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Abstract

As a center for Japanese culture based outside of Japan and designed by a non-Japanese architect, the Japan Cultural Forum is symbolic of the contradictions inherent to Japanese culture for centuries. These contradictions arise from the creative process of synthesis vital to the development of Japanese culture – and more importantly – the ever-present gap between Japan and the outside world. Despite these contradictions, the JCF may be designed within the diverse urban context of Manhattan through the utilization of universal strategies found in great architecture of both East and West – incorporated using modern materials and methods sympathetic to Japanese aesthetic values.

The design of the JCF is not intended to mimic the traditional forms of Japanese architecture. Rather, it is intended to display the universal strategies employed in Japanese and Western architecture of all epochs. These include the use of a module, a clear relationship between structure and enclosure, integration with nature, and the employment of sequence, ceremony, and procession. For centuries Japanese architects have utilized these strategies from wide ranging sources and employed them in ways to suit the unique needs of Japan’s culture and climate – thereby creating a truly Japanese style.

The mission of the Japan Cultural Forum is to share the finest aspects of Japanese culture to all who wish to learn about Japan’s unique interpretation of the world through its art forms such as sculpture, painting, design, film, theatre, music, and literature. In addition to cultural exchange, an educational center is provided for language instruction to both native and non-native speakers. The JCF is intended to provide a central, recognizable landmark for the sharing of modern Japanese Culture in New York City.
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As a center for the dissemination of Japanese culture in New York City, the intention of the Japan Cultural Forum (JCF) is to support the unique requirements for the sharing of Japanese art forms in a foreign setting. Using a systematic approach focusing on timeless, universal architectural strategies – instead of recognizable, traditional forms – the design of the JCF is achieved through a distillation of shared concepts between Occidental and Oriental cultures.

While outlets exist in Manhattan for the sharing of Japanese culture, they are fragmented in location and intent, lacking in visibility within the city – especially for those not already familiar with Japanese culture. Furthermore, the most recognizable symbol of Japan in New York – The Nippon Club – is a private organization closed to the public. Sited adjacent to MoMA and the Museum of American Folk Art on West 53rd Street, the Japan Cultural Forum provides a highly visible landmark for the Japanese community of New York City and beyond.

A central theme of the JCF is the presence of a physical gap in the construction that one must continually pass through to experience the building. This gap is both a technique for the introduction of natural light and air within an urban environment, but also a metaphor for the unbridgeable gap between Japan and the outside world. This gap exists as one of many mysteries that arise from the study of Japanese culture. Despite how open Japan has been to outside ideas and influence, its culture remains mysterious to even the best foreign interpreters.

As Japan has always looked to the outside for ideas and inspiration to develop its culture, a unique blend of East and West is manifest in its art forms. While there are certain uniquely Japanese strategies within these art forms, their conceptual foundation owes credit to the external sources of their inspiration. Due to this "synthetic" approach of mixing the foreign and domestic, Japanese culture has evolved into a unique amalgam of influences. Despite this openness to the outside for creative
guidance, Japan has traditionally been closed to the outside world, creating an aura of mystique based on this chosen isolation.

Due to the disconnect that has existed between Japan and the outside world for centuries, there exists a rich opportunity for education by sharing its culture in a foreign setting through art forms such as sculpture, painting, design, film, theatre, music, and literature. As a center for Japanese culture based outside of Japan, and designed by a non-Japanese architect, the JCF is an appropriate forum to reflect the contradictory nature of Japanese culture. This dual nature of the culture, however, should not be viewed in the negative sense but rather as an occasion to imbue meaning to the problem of representing a culture in a foreign environment.

For the design of the JCF, Japan’s relation to the West will be explored through the use of architectural strategies shared between Occidental and Oriental. These strategies will generate a design independent of traditional Japanese formal motifs that often appear in the realization of cultural buildings. These architectural strategies are the use of a module, a clear relationship between structure and enclosure, integration with nature, and the employment of sequence, ceremony, and procession.

Chapter 1 will focus on the historical development of Japan, and the process of cultural synthesis. Both Japan’s relation to the outside world, and its embrace of both past and future signify an ambiguous foundation of cultural heritage, one that is neither heterogeneous nor homogeneous, but rather a hybrid formed through the distillation of external and internal influences. These qualities that have propelled Japan to the forefront of the global marketplace will be investigated for shared ideas between the aesthetic and business culture of Japan.

Chapter 2 introduces the four central characteristics of Japanese beauty: suggestion, irregularity, simplicity, and perishability. Strongly rooted in the Shinto and Buddhist tradition, these aesthetic concepts played a critical role in the formation of the world-renowned Japanese aesthetic outlook, influencing both its arts and architecture, but also more importantly the cultural sphere
in activities such as the tea ceremony. The continual presence of contradiction is also manifest in these aesthetic concepts, as will be explained in the discussion of irregularity as the ultimate form of beauty.

The universal architectural strategies that are employed in all great architecture will be investigated in Chapter 3. These concepts of modularity, a clear relationship between structure and enclosure, integration with nature, and the use of sequence, ceremony, and procession are central to the design of the Japan Cultural Forum. Through the implementation of these architectural strategies, spaces conducive to the sharing of Japanese art forms can be created without resorting to literal formal quotation. The use of modular generation will be shown first with an investigation into the Japanese use of the tatami mat, countered with the most well known use of a modular system in architecture – Le Corbusier’s Modulor. These examples will focus on the generative aspect of a modular system, and how it can provide a flexible basis for the formation of a dynamically proportioned design.

The clear separation of structure and enclosure is also paramount to the implementation of Japanese architectural ideals into a foreign environment. Revelation of structure is paramount to the conception of Japanese architecture, and will be shown in not only the traditional farmhouse of Japan but also in Toyo Ito’s Sendai Mediatheque, which continues this tradition of separating structure from enclosure using advanced construction techniques and materials. In terms of Western implementation, the work of Mies van der Rohe appears at first glance to fully support these structural ideals. However, the use of hidden plug welds, and fireproofed structure within reveals a concern more aesthetic than structurally rational. Looking to the work of Danish architect Jorn Utzon reveals a reverence for the honest material usage, and clarity and order found in Japanese architecture. Using Bagsvaerd church as a precedent, the case for a Western implementation of Japanese structural principles can be made visible. Through Utzon’s deft handling of concrete in an almost kit-of-parts assembly, he creates a
highly readable composition of support and supported that is enlivened through the presence of concrete vaulting in space of worship.

The introduction of nature into architecture is of paramount importance to the Japanese, and can be witnessed at all levels of architectural expression. Beginning with the planning of Buddhist temples, the Japanese relationship with nature has been one of continuity rather than domination. The Sumiyoshi Row House, designed by Pritzker-prize winning architect Tadao Ando, provides keen insight into the extreme measures taken to experience nature’s elements within an overcrowded urban environment. Continuing to the Western view of this concept, we can look to Jean Nouvel’s Foundation Cartier in Paris as architecture responsive to the site in which is created. Barely perceptible within a grove of trees, of which a 19th century cedar is a protected monument, Nouvel creates an essay of transparency that displays a tension between reality and perception.

Finally, the use of sequence, ceremony, and procession in architecture will be demonstrated through the carefully choreographed ritual of the Japanese tea ceremony within a specifically designed teahouse. Despite its small size, the deliberateness of the choreographed movement within the structure demonstrates a great care and respect for ceremony in architecture. Mies van der Rohe’s Barcelona Pavillion of 1928 is also a paramount example of these concepts put to use with a minimum of material. Perhaps the most elegant and respected example of sequence in Western architecture, the Barcelona Pavillion shares not only these concepts with Japanese architecture, but also the clear distinction between plane and column, structure and enclosure.

