

The Geometric Poetry of KRIS YAO | ARTECH

Author: Wang Junxiong

20140903

Associate Professor of Shih Chien University, editor-in-chief of *Taiwan Architecture* magazine

Orderly geometric spaces are considered to be one of the most essential features of KRIS YAO | ARTECH's (below as KYA) architecture, especially for the Lanyang Museum in Yilan and the Hsinchu THSR Station, both of which are regarded as the two most representative pieces so far. While concurring with such an opinion, this article will further point out that while reading about and experiencing KYA's architecture, the most delightful point is not only to better understand the unique techniques of the firm's geometric practice (which surely deserve separate treatment), but most importantly, to perceive an indefinable "state" in its geometric spaces. This indescribability is beyond any kind of geometric language itself.

If we take literature as an analogy, a "poetic" feature appears when architecture eventually exceeds material, surpassing where it came from. Another aim of this analogy between poetry and the implication of KYA's architecture is to discuss the dialectical relationship between universality and peculiarity. It is generally believed that architecture originates from geometry, or that there is even an equivalence between them. Poetry has the same property as being not only one of the oldest literary forms, but also an international art that exists broadly in almost every language system. However, the worldwide span of poetry does not hinder the production or delivery of its peculiar content. From the Vedas of India, Homer in ancient Greek and the poems of ancient Arabian poet Sa'di to Shakespeare's sonnets, all have their own peculiarities derived from different features and structures, composing a colorful world of poetry. Poetry is a form of literature which across time and space seems to demonstrate that cultural gaps can be bridged when language surpasses itself and becomes a mental communication experience. On the foundations on which poetry is constructed, the peculiarity of each form gains mutual understanding and appreciation. Similarly, when geometric space achieves poetic form, it delivers peculiarity instead of universality, which will probably be universally perceived and understood.

1. Nighttime exterior of the CEC Headquarters in Taipei
 2. Nighttime exterior of the Yanghui Lyceum
 - 3.4. Administrative and Academic Building and Library of Yuan Ze University
- Pan Ruicong

It seems that the first critical change in KYA's geometric architecture occurred around 1995. Before that, the firm's geometric architecture was something of a result of operational technique, without high spatiality or inner connection between form and content. For example, Sky City in Xindian, designed in 1994, appears to be a summary of this mechanical geometric practice, while the CEC Headquarters in Taipei, designed in the same year, exploited a special geometric poetry, adding a brand new look to KYA's repertoire. In the design of the CEC Headquarters, KYA tried to make the "material and technique transcend themselves," thereby dissolving the mechanicalness of geometry and creating a presence of poetry.

More specifically, as an office building, the CEC Headquarters seeks the maximum elasticity of inner space usage, which lends legitimacy to the column-free spaces on the standard floors. Vertical structures were removed from the exterior to allow maximum spatial transparency inside. Exposed structures which are supposed to be heavy instead generate a sense of void, as the four load-bearing corners are suspended in a surprising way and transform into deep-grey steel to differentiate from the concrete columns on the ground. In addition, the ground columns are unusually long and thin, generating a sense of perpendicularity that eliminates their load-bearing feeling. The meticulous structure and continuous space of the CEC Headquarters present an unstructured magical floating feeling, and it is hard to realize how this whole building is supported.

Designed in 1995, the Yanghui Lyceum in Taichung and the Library of Yuan Ze University in Zhongli show completely different paths of poetry. In the design of the Yanghui Lyceum, the structure degenerates without any active performance, and the inner skylight is enclosed by blocks with clearly divided geometric facades. The division of the exterior grid implies that the entire building is like a Cartesian space, where the vertical dimension generates a geometric order interwoven with voids and solids. The transformations of depth of space and the variations in light and shadow

give people the sense of a quiet atmosphere at the moment of entry from the street.

A third kind of geometric poetry was developed for the Library of Yuan Ze University: its sense of space is produced primarily by the integration of the environment. As the library occupies the endpoint of the campus's main axis, the purpose of its geometric operation is not to form an internally oriented building like Yanghui Lyceum, but an externally oriented one able to blend actively with its surroundings, concretely forming an "architecture of the city" that plays a leadership role for the whole campus and creates its peculiarity, if Aldo Rossi's discourse is applied.

From a technical point of view, the geometric operations of Library of Yuan Ze University seem to be among the most complex architectural works of KYA. Its complexity stems from an attempt to create a new environment that fits its circumstances, so the differentiation between higher and lower geometric figures and their configurations, the streamlined serial spaces joined at 45° angles, the ordered juxtaposition of voids and solids, and everything else all focus on shaping the overall environment. Through continuous subtle demonstration of geometric space, the building eventually absorbs strength from its surroundings to form its own peculiarity, and in turn, the unique architectural space also presents the identity of the environment.

In summary, it appears that, KYA developed three different kinds of geometric poetry in the middle of 1990s, establishing a foundation for future development. More remarkably, despite the huge differences among the buildings of Sky City, the CEC Headquarters, the Yanghui Lyceum and the Library of Yuan Ze University, they all show a keen interest in movement intruding on the geometric spaces, turning the relatively static buildings of earlier times into dynamic ones. Since then, the pursuit of movement has become one of the basic elements of KYA's geometric architecture.

