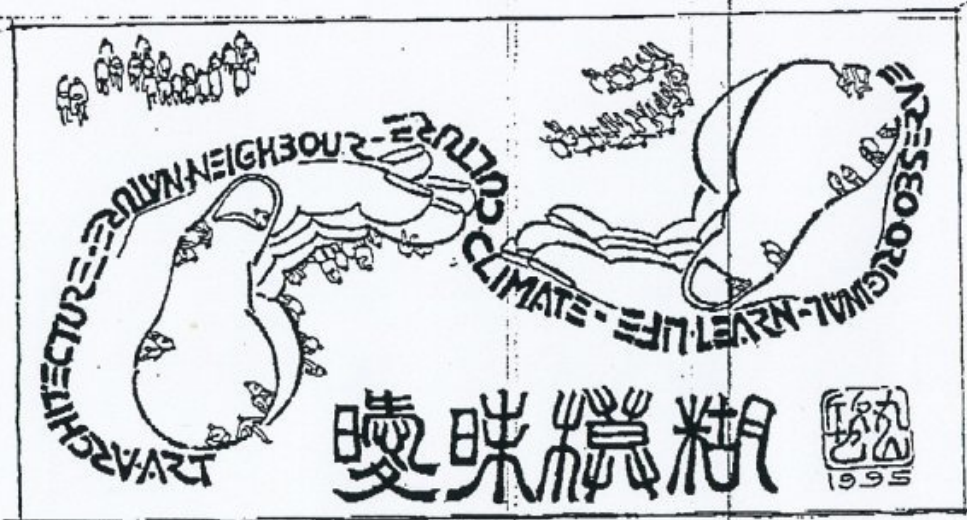


# AIMAI MOKO

A TREATISE FOR DELIGHTFUL  
"HAND-TECH" ARCHITECTURE

L'ARCHITECTURE "COUSUE MAIN"



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***Aimai moko* infers that which is ambiguous or vague, is by nature undefinable and multi-functional, and therefore can be created in many different ways.**

In the discussion of the differences between Eastern and Western cultures, especially pertaining to the perception and creation of built space, I believe the concept of *aimai moko* plays an essential role. Literally, *aimai* means "vague" or "ambiguous" and *moko* means "indistinct" or "unclear". The realm of *aimai moko* is vast -- it encompasses all things or spaces which provide a means of transition, a relationship to nature and the culture of a place, and the chance for discovery about oneself and the world.

*Aimai moko* is not based on natural science; it has the same roots in nature as that of *feng shui*, or geomancy. It is derived from natural forces such as the sun and the wind but yet is specific, adapting to a particular site, culture, or place. *Aimai moko* has no boundaries and is never limiting -- it creates an environment that is nurturing, protective, revelatory, and playful.

*Aimai moko* cannot be rationalized; it cannot be created with a computer; nor can it be clearly defined. It cannot be understood in the stereotypical Western duality of "if not this, then that". *Aimai moko* is every shade of gray that lies between black and white and every shade and tone of every color as well. It is porous rather than solid, and *aimai moko* is multi-dimensional. It is a network, connecting every one of us to each other and the world.





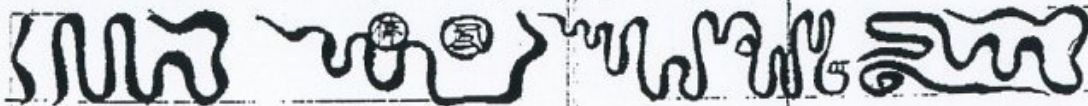
***Aimai moko* supports the collaboration of mankind and nature, uniting the macro- and micro-climates, easing the division of inside and outside, and giving continuity.**

Another important concept in the Japanese perception of the environment is *fudo* (*fu* means "wind" and *do* means "earth"). The meaning of this one word is very broad -- it incorporates all aspects of the climate and natural features of a region, including the wind, precipitation, topography, and vegetation. The word "*fudo*" was coined in the early 20th century, but the idea and understanding of *fudo* and its relationship with lifestyle and also with form, as well as the relationship of living things and form, has been historically of great importance in Japanese thought and art.