Concluding with Chapter 4 the focus will shift to how these strategies linking East and West are implemented in the design of the Japan Cultural Forum. Questions such as how the building is responsive to the art contained will be of great importance. As there is no desire to rely on traditional motifs, the architectural
language employed may be recognized as Occidental or Oriental depending on the viewpoint of the critic. This ambiguity between East and West is central to the problem of how to implement universal architectural strategies in a way specific to the representation of a culture such as that of Japan.

Chapter 1 – Cultural Synthesis

"If East is East and West is West
Where will Japan come to rest?"
-Arthur Koestler

Once Commodore Perry opened her ports to the West in 1854, Japan embarked on a non-stop process of modernization, intent on catching up with the West after the a 200-year policy of forced isolation. Barely a century through this transformation, Japan is both a financial superpower and world leader in cultural production, with a far-reaching global influence second only to America. Through a process of cultural synthesis, the Japanese have been able to learn from the West while preserving their customs and traditions. Throughout this conversion from feudal stronghold to world player, Japan has generated fervent opinions regarding the contradictions with which its culture is either blessed or cursed, depending on view of the critic. Perhaps explained best by Peter Tasker in his book *Inside Japan*:

"Here come the Japanese…they are the most innovative imitators, the hardest working hedonists, the lewdest prudes, the most courteous and cruelest and kindest of people. Rich and yet wealthless, confident but confused, they have just staged one of the greatest comebacks in history."

These contradictions are noted in the introduction of nearly every text concerning Japanese culture and history. Part exotic orientalism on the behalf of the authors – and part truth – the complex and often contradictory nature of Japanese culture is both fact and fiction for this island nation. Seen from the outside

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looking in, Western descriptions of Japan often focus on its refined customs and respect for ceremony, its strong adherence to tradition – yet equally strong embrace of the future. While there certainly is legitimacy behind these claims, those who are able to make the voyage to Japan are apt to focus on these often-repeated aspects of the culture. This nearsightedness obscures the true nature of the Japanese people and their hybrid culture of both Eastern and Western influence that has been refined for thousands of years.

Before Commodore Perry landed at the port of Edo, Japan had been blessed as one of the few nations in the world to avoid invasion. After closing her ports in 1637, the Japanese sent Dutch and Portuguese merchants back to their homelands with the message that entering Japan would be punishable by death. The warning was not heeded by the Portuguese, who in 1640, launched a mission from Macau to negotiate for resumption of trade and subsequently suffered a massacre at the hands of the Japanese. The thirteen sailors spared from execution were returned to Macau with a specific message from the Tokugawa Shogunate government: ‘Let the people of Macau think no more of us; as if we were no longer in the world.’

For the next 200 years, Japan existed as an independent feudal state, content in its isolation from world matters. It was during this time that many aspects of what is now referred to as traditional Japanese culture were refined. Emblematic of this period of cultural refinement is the Katsura Detached Palace in Kyoto, the Zen-Buddhist Tea Ceremony chanoyu, and Noh Theater. These traditions are now of classical importance to Japanese culture, not unlike Greek culture to the West. In 1933 German architect and critic Bruno Taut likened the Katsura Detached Palace in cultural significance to the Parthenon, calling it “An eternal thing.”

When confronted with these engaging aspects of Japanese aesthetics and culture, it is all too easy to consider the artistic

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expressions as unique in their creation, development, or execution. Bolstered by the Tokugawa government’s isolation policy from the early 17th to late 19th centuries, and countless narratives of Japan’s distinctive and mysterious cultural output, the case is often made for a Japanese aesthetic bereft of any external influence. Close examination of the formative years of Japan’s architectural tradition reveals that the true genius of Japanese culture lay in its rare ability to synthesize foreign influences and modify them to suit the unique needs of culture and climate.

While Japan may have been free from foreign invasion for thousands of years, it maintained contact with China, which provided the roots of Japanese culture from its pictographic writing system to the planning of Buddhist temple complexes. This process of cultural synthesis is described by Ian Littlewood in his book *The Idea of Japan*:

“Moreover, the Japanese soon showed a disturbing ability to absorb western ideas – about clothes, about trade, about politics, even about war. One cultural bonus of trying to drum these things into Asiatics had always been the satisfaction of demonstrating that they were too dense – and different – to produce anything but a risible imitation of them. Now Japan was disproving this, and in the process seemed to be claiming a kinship with Europe which put at risk the scared boundaries between East and West.”

Due to its careful shaping of an amalgam of cultural influences, Japan today has attained a favorable status in the eyes of many Eastern and Western nations. This is due in large part to its efficient business practices and its well-designed and reliable consumer electronics and automobiles. Blessed with a minimum defense budget, Japan has been able earmark large amounts of money for cultural projects that exude the Japanese respect for quality. The most notable and recent of these projects is Rafael Viñoly’s $1 billion Tokyo International Forum (Fig. 1). Despite its questionable necessity, the Forum building reinforced Japan’s status as a world leader in cultural architecture. Due to buildings such as the Tokyo International Forum, Japanese architects have

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Architects such as Tadao Ando have achieved commendations in the form of significant overseas commissions and awards such as the 1995 Pritzker Prize and 2002 AIA Gold Medal.

Often cited as a Japanese architect who is able to retain a strong cultural tradition in his work without resorting to literal quotation; Ando has responded to the need for a continuation of Japan’s refined aesthetic culture that manifests itself in modern materials and techniques – while still demonstrating the power that order can bring to architecture. Emblematic of the synthetic nature of Japanese culture, Ando’s buildings are just as appropriate in Osaka as they are in Weil Am Rhein, St. Louis, or Fort Worth. Strongly rooted to the site of their creation, Ando achieves deceptively simple spaces through the manipulation of pure geometries rendered in concrete, glass, and steel, creating a quiet architecture of its time and place. Ando has commented on the influence Japan has had on his work:

“But today we should not think of making ‘Western’ or ‘Asian’ architecture, but something that is global, a bridge to a space that is about any person. If we think globally, we are thinking about expanding barriers, overcoming barriers…of course, I have been very influenced by traditional Japanese architecture. It has taught me, above all, that universal expressions aspire to simplicity. All art forms that mankind creates, whether they are old or new or made by different cultures, connect at very deep and universal levels.”

Chapter 2 – Japan’s Religious and Aesthetic Foundations

Japan is unique in its tolerance of religions, as the majority of the populace worships both Shintoism and Buddhism. Shintoism, translated as “way of the gods” is considered Japan’s indigenous religion, dating back to prehistoric times. While not a religion in the strict Western sense of the word, it features strong mythological content, focusing on the belief that “spirits dwell in practically every phenomenon of nature, including such living and nonliving things as the sun, stars, mountains, trees, stones, wind, as well as a

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6 Michael Auping, Seven Interviews With Tadao Ando, Modern Art Museum of Fort Worth/Third Millennium Ltd., 2002, pp. 33, 43.
particular locality.” Shintoism makes no distinction between good and evil, and can be considered “a feeling of values found in daily life, rooted in Japan’s climate and natural conditions…built around the ideas for respect of nature and natural features, and the belief in a divine response to prayer in this world.” Ethical distinctions are not provided by Shintoism, as guidance is not provided to avoid sin. What makes Shintoism significant to the formation of a Japanese building tradition, however, is its belief that carefully designed “containers” are required for the worship and appreciation of ancestral spirits – as best exemplified at sacred sites such as Ise – in Japan’s Mie prefecture (Fig. 3-5). Graham Parkes writes about this difference between Eastern and Western approach to temporal thought:

“A salient feature of Shinto illustrates a contrast between the Japanese and the Western understandings of age and the reality of the past. The Great Shrine at Ise is dedicated to the ancestor of the imperial family, the sun-goddess Amaterasu. The most ancient shrine in the country is also the newest: In order to avoid the impurity that comes with the decay of aging, the Ise shrine is destroyed a built anew every twenty years. Whereas in the West the age of a building depends on how old the materials of which it is made are, in Japan it is the form that counts…form as concretely embodied in a finite, impermanent building. The ephemeral nature of existence, of which the Japanese appear to possess an especially keen awareness, is enacted in the perpetual destruction and reconstruction of the most sacred structure of the national religion.”

