gehry Architect)

Current trends as seen in the works of Frank Gehry or Daniel Liebeskind create a “world view” of architecture that is both specific to the immediate design problem but also consistent language among the building forms. These designs border on the Eclectic realm of architectural design, almost a design for the sake of expression, regardless of the specific society or culture. Design of this type threatens the relationship of architecture to the social needs and purposes as well as the cultural symbolism. No building solution stands alone as they are related to their environment, context, society, culture, and purpose.

The sacrifice and compromise in architectural design may be found through inability to construct the proposed solution due to realities of budget, site, regulations, or technological aspects. There may also be compromise with regard to the semantics of a design which falls short of the intended meaning due to the relationship with pragmatic elements.

Architectural design, in order to succeed, must find the balance between reality, theory and practicality. Reality relates to the real time component of design, placing it within a given societal/cultural structure that provides the known elements of meaning for the solution. Theory is the mode of design that applies the architectural design constructs to the proposed reality. Practicality relates to the specific nature of the client’s needs (the building program and budget), as well as the technological capabilities available. It is technically possible to build a skyscraper in the arctic ice-fields but economically unfeasible and theoretically improbable.

To properly maintain the relevance of architectural design within society, there must always be a sociological concern applied to each design solution. A building achieves meaning through its constructed form and intangible space, in the way that these elements relate to the human persona that use and inhabit it. Buildings that are elevated to the status of 'architecture' are those that are able to relate their inherent meanings (physical and spiritual) to those that inhabit and view it, thus providing a higher level of appreciation.

"Architecture reflects the cultural expectant that produces it."

R. Johnstone, (SAA Conference Speaker, 2005)

This analysis provides a basis of architectural design that focuses on contextualism; a provision of architectural meaning found relative to the location and surroundings. Meaning also deals with the spiritual (intangible) aspects of the human experience. Mankind must be able to relate to their surroundings in order to achieve a comfort level sufficient to allow them to be productive, interact, and exist on a daily basis.

Frank O. Gehry stated the social intention of a new cancer treatment centre he has designed as:

"The aim is to create a building which will make people feel safe and cared for, and at the same time stimulate their imagination. All the services at Maggieâs Centre are designed to help people make the best possible use of their own resources and thus cope better with having cancer. The building itself will have a major part to play in this."

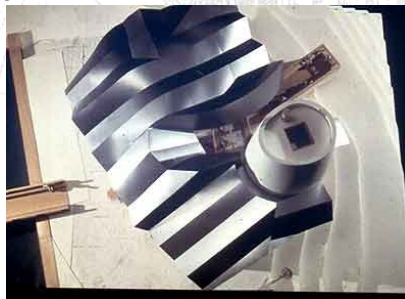


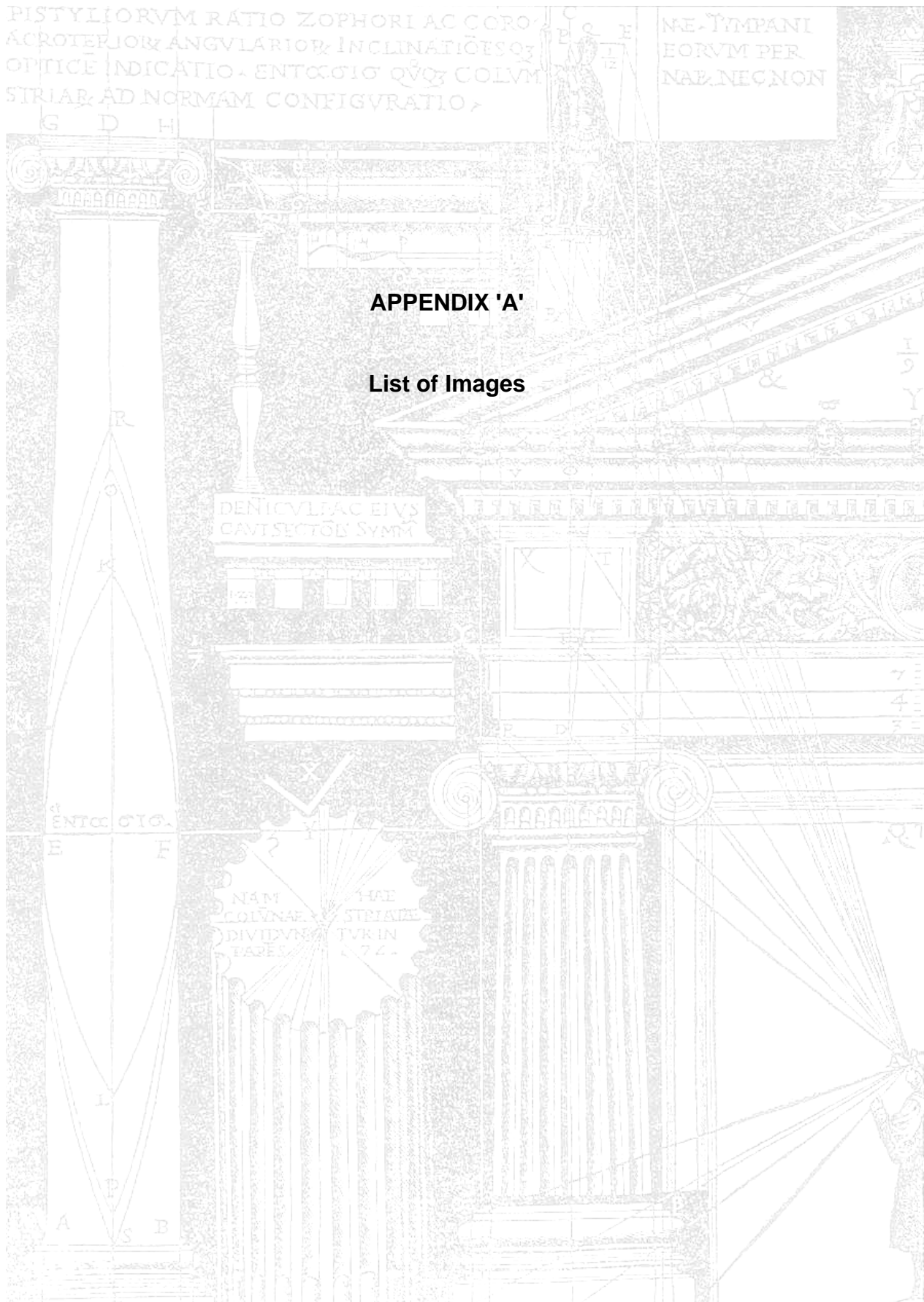
Figure 27: Maggieas Cancer Treatment Centre, Dundee

