# **Boyuan Zhang**

# A Chinese Renaissance: Henry Killam Murphy and His Interpretation of Traditional Chinese Architecture

Un Renacimiento chino: Henry Killam Murphy y su interpretación de la arquitectura tradicional china

Um Renascimento Chinês: Henry Killam Murphy e a sua interpretação da arquitetura tradicional Chinesa

Keywords | Palabras clave | Palavras chave

Architectural drawing, Campus planning, Revivalism, Historicism, Cultural hybridization

Dibujo de arquitectura, Diseño de campus, Revivalismo, Historicismo, Hibridación cultural

Desenho arquitetónico, Planeamento do campus, Revivalismo, Historicismo, Hibridização cultural

## Abstract | Resumen | Resumo

American architect Henry Killam Murphy (1877-1954) dedicated his career to a "Chinese Renaissance" that adapted traditional Chinese architecture to meet technological and programmatic needs. Although previous scholarship has surveyed Murphy's work, it deserves a closer analysis in order to measure Murphy's design outcomes against the goals he described. This paper examines archive drawings by Murphy's office so as to show the architect's design intent, identifying creative design solutions provided by Murphy and his team that balance traditional architectural principles with modern requirements.

El arquitecto estadounidense Henry Killam Murphy (1877-1954) dedicó su carrera a un "Renacimiento chino" que adaptó la arquitectura tradicional china para satisfacer necesidades tecnológicas y programáticas. Aunque la obra de Murphy ya se ha estudiado, merece un análisis en profundidad en el que se midan los resultados de sus proyectos respecto a los objetivos que se había marcado. Este artículo examina los dibujos del archivo del estudio de Murphy para mostrar las intenciones de sus diseños e identifica aquellas soluciones creativas que Murphy y su equipo ofrecieron en las que existía un equilibrio entre principios arquitectónicos tradicionales y requisitos modernos.

O arquiteto americano Henry Killam Murphy (1877-1954) dedicou a sua carreira a um "Renascimento Chinês", que adaptou a arquitetura tradicional Chinesa para satisfazer necessidades tecnológicas e programáticas. Embora a sua formação

académica prévia tenha servido de medida do seu trabalho, este merece uma análise mais atenta a fim de avaliar os resultados do design de Murphy em relação aos objetivos que ele descreveu. Este artigo examina desenhos de arquivo do gabinete de Murphy, de modo a mostrar a intenção de desenho do arquiteto, identificando soluções criativas de desenho fornecidas por Murphy e pela sua equipa, que equilibram os princípios arquitetónicos tradicionais com os requisitos modernos.

#### Introduction

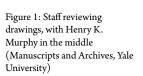
Different architectural traditions, such as Western classicism or Chinese *guanshi* architecture, have developed distinct elements and organizational rules, often likened to "lexicons" or "grammar books" (Liang 1945). If architecture is analogous to language, is translation possible between traditions? The case of the American architect Henry K. Murphy provides a positive answer that enriches discourse on cultural hybridization, challenges conventional views on appropriation, and sets a precedent for traditional design today.

Henry Killam Murphy (1877-1954), a Yale-trained, New York-based architect, developed Chinese traditional architecture to make it compatible with up-to-date building technology and programmatic requirements. In his new Chinese Revival style, he planned and designed major college campuses across China, led the planning of the country's capital city, and brought Chinese style back to the United States with a belief in Chinese architecture's universal value.

Through the lens of his Beaux Arts training, Murphy identified key principles and details of traditional Chinese architecture and applied them gracefully in his designs. He produced accomplished architecture with little command of the language or direct artisanal knowledge. This mutual intelligibility between distant architectural traditions is not an "accidental affinity" (Ruan 2002) but rather suggests a common foundation of different human cultures.

Previous scholarship has surveyed Murphy's projects and documented his time in China, but discussions of his architecture and design process have been superficial. This paper fills the gap by closely reading Murphy's drawings and writings in order to pinpoint his adherence to or deviation from traditional Chinese principles and details, and to measure his design outcomes against his stated aims.