The Chinese introduced Buddhism into Japan sometime during the sixth century A.D., providing a vehicle for hundreds of years of Chinese culture to permeate through. Buddhism is based on various mixtures of Taoism, Universalism, and Confucianism, providing a more rigorous method of worship than Shintoism. The two religions have coexisted peacefully in Japan to this day, reflecting the accommodating nature of the religions themselves, and Japanese culture. Due to its origin in sixth century B.C.,

7 Ibid. p. 24.
8 Ibid. p. 24.
Buddhism’s arrival in Japan had nearly 1000 years of development, which resulted a more simple and clear doctrine than initially created in India. However, the Japanese were able to further refine the nature of Buddhism according to their specific needs and cultural spirit. Botond Bognar explains the essential characteristics of Buddhism in Japan:

“The basis…in contrast to Christianity, is enlightenment through learning and cognition, not faith. The way to salvation is found through eschewing rituals and, further, even the world itself. The ultimate goal is not eternal life, but nirvana, the domain of nothingness, or the Great Void.”

As Buddhism regards the universe as an ever-changing phenomenon, there is an intrinsic appreciation for all things in transition. In this belief of a continuous cycle of rebirth, the notion of permanency loses all value, as there is the potential for future generations to supercede the present in quality. This idea is central to Buddhist thought, and can be witnessed in the temporary view towards building in Japan even to this day. Important religious structures can be destroyed and rebuilt at will, as they are simply considered containers for eternal spirits. However, the significance of a temporary condition is never overlooked, whereas a Western viewpoint of substance often relies on notions of permanency. Additionally, Buddhism’s tendency towards toleration is reflected in its acceptance of any culture, civilization, or religion as a legitimate step toward a more perfect one, hence the cooperative stance towards Shinto beliefs. A significant aspect of Buddhism’s impact in Japanese culture can be found in the belief that things cannot independently exist on their own, rather, everything can be considered “itself” only in relation to other things. This mode of thought is true for the human body, as it is for any inanimate object. Described by Graham Parkes:

“The practice of Zen (Buddhism) effects a return to the preconceptual level of the individual’s being and to the

11 Ibid. p. 27.
most basic context of the person, which is understood as mu, or nothingness…in East-Asian thought it is the group – whether the nation or the family – that is ontologically primary, and the individual a derivative aberration. Thus when one enters a Zen monastery – giving up one’s former possessions, clothing, social standing, head of hair, and even one’s name – all ties to one’s former existence are severed and the context of one’s personal identity is completely abandoned…the point of the Zen regime is to show the novice that the ultimate context for his being is precisely nothing.”¹²

Upon Buddhism’s integration into Japanese society, both religions flourished in their respective arenas, beginning a process of mutual influence that led to each religion adopting aspects of the other.¹³ The real impact of Buddhism lay in its pioneering development of phenomenology, affirming the presence of human existence, and emphasizing a transcendental realm of being. Commenting on Japan’s integration of Chinese Buddhist beliefs, Botond Bognar conveys the open-mindedness of the Japanese for all things foreign:

“Thus Japan remained free to select from Chinese and other foreign cultures exactly those features that correspond to the innate mentality of the society, assimilating some while rejecting others. Because Japan cultivated this attitude of critical choice, Japanese culture has always been able to retain it’s own unique and exclusive characteristics, which at the same time became inclusive of the imported and synthesized foreign elements as well.”¹⁴

This culture of “critical choice” as Bognar refers to it can be seen as the most homogenous while also the most heterogeneous in the world. Homogenous because of the consistently pure heritage of the Japanese people, and heterogeneous because of the various cultural influences of

¹⁴ Ibid. p. 28
which it is the outcome. This duality is commented upon by Graham Parkes in his book, *Ways of Japanese Thinking*:

“Indeed, the Japanese tradition is above all *multiple*, being composed of many heterogeneous elements; and Japan is one of the most fascinating of modern cultures because of the ways its enduring indigenous tradition has continually incorporated a wide range of foreign influences.”

The intense Japanese appreciation for aesthetics is at times felt by many to be more significant than religion, as it is witnessed in all aspects of society, from the careful wrapping of seemingly insignificant store bought goods (Fig. 6,7), to the ultimate in Japanese aesthetic refinement, the Tea Ceremony *chanoyu*. Noted Japanologist, Donald Keene, in an essay titled *Japanese Aesthetics* identifies four central characteristics of Japanese beauty: suggestion, irregularity, simplicity, and perishability. These qualities, while providing keen insight into the aesthetic development in Japanese culture, are not a complete manifestation of all attributes one may find in a particular art form. However, they are quite appropriate for further investigating the foundation of many Japanese art forms.

Suggestion, for the Japanese, is central to an appreciation of any form of beauty, whether created by man or nature. Japanese painting, for centuries, has relied on the concept of suggestion to provide the viewer with an absolute minimum amount of information to provoke a response, or capture one’s imagination to enliven the canvas. As explained by Keene:

“The use of suggestion is carried to great lengths, a few brush strokes serving to suggest ranges of mountains, or a single stroke a stalk of bamboo. A desire to suggest rather than to state in full was surely behind the preference for ink paintings…many painters renounced color in favor of monochromes. I have never seen any reason stated for this preference, but I wonder whether it was not dictated also by an awareness of the power of suggestion. A mountain painted in green can never be any other color but green, but a mountain whose

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Another important aspect of Japanese aesthetics is the appreciation of irregularity (Fig. 8). For the Westerner, it can be one of the most attractive characteristics of Japanese beauty. Donald Keene retells a passage by the 14th century monk, Abbot Kenkoh:

“Leaving something incomplete makes it interesting, and gives one the feeling that there is room for growth. Someone once told me, ‘Even when building the imperial palace, they always leave one place unfinished…It is typical of the unintelligent man to insist on assembling complete sets of everything. Imperfect sets are better.”

While the appreciation of irregularity can be found in other Asian cultures such as China, asymmetry can be considered a unique aspect of incompleteness witnessed in Japanese culture (Fig. 9). Looking to architecture, when monastery layouts were imported from China they began as symmetrical arrangements of bilateral symmetry, anchored by a strong central axis. When constructed in Japan, however, the monastery plan lost its central axis, and featured strongly clustered buildings for a convincingly asymmetrical arrangement. Japanese ceramics are also best known for their consistent imperfections, which creates a beautiful object through the use of contrast. This duality is witnessed in many aspects of Japanese aesthetics, exemplifying the widely held notion that beauty can only reach its greatest height through the use of contrast.