Traditionally, the Japanese concept of science, like much of Japanese culture, was learned from the Chinese and based on holism and the idea of interconnected systems in many scales, rather than the Western concepts of separate and independent systems and parts. In architecture, this was apparent in the use of *feng shui* (called *fusui* in Japanese -- *fu* meaning "wind" and *sui* meaning "water") and other forms of divination to site a building or town.

Also assimilated from China, Buddhism entered Japan in the 7th century. Soon thereafter, Japanese scholars wanted to establish an identity particular to Japan and began to develop the Japanese way of writing, called *kana*. Artists worked to create original expression in poems and songs, and the search for a Japanese identity and form of expression lead to a new style of Japanese literature, novels depicting everyday life.

Until that time, Japanese painters had studied the Chinese method of representing space and usually painted scenes of China. However, they began to incorporate scenes from the new literature into their paintings, attempting to show the physical space present in the stories and for the first time painting scenes from Japanese life. By the beginning of the 10th century, this manner of painting became known as *yamato-e* and is now considered the classical style of Japanese painting.

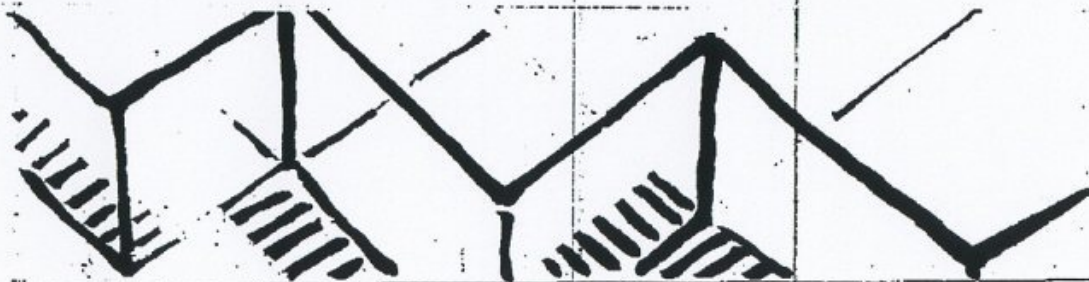




**In *aimai moko* space, the spirit of the community enters the building and the functions of the building emanate into the community.**

The *yamato-e* depict life as it was at the time. The most minute details of private life and the typical scenes of public life were painted at the same scale, thereby giving them equal importance. This is a clear representation of the idea of *aimai moko*. The viewer's eye moves constantly back and forth; there are no perspective lines to draw the eye in a specific direction. By moving back and forth between inside, outside, detailed, general, public, private, natural, and man-made, the viewer discovers the essence of the life depicted in the painting -- the relationship to and importance of nature, especially of the particular place and season -- and can relate these discoveries to contemporary life. Although these paintings are of a specific time and culture, the existence of *aimai moko* imparts in us a feeling which we can relate to our own lives.

In the *yamato-e*, architectural space was not drawn as it would actually appear to the eye, and natural features such as clouds and lakes often abruptly obscured part of the scene, adding an element of mystery. Similar to an isometric drawing, spaces were mostly kept in proportion and were given equal emphasis. Therefore, the connections between inside, outside, public, and private are shown very clearly and strongly -- and the usual distinctions between public and private and in and out are blurred. By providing a connection rather than a separation, the building and the community are tied together. The scenes which take place outside the walls are reflected in the interior spaces and vice versa. As the viewer, we find ourselves both watching and being watched. This phenomenon, which is particular to the *yamato-e*, began to diminish as western drawing methods were brought to Japan.