Cultural and political meanings aside, Murphy's work is architecturally significant, as it points a way to reviving and transforming an architectural tradition through sensitive and meticulous studies. His design approach is still applicable today for architects seeking to design in traditional styles and cultural settings beyond their direct experience.





#### Background

On his first trip to China in 1914, Murphy immediately became an admirer of Chinese architecture and undertook to revive its tradition. He viewed Chinese architecture as equal to European canons, stating that "there are not two, but three great styles of architecture, and that to the Classic and the Gothic must be added the Chinese" (Murphy 1921).

The "Chinese architecture" to which Murphy referred was almost exclusively the *guanshi jianzhu* (lit. "official buildings") of the Ming (1368-1644) and Qing (1644-1911) dynasties. There are indeed many other traditions across China's vast geographic span and diverse cultural groups, but for the purposes of this paper, the term "traditional Chinese architecture", unless otherwise specified, refers to this official style established to symbolize the sovereignty and unified identity of imperial China. Murphy's practice in China was centered in Beijing and Nanjing – ancient capitals of the north and south that offer a rich cultural context and exemplars of palaces, monuments, and religious buildings.

The tumultuous period between the Boxer Rebellion (1900) and the outbreak of World War II (1937) saw a great wave of American missionary campaigns in China (Bays and Widmer 2009). This generated growing demand for missionary schools and hospitals. To allay anti-missionary sentiment, many missions began to favor a locally inspired character for new buildings. Prior to Murphy, designs in Chinese style by Western architects had had mixed outcomes. Dwight H. Perkins (1867-1941) created a delightful composition of blue-tiled roofs on gray-brick walls for Nanjing University (1912), but its masses showed a mason's sensibility, not reflecting the local tradition of wooden construction. The Hsiang-Ya

Hospital (1918) in Changsha by James Gamble Rogers was an apathetic hybridization. Rogers struggled to put a Chinese-inspired roof over a four-story, largely utilitarian brick complex, resulting in "a ritual mask for an otherwise faceless institution" (Betsky 1994), incoherent and clumsy.

Murphy was aware of issues such as those faced by Rogers and proposed a more rigorous study of traditional Chinese architecture. In a significant speech he asserted that "it is not enough to put Chinese roofs on buildings which are otherwise foreign ... we must start the Chinese treatment from the ground and continue it all the way to the ridge." He went on to identify three essential aspects of traditional Chinese architecture: first, the orderly planning of building ensembles organized around axes and open courtyards; second, exposed columns, with their frankness and tectonic clarity; third, the splendid polychromy complementing architectural expression.

Of these three points of inspiration, Murphy's planning ideas and his use of color require further study. His Nanjing Capital Plan (1931) should be compared with Burnham's Chicago, Griffin's Canberra, and Lutyens's Delhi. He also blended American garden suburbs with Chinese houses in Nanjing, as well as in Coral Gables, Florida. Murphy may be seen as a transitional figure between the previous generation of Raymond Unwin and the next one of Edmund Bacon, who worked for Murphy in Shanghai.

As for Murphy's architectural design, certain key projects show how his approach progressed. His first period includes his designs for Yali (known as Yale-in-China) in Changsha, Hunan, starting in 1914, where Murphy first attempted to unify all the buildings with a Chinese Revival style. The singular, centrally placed open space and buildings facing it, however, were still largely Jeffersonian, and the detailing of the buildings had room to improve. His second period

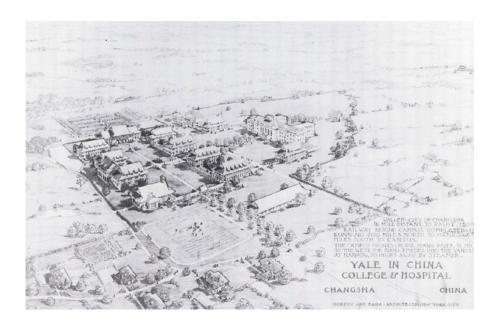


Figure 2: Murphy and Dana, aerial view of Yali Middle School, 1916 (Yale-China Association Records. Manuscripts and Archives, Yale University)