Simplicity in Japanese culture is no better exemplified than in the tea ceremony *chanoyu*. Every motion of the teamaster is choreographed to be as unobtrusive as possible in the aesthetic sense. No movement is made that does not accomplish a specific task in the most exquisite manner possible. Japan’s most revered teamaster, Sen no Rikyu (1552-1591) was instrumental in refining

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17 Ibid. p. 31.
18 Ibid. p. 32.
19 Ibid. p. 32.
the ceremony, going so far as contributing words to the Japanese lexicon, such as *sabi*, that helped better define the exact character of simplicity that was expressed in the tea ceremony. Rikyu’s *sabi* aesthetic helped redefine an era often marked by gratuitous displays of extravagance and wealth from Japan’s many feudal warlords.

The final quality of Japanese aesthetics is perishability. This characteristic is perhaps most easily discernible in the field of architecture, where the desire to create long lasting, monumental works pales in comparison to Western desires. Japan’s appreciation for natural materials and its humid climate have also led the development of wood architecture with connections that are not permanent, allowing for the modular replacement of structural members (Fig. 11). 19th century American expatriate Lafcadio Hearn (1850-1905) describes the concept of impermanency in Japan:

> Generally speaking, we construct for endurance, the Japanese for impermanency. Few things for common use are made in Japan with a view to durability. The straw sandals worn out and replaced at each stage of a journey; the robe consisting of a few simple widths loosely stitched together for wearing, and unstitched again for washing; the fresh chopsticks served to each new guest at a hotel; the light shoji frames serving at once for windows and walls, and repapered twice a year; the matting renewed every autumn,—all these are but random examples of countless small things in daily life that illustrate the national contentment with impermanency.

The discernible signs of wearing are, in terms of Japanese aesthetic principles, highly desirable. It is thought that the visibility of use heightens the beauty of objects, displaying their impermanency within the world. Flaws can be appreciated in the same aesthetic terms as the accepted features of beauty, lending credence to the use of contrast as a legitimate compositional objective (Fig. 12). Given Japan’s extensive reserves of stone, many wonder why an architecture of seemingly delicate quality has developed over the centuries. Clarified by Donald Keene:

> “The frailty of human existence, a common theme in the literature world, has probably not been recognized

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Ibid. p. 38.
elsewhere than in Japan as a necessary condition of beauty. This may explain the fondness for building temples of wood, even though stronger materials were available: the very signs of aging that made Harold Nicolson recall the wooden buildings of frontier towns give greater aesthetic pleasure to the Japanese than age-repellent walls of brick or stone.”

Japanese architect Arata Isozaki further elaborates this concept of aging:

I learned from the Orient that everything exists in a state of flux, even though city architecture and objects have their own life, all are born, will decay, and die. It is a process of change, decaying, growing, and decaying again. Only changes are eternal. What happens is that some crisis will dictate the state of ruin but everything is to be reborn again. This “cycle-oriented” life is derived from Japanese thinking or Oriental thinking as a whole. Such an idea stands very much in antithesis to Western thought on architecture. To the European mind, architecture is eternal, and this sense of eternity is materialized through monuments…The Japanese concept is one that engages both life and death.”

Despite the numerous differences in outlook and execution, there exists a strong link between Western and Eastern architecture that cannot be overlooked. While the Japanese appreciate the delicate, fleeting beauty of impermanence, and the West a structure of material substance and longevity, there exist shared architectural strategies that confirm a universal belief in timeless architectural principles. Whether executed in wood or steel, rice paper or glass, all great architecture employs these strategies to create buildings appropriate to their time and place. Never existing outside the boundaries can these qualities be found – as the basis for their integrity rests in their proper material and ethical realization. As the architects of early Japanese temples, and modern masters such as Tadao Ando have shown, through the rigorous use of these universal, pan-cultural strategies, an architecture of timeless quality can be created – that remains relevant through centuries, but also between cultures.

21 Ibid. p. 39.
Chapter 3 – Universal Architectural Strategies Unite East and West

Seizing upon this notion of cultural universality – and having experienced the inadequacy of various outlets available for the sharing of Japanese culture and art forms in New York City – the need became apparent for a recognizable resource to maintain cultural customs and communicate the finest forms of Japanese culture to a curious, growing audience. Despite a small Manhattan site, which is foreign to the Japanese art forms that would be displayed in such a building, it is argued that such a setting does not prevent the possibility for architecture to provide a sympathetic environment towards the sharing of this art – without the use of traditional Japanese formal techniques. A thorough analysis of all epochs of Japanese architecture can distill the essential, universal design strategies inherent in all valued buildings – regardless of culture. Therefore, an architecture responsive to both the urban setting of New York, and the Japanese art forms displayed within can be achieved using a modern expression of these universal strategies.

In examining the relationship between architectural development in Japan and the West, it is possible to look at specific works from both cultures that display similar formal strategies, regardless of their eventual aesthetic and material realization. When comparing Japanese and Western architecture, there appears to be little in common, despite the formal allegiances between the traditional sukiya style found in Japan and particular examples of early Modern architecture as first described by Bruno Taut during his tenure in Japan during the 1930’s.

Commenting on the relationship between the East and West, Japanese architect Arata Isozaki describes how he confronted the multicultural task of designing the Museum of Contemporary Art, Los Angeles, in his book *The Island Nation Aesthetic*:

“The city of Los Angeles is located at a point of confluence between the culture of the East and the West. Inevitably an oriental architect called to work
there must provide a methodological interpretation of both cultures. To satisfy this demand, I refined my design approach into a homage to the golden section, as the Western method of establishing divisions, and the Yin and Yang philosophy, as the corresponding Eastern method...I was able to design in an ambivalent way, to produce something that is neither oriental nor occidental while being both. During the process, I myself was drawn into a vortex of examination and interpretation arising from the collision of heterogeneous cultures."

Four discrete strategies of architectural development linking Japanese and Western architecture can be identified: the use of a modular proportioning system for spatial arrangement; a clear articulation of structure to display the (non load-bearing) relationship between structural frame and enclosure; integration with the natural environment; and the exploitation of sequence, ceremony, and procession. What follows is the result of this research, with the intention of identifying the universal, shared aspects of architecture in Eastern and Western cultures – that can provide guidance for an architect faced with the task of designing within a multicultural environment.

Modularity

Perhaps the two most well known systems of modular planning in architecture are the tatami mat and Le Corbusier’s Modulor. While at first it may seem the Modulor system of Corbusier is the more dynamic of the two, both are able to define space according to the golden mean in a dynamic manner regardless of the proportion employed. Both systems originate from the human body, with the tatami mat originally sized as the minimum amount of space for habitation (3’x6’) and in the case of the Modulor, a flexible derivation of the Fibonacci series based on the inherent proportions of the human body. Both can be utilized in unlimited combinations, creating an underlying rule of proportion for an architectural composition.

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Modularity for the Japanese has been of great importance from both an aesthetic and cultural standpoint. The traditional Kimono, for example, is based on a modular system of proportion that both accommodates all shapes and sizes and also folds neatly for storage (Fig. 14). The kimono is the first evidence in Japan of a view towards modular design derived from the measurements of the human body.

The double-square proportion of the tatami mat provided the basis for dynamic asymmetry found in Japanese architecture to this day. First employed in Japan during the Heian Period (781-1184 A.D.) the tatami mat was a response to the humid summer climate, providing a breathable and therefore cool surface on which to live and sleep. This is due to the construction of the mats themselves, which are made of rice straw tightly wound and bound with linen tape. The dimension of the mat is regulated to a strict 6 feet in length, 3 feet in width, and 2 inches of thickness. The temperate nature of the tatami led to the development of a low interior space that relied less on furniture than in the West, providing the basis for a spatial continuity emphasized through the use of movable partitions independent of structural function. To this day, room sizes are described by how many mats are contained within their dimensions, regardless if the actual floor surface is composed with tatami. Standard room sizes are made with combinations of 4-1/2, 6, 8, 10, 12, 15, and 18 mats (Fig. 14). The use of the tatami mat in Japanese architecture has provided a proportional consistency unparalleled in Western architecture. It has guaranteed internal organization for the planning of spaces both large and small, by locating structural elements and partitions with great flexibility.