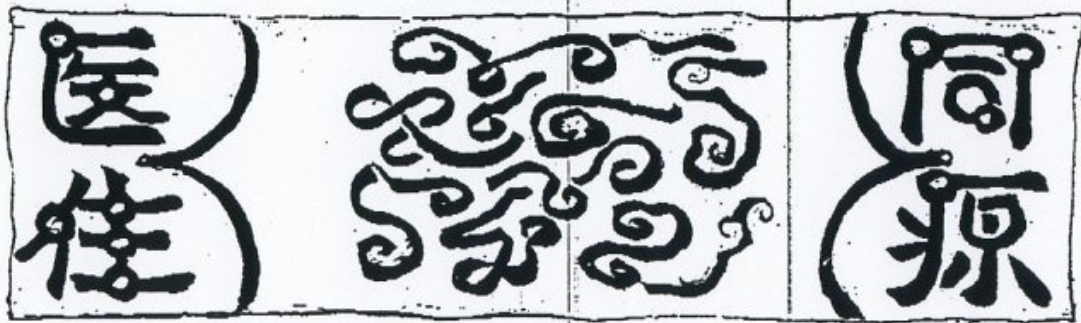


**The characteristics of *aimai moko* change in response to the progression of time and the cycle of the seasons, keeping in rhythm with nature's clock.**

Western scientific drawing, in the form of detailed drawings of plants and animals used for the purpose of identification, was first introduced in Japan by a Swedish physician in the 18th century. Japanese artists, intrigued with this new style of drawing and seeing, adapted it to their own methods and created a new style of painting. These paintings were then taken back to Europe by Western travellers and in turn influenced European art.

Scientific perspective was unknown in Japan before the 17th century and first became clearly apparent in Japanese visual arts in early 19th century woodblock prints (*ukiyo-e*), such as those by Hokusai. Hokusai was influenced by Western explorers in Japan, especially Dutch traders, and adapted the techniques of one- and two-point perspective into many of his works. While elements of *aimai moko* are still visible in his work to some degree, the use of perspective forces the viewer to focus primarily on specific areas of the prints, creating a distinct hierarchy of spaces.

With the advent of world's fairs in the mid-19th century, Japan formed even stronger ties with the West. *Ukiyo-e* prints were often exhibited and were even imitated by European artists. Although much was gained from the give and take between Japan and the West, as Japanese artists became more influenced by Western scientific and perspective drawing, the strength of the centuries-old idea of living in harmony with the natural rhythms of the earth and one's body began to diminish, and with it the connection of the Japanese culture to nature also began to decrease.





***Aimai moko* is the result of the spontaneity of creation and a reflection of the state of being.**

*Aimai moko*, as it is in traditional Japanese architecture, is an important element in the architecture of temples and shrines. The way in which these types of buildings were created, in order to provide a place of worship for the local people, designate a way to enter and exit, and give protection from the weather, derives from the style of the Chinese temple but was adapted to suit the Japanese climate and feeling. Many of these buildings have deep verandas which provide access to the sacred interior spaces and also serve to blur the distinction between inside and out, thus connecting the god who resides in the temple to the place. This is a reflection of the Buddhist concept of oneness and, in this manner of connecting as well as creating, is essentially within the realm of *aimai moko*.

Traditionally, temple and shrine buildings were constructed of wood, often with thatched roofs. One such shrine, the imperial shrine in Ise, is rebuilt every twenty years, and the cedar used in the construction comes from one specific forest, grown only for use at Ise. Each shrine building has two identical sites, one adjacent to the other. Every twenty years the buildings move back and forth between these two sites. The constant awareness of this movement, which is apparent when one visits the Ise shrines, gives a sense of ambiguity and a perception of time. The knowledge that as the shrines are rebuilt, the columns and beams of the old buildings are given to temples and shrines throughout the region to replace decaying parts of those buildings, further emphasizes the ambiguity and the re-creation of Ise. This recycling and re-use of parts serves to connect the shrines and temples of the area to the shrines at Ise.