The difficulty found in this analysis is that no two persons will "see" the same thing, "feel" the same way, or "experience" the same environment. Architectural design must be capable of expressing that which is common to society (cultural norms and values) while proposing a new median through which to accept the building typology. The task remains ongoing and will continue.



Figure 28: Neuschwanstein Castle





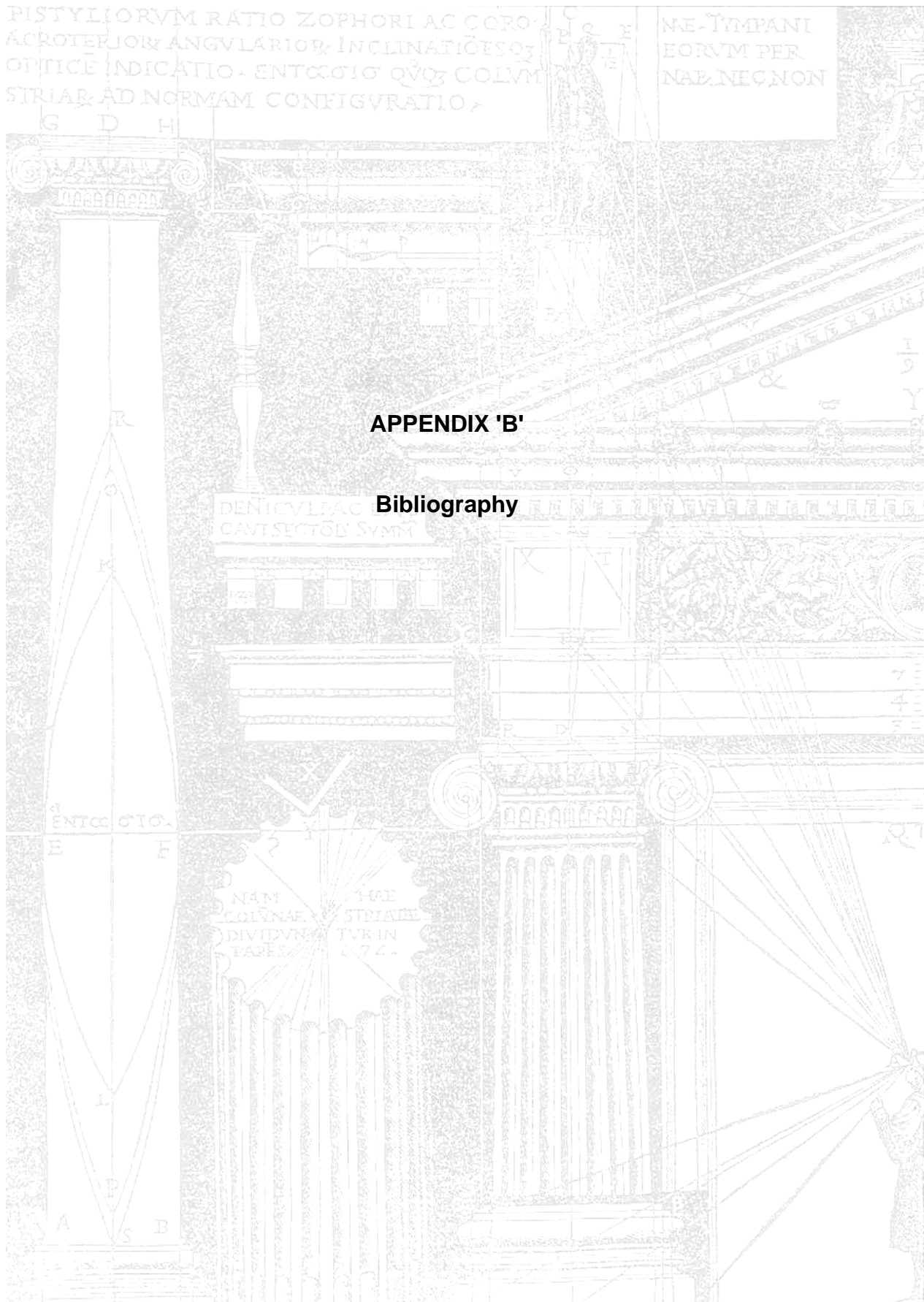
APPENDIX 'A'