Figure 3: Henry Killam Murphy, Architect, central dormitory building of Ginling College (Talbot F. Hamlin Papers, Avery Architectural & Fine Arts Library, Columbia University)

showed a more rigorous interpretation of both traditional Chinese planning and architecture. Buildings were organized into series of courtyards instead of one grand campus, with details adhering more closely to traditional principles. His designs for Ginling College (1921) and the earlier plans for Yenching University (1920) best exemplify this. His third period shows a more romantic tendency, such as the picturesque plan for Yenching University's lakeshore complex, the playful rotation of axes in Fukien Christian University, or the imaginatively curved walls at the Memorial Cemetery for Heroes of Revolution in

Nanjing. Murphy's work culminated with his unbuilt Nanjing Capital Plan, in which all his previous studies and prototypes were synthesized into an idealized Chinese city.

It should be noted that most of Murphy's work was carried out when a thorough understanding of Chinese architectural history was not yet available. Traditional building knowledge was held by craftspeople, such as the Lei family, who served as the Qing court's chief architects for generations. Its abstruse principles and terminologies were never widely known and quickly fell into neglect with



MEMORIAL LIBRARY BUILDING - PEKING UNIVERSITY

Figure 4: Perspective drawing of the library court, Yenching University (Henry Killam Murphy Papers)



Figure 5: The National Government Center, the focal point of Murphy's new city plan for the area outside Nanjing's historic walls, 1929 (Henry Killam Murphy Papers)

the collapse of the Qing court in 1911. On the other hand, the first generation of Western-trained Chinese architects, who would eventually rediscover those rules, had not yet formed when Murphy began working in China. The ground-breaking surveys and research by the Society for the Study of Chinese Architecture (Yingzao Xueshe) founded by Chinese scholars and architects in 1930 did not inform Murphy's work until the very end of his career. The best references he had were photographs from his own travels or in books such as that by Ernst Boerschmann, whose illustrated plates served as a direct inspiration.<sup>2</sup> Publications on the Forbidden City by Japanese scholars were another visual reference, most likely for decorative details.<sup>3</sup> In short, Murphy had to study built examples on his own so as to hypothesize the principles of Chinese architecture, with limited means for doing so when not in China.

Figure 6: An excerpt from Murphy's writings on the adaptation of Chinese architecture, 1921 (Henry Killam Murphy Papers)

# The Adaptation of Chinese Architecture

BY HENRY KILLAM MURPHY, A. I. A. Architect of Yenching University, Peking.

unidenable interest has been expressed in our last month's activate and features of the Yenching University buildings, and in the din carrying out the architect's design, we have secured by the following stary of the derelopment of the design itself.)

the new reinforced-concrete con-struction for buildings in the old Chinese style of architecture. But in another aspect this might be called "New Wine in Old Bo'tles"—for I like to think of our adaptations of Chinese architecture as formishing an old se'ting for the new education offered to China by such institu-tions as Yenching.

When we indertook, in 1918, the planning of the new group of buildings for Yenching University—the choice of architectural style was a matter for much discus-sion. There were those who felt that institutions offering Western education (and Western religion)

ntion (and Western religion) d, for the sake of consisshould, for the sake of consis-tency, be housed in buildings of Western architecture; there were those who felt that the cost of constructing buildings in adapt-ed Chinese architecture would be very much greater than for foreign architecture, and that Mission institutions should therefore not attempt it; and, finally, there were those who felt that the architectural problem was too difficult to justify the hope of an aesthetically successful solu tion.