After the climax in 1995, KYA's geometric architecture has seen ongoing development, including a number of variations on these three themes. For example, the College of Sound and Image Arts building at the Tainan National University of the Arts (1996) can be seen as an advancement of Yuan Ze Library's "Environmental Integrated Geometry," integrated with the sloping landscape of the campus. Important works carried out on this path also include the Taipei Lite-On Technology Center (1997), Taipei Compal

Building (1997), the College of Design building at Shih Chien University (1999), and the Gymnasium and Library at Shih Chien University (2003): these are all resolved into different geometric spaces in different angles due to different environmental contexts.

The Kelti Building in Taipei (2005) and the China Steel Corporation Headquarters in Kaohsiung (2004) both transcend their materiality through cladding instead of structure, blurring their geometric spaces despite the general pursuit of clarity. Although these attempts are on different objects and different methods, they can still be seen as a follow-up of the “self-transcending technique” geometric path of the CEC Headquarters. This geometric path was renewed around 2000, mainly demonstrated by the THSR Hsinchu Station (1999) and the Lanyang Museum in Yilan (2000).

Superficially, the breakthrough of the THSR Hsinchu Station is the avoidance of the cubic geometric skills KYA is familiar with. Instead, intricate curved spaces were employed. Braving the technological challenges, the firm designed a huge roof (100 m long, 70 m wide and 26 m high) that lands at only two spots. From a deeper perspective, it seems more important that KYA, by taking advantage of an opportunity provided by technology, was able to create a very unique experience of flowing space.

Unlike the loose horizontal spatial experience in ordinary stations, the vertical space of the THSR Hsinchu Station deliberately creates a compact sequence and strong sense of movement. In particular, the smooth spatial experience is full of rhythm all the way down from the platform, which fills people with a sense of energy and joy. The secret may be that this spatial experience handles the feelings in a delicate and precise way as the train slows down. The same delicacy and precision permeates the detailed treatment of the landing point of the structure and the geometric split of the surfaces.

By imitating the surrounding cuesta landforms, the Lanyang Museum’s geometry sinks into the ground at a slanted angle instead of perpendicularly, creating an atmosphere that responds to multiple facets. First of all, this geometry builds a breathtaking experience in the glass hall. Secondly, the implementation of this geometry allows for three exhibition halls of different themes—mountains, plains and sea—providing the experience of a miniature version of Yilan’s landscape at various levels.

Thirdly, the form of this leaning geometric body explicates the topography where the mountains meet the sea, enabling this artificial object to actively blend with nature and generating a new relationship between the mountains and the sea. And lastly, the seemingly random variations of the surface created by discreetly arranged granite and cast aluminum panels not only blurs the geometric shape, but also naturally integrates this artificial entity into the landscape, incorporating the seasonal landscape changes over the Lanyang Plain. In this way, the Lanyang Museum achieves a leapfrog development of geometric poetry; at the very least, it is a blended geometry of “self-transcending technique” and “environmental integration.”

5、The School of Sound and Image Arts, Tainan National University of the Arts

6、Main entrance of the School of Sound and Image Arts, Tainan National University of the Arts

7、THSR Hsinchu Station

8、Willy Berre Exterior of Fo Guang Shan France

9、Willy Berre Main Hall of Fo Guang Shan France

Compared with the two paths of “self-transcending technique” and “environmental integration,” the cultural geometry developed for Taichung Yanghui Lyceum seems to grow more slowly. Fo Guang Shan France (2004) is one of the few examples in which a mainly horizontal geometry was developed from the vertical space of Yanghui Lyceum.

However, in the case of Silks Palace at the National Palace Museum designed in the same year with Fo Guang Shan France, KYA found a new, external path to express the cultural discourse of the geometry according to its alternating nature.

The Taipei Water-Moon Monastery, designed in 2006, leads the path to a new page. Though the discourse given by its cladding of scripture is important, the powerful dialogue between geometry and landscape is even more so: this dialogue not only creates a continuity between architecture and landscape during the “environmental integration” procedure mediated by the geometry; in addition, the reflections in the pool increase the richness of geometry, while the natural distortions and fluctuations in the water ablate the rigidity of geometric body, creating a wonderful dialectic strength between certainty and uncertainty to reflect the meaning of this Buddhist space. The

Hua Nan Financial Holdings Headquarters (2008) and Wuzhen Theatre (2010), which followed, undoubtedly build upon this cultural discourse of geometry.

Limited by length and time, this article only analyzes the geometric poetry and its makeup in KYA's architecture. However, I would like to point out more than just the skillful techniques and the poetic feature, but additionally the opportunity to express the peculiarities implicated in geometry: the common architectural methods and tools. To realize and seize this kind of opportunity, a renewed understanding of geometry is needed in which the pursuit of perfect operation should not be our only goal. What is important is that geometry can support us in pursuing creation as a tool or design technique, but not of the geometry itself.

Geometry should not be an insulated beauty that indulges in self-admiration, but a vessel or platform combined with social and cultural power with the possibility of multiple developments. In the poetic approach and development of KYA's geometric architecture, the extent seems rather narrow and the power of poetry is not completely displayed. But as a start off, we see a special way of understanding the geometry and its power, and this attitude toward geometry stresses the cultivation of meaning and the appreciation of communication.

This communication is not the pursuit of a united understanding; on the contrary, it tolerates different understandings between authors and readers, or between one reader and another, which can be communicated and exchanged. Thus appears a new angle of treating the geometric world and a possibility to eliminate the gap between universality and peculiarity.