List of Images

Reference tags:

- A : Photograph by Author
B : Buildings That Changed The World
C : Vitruvius – 10 Books on Architecture
D : Designing Places for People
F : Architecture: From Pre-History to Post-Modernism

Number	Name	Reference	Page
Cover	Architecture Goes to School (1998)	A	--
1	Courtyard, Medici Palace, Florence	A	---
2	Spanish Steps	B	115
3	The Parthenon, Greece	B	21
4	Florence Apartments, Italy	A	---
5	Vitruvian Proportions	C	191
6	Luxembourg Palace, Paris	A	---
7	Cours de Murier Courtyard, Paris	Internet Image	---
8	Conversational Distances	D	31
9	Personal Space	D	24
10	St. Maria del Fiore, Florence	B	85
11	Arc de Triomphe, Paris	A	---
12	McCallum Hill Towers, Regina	A	---
13	Typical Corporate Floor Plan	Space Planning Basics	68
14	Residential Territory Designations	D	44
15	Residential Fencing	A	---
16	Social Role Designations	A	---
17	Retail Store, Florence	A	---
18	Main Entrance, St. Maria del Fiore	A	---
19	St. Peters Square, Rome	F	343
20	Signage Style	A	---
21	Scarth Street Elevation	A	---
22	Milan Transportation Centre	F	518
23	Bauhaus School, Dessau	B	153
24	House Form Stereotype	A	---
25	Site Building, University of Ottawa	www.ikoy.com	---
26	Guggenheim Museum, Bilbao	B	179
27	Maggieas Cancer Treatment Centre	www.arcspace.com	---
28	Neuschwanstein Castle, Germany	B	130



APPENDIX 'B'

Bibliography

Deasy, C. M with Thomas E. Lasswell

Designing Places For People

New York, NY, USA; Billboard Publications Inc., 1985

Hays, K. Michael (ed.)

Architecture Theory since 1968

Cambridge, Mass. USA; The MIT Press, 1998

Huxtable, Ada Louise

The Troubled State of Modern Architecture

Architectural Digest, Vol. 1-Issue 2, 1981

Karlen, Mark

Space Planning Basics

New York, NY, USA; Van Nostrand Reinhold Publishing Ltd., 1992

Kostof, Spiro

The City Shaped: Urban Patterns and Meanings through History

London, England; Thames and Hudson Ltd., 1991

Kostof, Spiro

A History of Architecture: Settings and Rituals

Oxford, England; Oxford University Press, Inc., 1985

Lindgren, Henry Clay

An Introduction to Social Psychology

New York, NY, USA; John Wiley & Sons, Inc., 1969

Lynch, Kevin

· **The Image of the City**

Cambridge, Mass. USA; The MIT Press, 1960

Newman, Oscar

· **Defensible Space**

Reichold, Klaus & Bernard Graf

· **Buildings that Changed the World**

London, England; Prestel Press, 2000

Sommer, Robert

· **Personal Space: The behavioral basis of design**

New Jersey, USA; Prentice-Hall, Inc., 1969

Teevan, James J. (Ed.)

· **Basic Sociology, A Canadian Introduction**

Scarborough, Ontario; Prentice-Hall Canada Inc., 1982

Trachtenberg, Marvin & Isabelle Hyman

· **Architecture: From Prehistory to Postmodernism**

The Netherlands; Harry N. Abrams, B.V., 1986