# The Decision

On the first point, the viewentually prevailed that the us of foreign architecture for Mission institution tended stamp its education as a liewhereas, the use of adaptet stamp its education as alien; whereas the use of adapted native architecture would help to emphasize the essential community of its educational interests with those of the country in which it was working.

on the second point, the general study I had already made of Chinese architecture, in designing the Academic Group for Yale-in-China, supplemented by the intensive study I had just begun of the Porblidden City, in designing the group at Nanking for Ginling College, convinced

He maintained a global practice for decades and eventually established offices in both New York and Shanghai. The office's correspondence and balance sheets from Murphy's archive are an invaluable resource for understanding the architectural industry and economic globalization in a connected world between the two world wars.

# Methodology

Through a close reading of architectural drawings generated by Murphy's office and of his own writings (Fig. 6), this paper seeks to identify Murphy's design goals and to evaluate his design solutions to the challenges and constraints he faced.

Murphy often used the word "adaptation" to describe his method, implying that he aimed to preserve certain qualities of traditional Chinese architecture but was also prepared to make creative changes on responding to constraints or needs. Not enough has previously been written to identify which details he preserved, which he changed, and how successful his method ultimately was.

This study's primary sources are technical drawings by Murphy's office. Largely neglected by previous research, these elevations, sections and details contain much more information and are more objective than Murphy's oftenquoted perspectives. Drawings for Yenching University and Ginling College are chosen as representing high points of Murphy's Chinese Revival design. Both projects are comprehensive undertakings, from the scale of planning to the designs for individual building types and their detailing.

Our analysis aims to answer the following questions: how closely did Murphy adhere to the principles and forms of traditional Chinese architecture? What deviations did he have to make in order to address modern requirements as to technology and program, and what treatments did he employ to address that challenge? If the term "Renaissance architecture" denotes a creative adaptation of ancient architectural forms to modern needs, is "Chinese Renaissance" a fair term for Murphy's work?

# The Problem of Façade Proportion

Traditional Chinese architecture defines a series of outdoor spaces in axial alignments through the grouping of simple, rectangular building types that vary in size and importance. This flexible planning principle, applied ubiquitously in residential compounds, religious temples, or imperial palaces, bears a degree of similarity with early American campus plans and monastic cloister quadrangles, as their European forebears. The convergence of the two traditions offered Murphy a convenient tool for accommodating the programmatic requirements of American institutions. These usually call for a series of typical classroom buildings

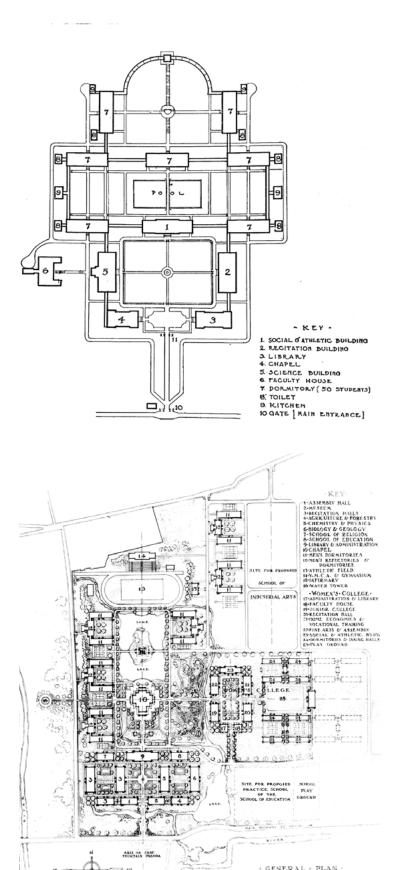


Figure 7: Campus plans with series of courtyards for Ginling (above) and Yenching (below) (Henry Killam Murphy Papers)