Unlike the West, where the image projected of a house is typically external, in Japan, the façade as a concept has been negated of importance in favor of the development of an inner spatial arrangement based on the tatami mat. Designed from the inside out, the Japanese use of the tatami creates a modular coordination, lending a natural rhythm to the both the plan and elevation. Columns are always located at the intersection of the
modular units, bringing versatility to the structural layout. Since tatami mats can always be relocated, the use of space never becomes fixed. Rooms are rarely given a specific function, and are often used in many different ways depending on time of day, therefore maximizing the usage of typically small room sizes.

Le Corbusier’s Modulor was intended not only as a proportional system of measurement, but also as a way to avoid the conflict between designing in a standard or metric system of measurement. The system was altered to use the 1.8 meter (6 ft) height as opposed to the original 1.75 meter height due to its round translation into feet and inches. Described by Le Corbusier:

“The Modulor is a measuring tool based on the human body and on mathematics. A man-with-arm-upraised provides, at the determining points of his occupation of space – foot, solar plexus, head, tips of fingers of the upraised arm – three intervals which give rise to a series of golden sections, called the Fibonacci series. On the other hand, mathematics offers the simplest and also the most powerful variation of a value: the single unit, the double unit, and the three golden sections.”

Hailed as a universal approach to determining a building’s proportion at all scales, Corbusier employed ‘Le Modulor’ in a variety of projects, from the monumental Convent La Tourette to the Maison Jaoul houses. Noting the different architectural approach of these projects, one can appreciate the versatility of the Modulor in providing a regulating system of proportion without limiting the realization to strictly rectilinear forms. Corbusier’s genius lay in the scale of proportion available to regulate all dimensions of a structure, from wall, to floor, to ceiling. The power of the Modulor lay in its infinite versatility due to the natural laws of mathematics, and also its scalability based on human dimensions. Corbusier often had to convince critics of the legitimacy inherent within the Modulor system:

“The Modulor is a scale of measures; the foot-and-inch and the metre are numbers. It is these numerations which make it possible to designate the value or measure of the Modulor in terms which are common

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currency, the foot-and-inch in your country, the metre in mine... The Modulor is a working tool for those who create (those who compose: planners or designers), and not for those who execute (masons, carpenters, mechanics, etc.).

Therein lay the genius of Corbusier’s contribution to modularity in architecture – the variability offered by a design tool that is not limited to actual values, but rather, a scale of measures harmonically composed by the laws of mathematics and unaffected by changes of scale. The system gave the architect a powerful tool for not only bringing harmony to his design, but also an inherent scale based on the dimensions of a “universal” human body.

**Structural Rationalism**

Articulation of structure appropriate to its material realization has always been a primary design strategy in traditional Japanese architecture. Warner Blaser, in his book *Structure and Form in Japan*, explains:

“Old Japanese buildings are variations on the theme of wood. For the Japanese, wood is never inert matter. In his hands it acquires new vitality, it is cut and joined, as its nature demands, without nails, without glue and without paint.”

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25 Ibid. p.178.
Even today, a clear hierarchy of structural function is of primary concern for contemporary Japanese architects wishing to maintain a lineage of building culture. Despite a change to modern materials and methods, displaying the structural function of a building’s various components remains important. The materials may have changed, but the underlying spirit remains.

Often presented as an archetypal example of traditional ‘sukiya’ style Japanese architecture, Katsura Detached Palace (1616 A.D.) (Fig. 21-23) in Kyoto displays this deceptively simple relationship between structure and enclosure, creating a model for centuries of architectural development. Unfinished wood columns rise from their stone foundations to provide a raised floor level within the structural frame, while rice paper is mounted on movable partitions to both enclose and define space. This strategy of structural separation allowed for a flexibility of space not found in Western architecture of this era.

Raised slightly higher above grade than typical by the vertical rather than horizontal orientation of the tatami (6 ft. versus 3 ft.), the Katsura Palace was located in a flood plain and therefore raised higher to prevent damage. The design of the complex reveals many uniquely Japanese modifications to Chinese architectural precedents. The roof curvature, for example, is convex instead of concave, and the exposed structural columns and beams are significantly thinner than those typically used – giving the entire complex an arresting elegance.

This clear display of structure and enclosure is not limited to buildings of the nobility, however. The Japanese farmhouse (Fig. 21) is just as viable an example of a clear hierarchy of structure and enclosure, with its independent structural frame and raised floor level. As at Katsura, columns are placed at the junction of tatami mats, creating a framework for the integration of partitions that may be fixed or movable – with the possibility of changing over time. The structural function of each component is clearly indicated, displaying a simple hierarchy of natural materials put to specific use.
Fast-forward nearly 1500 years, and we can see the same appreciation for structural separation and spatial flexibility in Toyo Ito’s Sendai Mediatheque. Hailed as a building with no set programmatic function, the Mediatheque acts today as a center for culture and information in Sendai, a medium-size city located two hours north of Tokyo. Constructed by shipbuilding experts, the Mediatheque is constructed through a revolutionary method of structural mesh steel tubes and sandwiched floor plates. All of the circulatory functions such as elevator and fire stairs are contained within these structural steel tubes, freeing the floor plates to serve any necessary function. Furthermore, all mechanical services are contained within the floor structure, acquitting the mechanical system from limiting the future use of the building. In fifty years the structure may have served its purpose and moved on to the function of a factory or department store with no negative effects on performance. Despite Ito’s choice of modern-day materials such as steel and glass, the Sendai Mediatheque proves the conceptual ability of traditional Japanese structural rationalism to translate to modern materials. Ito’s genius lay in his ability to abstract these principles into an expression appropriate to the 21st century setting in which it exists.

Jorn Utzon’s Bagsvaerd church in Copenhagen of 1973-76 is a clear example of how an articulate distinction between frame and infill can be used to create a vibrant composition of space and light (Fig. 26). Kenneth Frampton has commented on Utzon’s innate ability to work within a rigorous constructional system:

“Utzon’s insistence on rational economic construction permeates every part of its fabric, displaying a mastery over prefabrication in which he is able to exploit a modular productive system as a source of inspiration rather than as a limitation. Like Wright, Utzon believes that the poetics of built form must derive in large measure from the totality of its tectonic presence…Utzon remains committed to the ideal of an emerging world culture that, while springing from local conditions, transcends them at the same time, thereby reintegrating and revitalizing different traditions through a kind of cultural transmigration.”

The magic of Bagsvaerd lies in Utzon’s mastery of the subtle game of sameness versus difference. Structure and envelope are composed of the same concrete material, only rendered differently depending on function. Concrete is cast-in-place (unfinished) when relied upon for structural function, and pre-cast (rendered white) when used as enclosure. The same material is used underfoot as it is overhead, only the treatment varies. Even the altar, for example, is constructed from the same precast concrete sections as the floor. This tectonic continuity can be seen as one of Utzon’s many odes to Frank Lloyd Wright, who believed the poetics of a building derived largely from the “totality of its tectonic presence.”