***Aimai moko* is not based on science but on feelings, instinct, intuition, and experience.**

Perhaps closer to the everyday lives of the Japanese people is the architecture of the vernacular farmhouses, the *minka*. These houses were not built according to a specific rationale but instead developed from the needs of the people in combination with the available materials and technology and the characteristics of the local environment. The *minka* were the homes of the farmers, foresters, and fishermen -- people whose lives were directly connected to nature, and the form of the building resulted from the existing environmental conditions as well as the lifestyle of the owner. The details of the buildings relate to the climate and take into account the needs for protection from the strong and frequent rains during the rainy season, the cold and sometimes windy winters, and the hot and humid summers. Materials and spaces were layered together to create comfortable, multi-functional spaces, the form and siting of which related directly to owner's vocation. Fishermen's *minka* were built to house both people and boats; farmers' *minka* had space for people and animals under the same roof; and foresters' *minka* included storage areas for tools.

The *minka* were not designed by architects with specific theories about space or attitudes about how one should live. These buildings were designed and built by carpenters who understood the nature of the material they were using -- wood. The carpenters would travel from village to village, erecting houses with the help of the local community. Everyone would work together to construct the framing or thatch the roof. The *minka* related to the lifestyle of the owner and the owner's needs and expectations. Like many vernacular styles, these houses were products of the time and place they were built. They were connected completely to the land and the lifestyle of the owner and provided protection from nature while remaining entirely tied to nature.



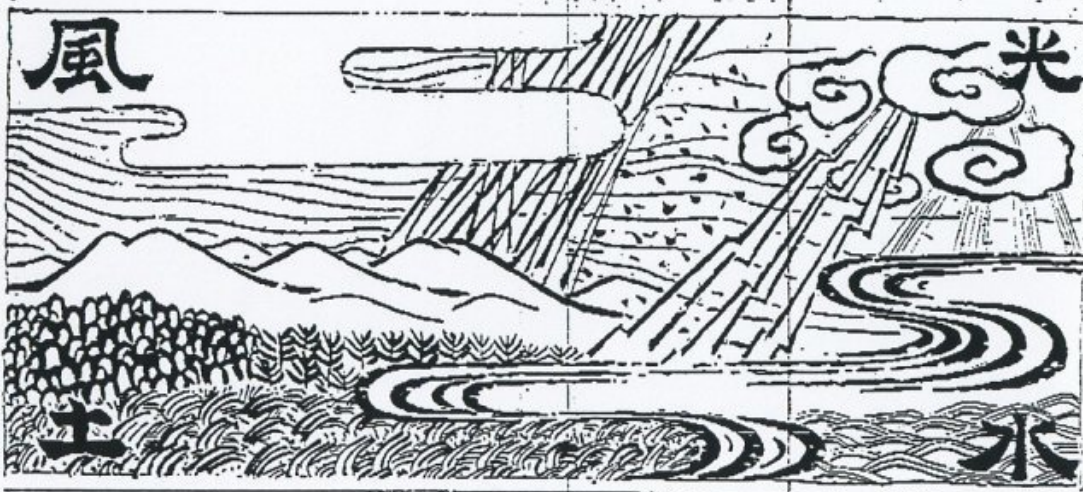


***Aimai moko* emphasizes organic order, learning from nature and understanding the give and take relationship of humans and nature.**

The connection of the *minka* farmhouses to the surrounding environment was especially strong in certain regions, where the farmers and builders studied the environment to find a solution to various architectural problems. This is most apparent in the use of huge curved beams to support the roof of the *minka* in some areas. The carpenters observed that trees growing on sloped land would bend toward the sun or sometimes would be bent by the force of the wind. They incorporated these powerful shapes, which were produced by the strength of nature — not the muscle of man, into the traditional construction, creating a spectacular roof structure.

During the rainy season, some farmers had problems with rain leaking through the ridge, the weakest part, of the thatched roofs of their houses. They looked to the land around them for a solution and discovered that planting flowers on the ridge would solve their problem. The root system of the plants would grow into the thatch of the roof, eventually becoming watertight. Although this method originated as a practical solution to a common problem, it became a distinctive and beautiful feature of many *minka*.