Externally quite reserved in character, Bagsvaerd gives only subtle clues as to the magical space held within. Through the manipulation of the module of pre-cast panel from plank to block, Utzon hints at the sectional quality of the interior vaulting on the exterior facades. (Fig. 27)

Lit exclusively from above, Bagsvaerd features corridors along its southern and northern flanks that both provide circulation, views to the outside, and natural light to the users below (Fig. 28). The treatment on the interior of these corridors echoes that of the exterior, conveying Utzon’s respect for the continuity of a chosen constructional material.

Integration With Nature

A sympathetic relationship with nature underlies all of Japan’s arts. Botond Bognar explains:

“Traditionally Japanese culture evolved from and is deeply rooted in the intense, uniquely intimate relationship of the Japanese to nature, which itself

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28 Ibid. p. 292
reveals basic differences between Eastern and Western mentalities. The Westerner tends to have a superior-inferior relationship with nature, while the Oriental thinks of himself as a coordinate, equivalent to and identifying with nature...in other words the traditional Japanese attitude is characterized by a strong impulse to merge with, rather than to overcome, nature...The result of his art is intended to be the revelation of natural intentions and spirit instead of the display of his own personal struggle."\textsuperscript{29}

Integration with the natural environment is fundamental to Japanese architecture, as the guiding force of nature is highly respected, and the appearance of controlling it is to be avoided. Returning to the example of Katsura Detached Palace, the link between interior and exterior is a cherished boundary that holds great environmental and psychological significance. The use of the portico, or \textit{engawa}, is employed as a zone of mediation between inside and outside. Fast-forward to Tadao Ando’s seminal 1976 Sumiyoshi Row House, and the Japanese respect for “nature” is observed even in the dense urban environment of Osaka. To circulate between rooms, it is necessary to navigate through a courtyard exposed to the elements, raising the resident’s awareness of the natural world in a city that is quickly overtaking it. (Fig. 29, 30)

The Japanese appreciation for natural materials cannot be understated. As previously mentioned, the humid climate of Japan necessitated the use of wood for its structures, as they were designed in a modular manner that allowed for the easy replacement of structural components. Furthermore, the natural characteristics of wood allow it to “breathe,” or more appropriately, expand and contract with the changing humidity. One finds even in modern Japanese architecture, such as that of Kenzo Tange or Tadao Ando, the revelation of all materials and the lack of any type of concealment such as paint.

Jean Nouvel’s Foundation Cartier is a graceful Western example of an architecture that uses the natural environment to its advantage, creating a powerful composition based on lightness and transparency. Founded with the aim of supporting and raising public awareness of contemporary art through corporate sponsorship, Foundation Cartier has evolved into an important center of artist exhibitions. Sited on property owned by the French poet Chateaubriand, who planted a cedar tree on the site in the 19th century, Nouvel was required to preserve all the trees, including the famous cedar. This requirement led to the use of an external screen wall to separate circulation from the main building volume, and to create backdrop for the reflection of the numerous trees on the site – dematerializing the building in the process.
Sequence, Ceremony, Procession

Sequence, ceremony, and procession can be considered the fundamental link between Japanese architecture and culture. Celebrated in all great buildings and in many significant cultural traditions, ceremony for the Japanese has become central to existence in a crowded urban environment. From the basic importance of bowing as a sign of greeting, to the many levels of politeness available in the Japanese language, ceremony provides a clear set of rules for behavior within this complex culture.

The art of the Japanese Tea Ceremony cha no yu elaborately illustrates the joint evolution of architecture and culture through a highly ordered ritual. Centered on the aesthetic act of carefully serving and drinking matcha green tea in a specifically designed environment, the tea ceremony was influenced originally by the etiquette of the samurai class. Tea Master Sen no Rikkyu in the 16th century developed these rules of etiquette into the procedures of the tea ceremony that all participants must strictly follow. In his book, The Enduring Art of Japan, Langdon Warner astutely describes the significance of the tea ceremony:

“What one can say about the force exerted by the tea ceremony on so many facets of Japanese culture since the fifteenth century is far short of the truth.”

Developed under the tenets of the Zen sect of Buddhism, the tea ceremony is of greater significance than simply enjoying a cup of tea in a well-designed environment. In simple terms, the goal of the tea ceremony is to purify the soul and forget worldly concerns through this choreographed act of drinking and serving tea. Through a setting of austerity, the act of preparing tea is refined to the highest levels in terms of both beauty and economy of movement. While the procedures may seem drawn-out, they are in fact the most efficient means possible for the completion of the ceremony.

Of architectural interest is certainly the significant impact the tea ceremony held with respect to simplicity of space and harmony.

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Fig. 33

Fig. 34

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with nature. While also evident in structures such as the Katsura Imperial Palace, the design of the teahouse follows significantly more strict requirements. The entry sequence, for example, is a fascinating display of procession. All participants, including the tea master, must enter through a low opening intended to emphasize humility for all those involved. (Fig. 34)

Ludwig Mies van der Rohe’s German Pavilion at the 1929 International Exposition in Barcelona also exhibits a strong sense of sequence, ceremony, and procession (Fig. 35-38). An iconic symbol of the early 20th Century, the pavilion demonstrated the potential inherent in the new spirit of Modernism. Described in simple terms by Walter Genzmer, the pavilion was designed “solely to encourage the visitors passing through the Exposition to linger awhile and look around.”

To create the ultimate sequential experience, Mies began with the siting of the pavilion itself. He chose a site perpendicular to the main axis of the Exposition grounds, creating a sense of dynamicism through the relationship of path to pavilion. Composed of free-standing walls placed on a plinth and embraced by water, the pavilion places great importance on the existential experience, “leading the visitor into a new world of paradoxes, into a philosophical topos of architecture in which the modern individual could become more cognizant of his existence.”

As with the traditional architecture of Japan, Mies’ ultimate goal was the unification of man, architecture, and nature. Through the

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idea of spatial continuity, Mies demonstrated the relationship of plane to column through a series of polarities described by Kenneth Frampton in his book *Studies in Tectonic Culture*:

“Aside from this patent opposition between columnar and planar form, it is possible to break down the Barcelona Pavilion into a series of polarities: tectonic versus stereotomic, still versus agitated, open versus closed, and above all, perhaps, traditional material versus space endlessness.”

Anchored by two major planes, one overhead and one below, Mies’ composition creates a strong tension of movement that is not literal in implying direction, but intuitively subtle in drawing the user through an understandable sequence of events. Placed on a podium, one must first ascend to the plane of travertine in a purely classical manner. Upon meeting the raised level, the presence of water is realized and a series of 90-degree shifts lead the visitor through the pavilion. Planar elements in the vertical direction then direct movement through the asymmetrical composition, their function clearly expressed as non-structural.

While these aforementioned architectural strategies are not limited to either Western or Japanese cultures, they are an appropriate mechanism for the task of designing a building that must span the disparate qualities that make each culture unique. Although the architecture cannot be truly labeled as belonging to either Japanese or American culture, it effectively represents the values that have driven the development of Japanese art forms for centuries. Each architectural response to the programmatic requirements of the building is governed according to these strategies, which creates a consistent expression of structure, space, and enclosure. A visitor to the Japan Cultural Forum may not perceive these strategies as literal forms of expression; however, they can also work in concert within the background environment of the building – providing a harmonious environment in which to share various Japanese art forms.

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Chapter 4 – Conceptual Integration

Led by the desire to create a building for the sharing of Japanese culture that is not reliant on traditional forms for its visual communication, the importance of integrating the previously introduced universal architectural strategies becomes of paramount importance.

These strategies alone, however, cannot satisfy the intention of creating spaces appropriate for the sharing Japanese culture. Multiple forces shape this task, most significantly the programmatic requirements of the various activities housed within, such as gallery space, theatre, library, classrooms, and seminar/meeting spaces. Furthermore, the theoretical desire of creating the constant presence of a gap in the construction of the building leads to a rich interaction of spaces shaped necessity on a variety of levels – both pragmatic and theoretical.

The base strategy for the conception of the Japan Cultural Forum is a constant reliance on the underlying strategy best employed for a given situation reinforced with programmatic necessity. From a conceptual standpoint, the modular grid of 10’ x 10’ was utilized to rule the building in both plan and section (Fig. 38, 39).

This modularity is used in an asymmetrical manner that reflects the Japanese aesthetic tradition. In elevation, the modular is reflected in the constructional method employed in a given location, such as the formwork joint lines in the concrete stair towers, or the size of galvanized metal panel. Its presence is of vertical character in the stair towers to reflect the verticality inherent in their ‘bookend’ expression. For the metal panels that appear to span the ‘bookends,’ the module is used in a horizontal manner to reinforce the impression of support.

Structurally, the design of the Japan Cultural Forum has been ruled by the dictum of clear expression between support and supported. What appears to be bearing load shall be of actual material consequence, and infill of a material incapable of
independent structural support. The theoretical approach to the relationship of column to load is one of shear. Never shall a column die into its supported surface through the use of a butt joint. Rather, a ‘sliding’ relationship of shear is employed to reflect the dominant-subordinate relation of structure to support.

Thematically, this concept of sliding shear is used to establish the floor plan on all upper levels. Using the stair towers as both metaphorical and literal means of support, the floor plates’ connection to the towers is expressed through a visual display of shear (Fig. 40). Furthermore, the supporting columns for these floor plates as a rule extend beyond the point of connection, displaying this concept of shear. From the lowest level to the highest, this visual revelation of structure is consistently expressed.

The introduction of nature’s elements of light and air is of great importance in an urban environment such as Manhattan. Conceived originally as a metaphor representing the unbridgeable gap between Japan and the outside world, this neutral space creating a thin void through the building is a constant source for light and air regardless of what level may be occupied.

On the ground level this void is filled with the presence of water, which permeates to the basement level through the use of a waterfall-like sheet of water extending beyond its edge (Fig. 41). This presence of water will both audibly enliven the basement level, but also provide natural effects of cooling during the humid summer months in New York City.

The use of sequence, ceremony, and procession is best exemplified in the design of the ground floor level. The presence of water is used as a reminder of the site’s natural beginnings, but also as a medium of which to bridge, creating a strong experiential effect of circulation bolstered through the sound and visual effects of water. To enter the building, one must physically cross the space between the public sidewalk and semi-private space of the JCF. By exaggerating the entry sequence, the feeling of openness to the exterior public space is increased (Fig. 42). After crossing the initial water feature, a movement of lateral circulation is employed to
allow the visitor to appreciate the tranquility of the semi-internal spaces of the ground floor. Not until the user has crossed the aforementioned “gap” can they finally penetrate the officially ‘interior’ space of the Japan Cultural Forum.

Many design iterations were completed to arrive at the eventual design of the JCF. First and foremost, various approaches to exterior massing were explored that fulfilled the civic importance of the building, while also fitting within the zoning envelope. An early strategy focused on the careful consideration of the entry sequence as it related to the desire to prolong the penetration – in the process entering the building from the rear as opposed to front. This provided the user a more contemplative experience to make the transition from the noisy city to the interior of the Forum building. As a result of this initiative, the form was twisted away from the adjacent Financial Times building to allow for the penetration of light and air into the entry procession (Fig. 43).

While this scheme proved adequate in terms of entry sequence, the exterior massing was unable to make a formidable presence among its Manhattan neighbors. Focus shifted from street scale to city scale, exploring the impact of creating a tower-like form to provide a recognizable landmark, but also to increase the interest of the spaces within through the use of atria (Fig. 44). A scissor-stair was utilized to satisfy the two dedicated exit paths while at the same time creating a point of interest and movement for users outside the building.

This approach, however, failed to create a strong enough impression at both city and street scales. Sited next to the Financial Times building, it took on the appearance of a miniature skyscraper, not having a strong enough stance at either end of the spectrum to possess credibility. Spatially, it proved less dynamic than previous iterations, resorting to the typical core / floor plate combination of skyscraper construction, yet without all the advantages of a monumental presence in the Manhattan skyline. Future iterations concentrated less on this monumental exterior presence, and more on the quality of interior experience.
The third generation building design was the first to feature monumental stair towers as a way of defining the entry space of the Forum. Care was taken to provide a modular basis for the treatment of the façade, allowing the stair towers to be of the same width – denoting their function as unique from that of other forms of vertical support.

A large central atrium was also the centerpoint of this scheme, delivering a communal point of focus to the building program. This atrium also allows the introduction of natural light to the lowest spaces of the building, such as the auditorium. Circulation spirals around this atrium through the use of escalators, providing a constantly changing scene for the public below.

The fourth generation building design retained this use of atrium surrounded by circulation, and refined the stepping pattern of the monumental entry (fig. 46). Position of the elevators was moved to allow for a more open spatial sequence on all floors. Most importantly, the concept of shear was explored to drive the design both structurally and spatially.

As shown in Figure 47, the atrium developed into a space of constantly shifting planes in both the horizontal and vertical direction. Balconies were provided to allow for informal viewing of spaces below, or specific performances that might take place in the auditorium. Bracing of the columns served double duty as support for these balconies. The shifting of floor plates began to take on a dynamic quality similar to that found in traditional Japanese architecture without being a literal translation. Programmatic forces drove the distribution of void space on each level, as did the privacy requirements for the varying uses within the building. The most public aspects of the program were placed on the lowest levels with the greatest void space, while the classrooms, meeting rooms, and library were placed on the upper levels to provide greater privacy and acoustical isolation from the possibility of excess noise emanating from the atrium.
Chapter 5 – Site Analysis

Sited on prime cultural real estate at W. 53rd St. in Manhattan, the Japan Cultural Forum is blessed with internationally recognized neighbors such as the Museum of Modern Art and recently completed American Folk Art Museum (Fig. 47). Centrally located, the JCF presents a recognizable face to the constant traffic of nearby 6th Avenue. Immediately to west of the 90’ x 90’ site is the 41-story International Style Financial Times building, which rises to nearly 500 feet. To the east is the acclaimed American Folk Art Museum, which seems diminutive in scale, at 80 feet above grade. Further to the east, Japanese Architect Yoshio Taniguchi’s $750 million addition to MoMA is currently being constructed (Fig. 43). The lineage of significant architecture continues east on W. 53rd St., with Cesar Pelli’s MoMA Tower, Hitchcock and Johnson’s original MoMA building, and finally, Johnson’s Annex to MoMA.

With such a varied collection of buildings in terms of architectural language, and perhaps more importantly scale, the task of inserting a mass within these “bookends” becomes a balancing act – with the architect responsible for harmonizing the demands of two adjacent buildings both different in scale and architectural distinction. Furthermore, the base of the Financial Times building houses an entrance to an underground parking garage – creating an undesirable source of noise and congestion for any adjacent building (Fig. 44). This site constraint led to the use of an external concrete stair tower to shield the entry of the JCF from these unwanted site conditions. This design consideration led to the theme of using the stair towers to bookend the building, furthering the desire to create a strong distinction to not only support and supported, but also served and serviced.

Early in the design process, the New York City Zoning Code provided a considerable impact on the potential massing of the Japan Cultural Forum. Intended to provide a continuous street wall without preventing the penetration of sunlight to the street.
below, the shape of any newly constructed building’s envelope must conform to these predetermined dimensions (Fig. 46).