It is interesting to note that the same solution was also found to prevent leaky thatched roofs in parts of Europe as well.





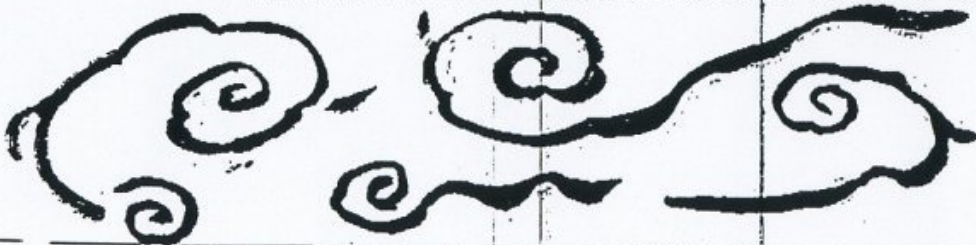
## In architecture *aimai moko* spaces encourage diversity in form, materials, and scale.

As more and more people began to congregate in one area and cities began to develop, a new style of architecture, the *machiya* or merchant's house, was created. Since the houses were built close together and land was more scarce than in the countryside, it was necessary to reconsider the ways to provide sunlight and wind to every house. The houses also needed to include areas for selling and storage, as well as living and sleeping spaces.

What could have been limiting proved instead to be liberating -- learning from temple and *minka* architecture and refining their skills, the carpenters learned to manipulate the spaces and the structure to provide sunlight and the passage of wind. The carpenters constructed beautiful spaces and details which showed their skill. Skylights, courtyards, and *tsuboniwa* (tiny gardens) provided the necessary light and air. Screened corridors connected the interior of the *machiya* to these exterior spaces, filtering the light and creating distinctive transitional spaces.

The *machiya* built for wealthy merchants were often masterpieces, showcasing the exceptional skill and finesse of the carpenter. Both indoors and out, many varieties of wood were combined so as to show their beauty and uniqueness. The layout of these houses incorporated beautiful garden areas, often accessible solely from the inside of the house. Even the toilet room, separated from the main house by a short corridor, provided an outlet for creativity and, in the ever-present low window, a tie to nature.

Few carpenters today have the skill to create such beautiful houses -- the knowledge of the potential of natural materials and the skills needed to unleash this potential have become rare. Architects with straight-edges and computers have virtually pushed the carpenters out, and with them, the connections between architecture and nature and *aimai moko* have declined.





***Aimai moko* doesn't limit the possibilities of space -- it produces a seed which germinates and grows naturally.**

In Japan, as architects have almost completely replaced carpenters as the designers of buildings, the carpenters' skill and pride in their work has declined. Similarly, within the architects' offices, computers and scanners have begun to replace drawing boards and pencils. Architects are losing the ability to draw on paper and are enslaving themselves to the latest technology. Of course, this phenomenon is not limited solely to architecture -- throughout Japan and many other countries, technology has become thought of as a savior to society, decreasing the time necessary to complete a task, allowing global-wide communication instantly, and even creating a new world -- that of virtual reality.

While there are many advantages and perhaps even delights in technology, we designers have been too quick to surrender ourselves and our futures to this computer-driven cause. Although we may be able to competently navigate the Internet and deftly use the latest version of AutoCadd, very few of us actually understand exactly how a computer works. We are becoming slaves to our software and are losing sight of our regional sources for the creative process, which may well result in a loss of culture.

This increased use of technology has resulted in a decrease in the ability to design spaces which are based on the experiences of life, history, and nature and which spring from the imagination. We have not learned how to teach the computer to be spontaneous, and we have not learned how to use the computer to design nurturing, soul-satisfying architecture. We cannot teach a computer to understand the feeling of a piece of wood in our hands, and we are forgetting to teach that to our children. We are losing the skill to create *aimai moko* spaces, and in doing so, we are losing an essentially Japanese, and Asian, part of our architecture and culture.