Despite the site’s presence on the northern side of W. 53rd St., the setback limitations are still applicable. Furthermore, the problem of establishing presence among the 41-story Financial Times headquarters while still fitting within this zoning envelope becomes difficult. The higher the building’s massing becomes, the more it is required to set back from the street wall. Concurrently, a street wall of a minimum 72 feet in height in line with the street line is required for all new construction. Above 85 feet in height, the building must begin to step back, thereafter fitting within the bulk established bulk envelope.

These multiple constraints, however, provide a motivating factor in the creation of an innovative architectural response. Without constraints, architectural decisions can be left to chance, weakening the power of the architect’s stance. Whether it may be the context surrounding the site, or the zoning regulations, these restrictions have provided the very basis for the building’s urban presence and massing. Each structure built on the street has also been designed in accordance within these boundaries, providing an inherent continuity to the overall massing of the street. Despite the desire for a building of great height free of any setback requirements, it is still possible to achieve a successful massing scheme that accomplishes the civic goals of the institution.
Chapter 6 – Program Objectives

The purpose of the Japan Cultural Forum is to provide a recognizable space in the city of New York for cultural exchange and education.

Created for all citizens of New York City, JCF is intended to bring together the Japanese and American communities in a socially accessible setting.

Operating in a variety of modes, JCF is programmatically diverse, operating as a central resource for the sharing of Japanese culture and art forms in Manhattan. Exhibition space is provided for temporary and permanent displays of artwork, while a dedicated performance hall creates a setting for lectures and performances.

Program Spaces:

Classrooms (8 @ 500 sq. ft. each)

Language Instruction

The Classrooms are intended to provide teaching space for weekly primary schooling of Japanese children. Typically this occurs every Saturday for seven continuous hours. The purpose of this schooling is to provide instruction in the crucial areas of Japanese literacy not available to students in their American curriculum, such as learning the 2,400 required Kanji characters and their variable usage in the Japanese language. The school also provides an important social atmosphere for children who are spending their formidable years in a foreign country, many of whom who are too shy to make significant relationships with their American counterparts.

When not used for Japanese primary school, the classrooms will be made available to the Forum’s language institute, which provides a range of Japanese language classes open to the public at regular intervals throughout the year.

Classrooms should be furnished with the latest available technology, including dedicated T1 Internet access jacks at each desk, along with individual power supplies. Each classroom shall
be equipped with full multimedia capabilities, such as digital projection with variable source input. A minimum of 12 linear feet of whiteboard surface should be provided for classroom instruction.

All classrooms shall have access to natural light in a manner not obstructive to the teaching process. Artificial lighting shall be employed with consideration to glare on both vertical and horizontal surfaces. Materials employed should be durable yet easily replaced if necessary. Gypsum board surfaces should be avoided in favor of more durable alternatives. Flooring surfaces shall be easily cleaned and not significantly obstructed by furniture. Permanent, lockable storage solutions are required.

Auditorium (2500 sq. ft. – 200 persons)

Theatre Performances, public lectures

The auditorium is the main public gathering space for the Forum, and shall be designed in a manner to express its importance. This is where the majority of lectures and performances will occur, ranging from theatre, films and slide presentations to more involved multimedia-intensive performances. As such, it is to be equipped with the latest display and audio technology, with special care given to variable-control lighting.

Access to natural ventilation and sunlight shall be user-controllable and adequate for times when presentations are given during the daytime hours. Mechanical ventilation should be carefully considered given New York’s often-humid summers and the auditorium’s large seating capacity. Circulation needs to be of adequate width to support prompt evacuation in case of an emergency.

Gallery/Exhibition (3000 sq. ft.)

Permanent/Temporary Display Space

The exhibition space of the Forum should be considered the most versatile space of the complex. Traveling and permanent exhibitions of both Japanese and Japanese-American artwork will
be displayed within the space, with special emphasis placed on daylighting as opposed to artificial illumination techniques. The central circulation of the Forum shall be integrated into the exhibition space to create a strong communal feeling.

Flexibility will be paramount in the space reserved for temporary exhibitions. Various strategies for the display of both flat paintings and three-dimensional artworks should be considered in conjunction with optimal natural and artificial lighting techniques.

**Library** (2000 sq. ft.)

*Public access, includes reading/study spaces*

The library will function as a space for both intensive research and casual interaction within the Forum. As such, careful consideration must be given to the acoustical function of the space for these seemingly disparate functions. Furthermore, in the areas of traditional stacks, daylighting must be carefully controlled to support the preservation of documents and texts.

Technology shall be seamlessly integrated into the resource space of the library and consideration given to the significance of digital file retrieval. Dedicated multimedia rooms shall also be provided for community use. These rooms shall be varied in size to provide the appropriate setting depending on use.

**Sculpture Garden** (2000 sq. ft.)

*Indoor/Outdoor communal space for the display of permanent and temporary works*

The sculpture garden will provide a central focus within the Forum that bridges the interior and exterior environments through the display of sculpture. Adequate space shall be given for both the contemplation of artwork and individual relaxation. Care should also be taken for adequate circulation space to transport potentially large works of sculpture into the viewing space. Carefully controlled introduction of natural light shall also be explored to fully complement the artwork displayed.
Meeting/Seminar Room (800 sq. ft. each)

Public accessible meeting spaces

Multimedia-equipped presentation rooms available for reservation by the general public. Technology available shall include fully-controllable lighting, professional sound system, digital/analog projection equipment and screens, audio/video playback and recording equipment, digital whiteboard, and full conference furnishings. T1 Internet jacks shall be provided in close proximity to conference furniture to allow real-time laptop use.

Seminar rooms shall be of appropriate proportion to allow seating of multiple users while providing an unobstructed path for projection of images. Ceiling height of 9’-0” required due to overhead projection capability.

Café (500 sq. ft.)

Public accessible with exhibition related retail component

Informal space for meeting, eating, reading, etc. Movable tables and chairs shall be provided for a versatile arrangement. Dedicated water and gas access shall be provided for light-duty kitchen use. Ventilation capable of handling commercial kitchen equipment is required.

Storage (1000 sq. ft.)

General/Exhibition storage

Storage for additional furniture, supplies, and artwork. Location shall be of close proximity to dedicated service elevator. Door openings shall also be of adequate dimensions to allow easy transport of artwork. Control of humidity levels is of great importance due to the delicate nature of the artwork stored within.

Book/Gift Shop (1000 sq. ft.)

Public accessible retail space

The location of the gift shop shall be near entrance of building to provide a recognizable space for casual users to browse. A
minimum of 48’-0” of linear shelving shall be provided for the display of goods. In addition, a space shall be provided for an assortment of freestanding retail display units. Daylighting is preferred, but not of utmost importance to the success of this space. General storage space should also be accounted for to service the point-of-sale (POS) checkout requirements for security.

**Administrative Offices** (1000 sq.ft.)

*Central quarters for all JCF employees*

Employees of the JCF will spend a considerable amount of time working in their offices; therefore the environmental siting of offices within the building is of great importance. Access to natural light and ventilation is required for each office space, communal or private.

**Restrooms** (6 @ 200 sq. ft.)

*Universally accessible washrooms*

A minimum of one female and one male restroom shall be provided on each floor of the building. Special care shall be given to the mounting heights of all fixtures including toilets, urinals, sinks, and grab bars to permit persons with disabilities full access to restroom facilities. Each washroom shall have a handicap-accessible lavatory that provides the minimum 5’-0” diameter turnaround space to allow for wheelchair user requirements.
Bibliography