***Aimai moko* generates delight in the recognition of place and time and a sense of security and peace in people of all ages and walks of life.**

A few architects in Japan are working to maintain the elements of *aimai moko* in their architecture. Team Zoo, a group of loosely affiliated architecture firms spread throughout Japan, is among them. My office, Atelier Mobile, is one of the more than a dozen offices which make up Team Zoo. We have been working for the last twenty-five years not just to incorporate *aimai moko* into our designs but to explore the entire realm of *aimai moko*, to go beyond the traditional ways of creating *aimai moko* spaces.

Team Zoo prefers architecture that learns from nature and the vernacular and relates to the lifestyle of the owner. We support craft and the pride, satisfaction, and delight that go along with it. Team Zoo does not shun technology but chooses when and how it is appropriate to use it. We do not believe that because computers have become "user-friendly" that we can create friendly architecture simply by using them. We choose instead to use our hands and bodies to make our architecture, what I have come to call "hand-tech" architecture. We learn from nature and vernacular architecture, agriculture, and lifestyle of the area and design our buildings to relate to the site and the region. We want our buildings to be pleasing and playful and to have a direct and explicit relationship to the body. We make our buildings for people -- for enjoyment, for discovery, and for life.

*Aimai moko* is often an important part of our architecture, from the details to the overall design. More than using *aimai moko* to create an essentially Japanese architecture, we want our architecture to be "user-friendly" and earth-friendly. However, by creating spaces which incorporate *aimai moko*, our architecture becomes more closely tied to *fudo* and to the landscape and nature of the region.





***Aimai moko* abandons the t-square for freedom of imagination and deep feeling, stimulating the imagination with an ambiance that is boundless, free-flowing, and peaceful.**

In addition to our architectural design work, my office and some of the other Team Zoo offices hold workshops for students and community members to teach them about our design methods. We do not advocate copying traditional architecture or our architecture, nor do we teach how to design *aimai moko* spaces. What we do teach is the process of making, for it is within this process -- the discovery of the joy of using one's own hands to create, the revelation of the connection between making and living, and the pride and satisfaction in the completed work -- that each person can begin to see a way toward a healthy, delightful architecture.

Using one's hands and body gives design a reality that a computer -- or even a t-square -- cannot. The advantage of this is that the object or space created from such a "hand-tech" process can never be separated from the process of making and therefore can never be separated from the care, understanding, creativity, and determination that went into its creation. "Hand-tech" architecture is not refined or elegant; it is rough and unpolished, but it stimulates our senses as it links us to nature and time and gives us pleasure.

The process of making, just like seeing and feeling, should be different for every person. We teach how to begin the process of discovery of one's own method and hope that through this, each person can use his or her own process to create architecture for the good of the world.





***Aimai moko* establishes self-sufficiency, individuality, and creative diversity of the whole.**

In my work, I have come to believe that architecture must be for the betterment of all living things. It must provide peace, joy, delight, and the chance for discovery. In these times, architecture is designed like ready-to-wear clothing that one buys off the rack. It comes complete, although the fit might not be quite right, or we might actually prefer a different color or pattern. We probably don't know who designed or made the clothing, and we certainly don't know whether the designer actually wears his or her own designs. Architecture, too, has come to be "ready-to-use", designed and built by professionals who don't actually live in their own designs and disappear when the building is complete.

I believe that we as architects must take more responsibility for the work we produce, be more sensitive to place, time, and history. We must understand for whom it is that we are designing and how the building will affect the environment, and we must be so completely satisfied with our work as to want to use or live in it ourselves. We should not let technology control us or affect how we design -- we must control technology and use it when and where we deem necessary. We must remember that we are not the only living beings and that nature has more power over us than we can ever have over nature.

If we try to understand how Eastern architecture has traditionally blended with nature, we will re-discover *aimai moko*. If we can realize the potential of *aimai moko*, we can use it to achieve a better balance between man-made objects and spaces and nature, enhance the natural environment, establish peace between humankind and nature, and restore our sense of identity and joy for life.