PHY-MCGILL-6-HAMLIN-

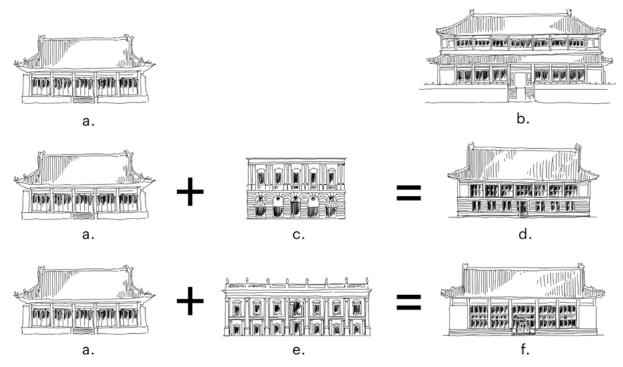


Figure 8: Diagrams synthesizing two-story elevations: (a) typical traditional Chinese palace, after Prince Gong's Mansion, Beijing; (b) traditional way of forming two-story buildings with an eave as a horizontal division; (c) Renaissance palazzo, after Bramante's Palazzo Caprini; (d) Murphy's Ginling College building; (e) colossal order, after Michelangelo's Campidoglio; (f) Murphy's Yenching building

and dormitories mixed with a few special structures such as libraries, gymnasiums, auditoriums, or chapels. Murphy's plans often group basic, repetitive building types into courtyard units while placing special buildings at axial intersections or terminations to mark their importance (Fig. 7).

Unlike with special buildings, which can always be treated uniquely, it is more challenging for an architect to come up with a systematic design for plainer and more repetitive building types. To leave behind the undesirable "Chinese roof on foreign buildings", Murphy applied the proportional

principles of a single-story Chinese palace to buildings that were usually required to have at least two stories. Although historic precedents of two-story or taller buildings do exist – such as Tiren Ge in the Forbidden City (Fig. 8b) – their façades are usually divided by a substantial eave separating the two floors, too elaborate for this to be an economical building type.

Murphy's designs provide two creative solutions. The first, as demonstrated by the buildings at Ginling College, composes the ground floor out of heavy masonry blocks and opens up the second floor with a running colonnade

Figure 9: First solution: a masonry ground floor supporting a colonnaded upper floor. Auditorium building, Ginling College, 1932 (Talbot F. Hamlin Papers)

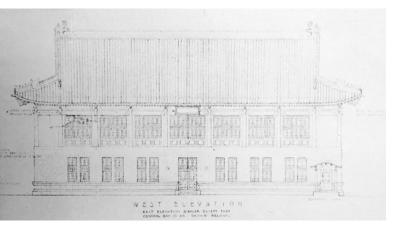


Figure 10: Second solution: double-height columns with spandrel panels. Henry Killam Murphy Architect, Library Building, Yenching University, 1924 (Talbot F. Hamlin Papers)

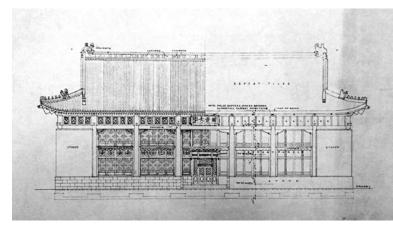




Figure 11: Photograph of the library court, Yenching University (Henry Killam Murphy Papers)

(Figs. 8d and 9). The width of each column bay follows the traditional cascading order, in which the middle bay (*ming jian*) is widest, usually the same as the column height, and the end bay narrowest. This treatment partially diverges from traditional Chinese precedents and was perhaps more inspired by the *parti* of a Renaissance palazzo, where a pilastered *piano nobile* extends over a rusticated ground floor (Fig. 8c). In Murphy's case, the subtly rusticated base also indistinctly recalls the heavy, tiered masonry platforms by which Chinese palace buildings are traditionally supported, as in the case of the three great halls of the Forbidden City.

This palazzo-Chinese hybrid solution has pros and cons. Its direct expression of two separate floors facilitates flexibility in working with varying story height combinations. But the columns, confined to only one floor, are out of proportion to the massive roof, sized to suit the building's overall height. Murphy must have recognized this, for his later designs for the Yenching buildings took a different approach (Figs. 8f and 10). There, the columns spanned two stories, similar to the "colossal" order used in Renaissance architecture (Fig. 8e). They are appropriately sized to provide enough visual support for the roof. The stone base is kept at a much lower height, almost like a plinth aligned with the ground-floor window sills, and is also more akin to a Chinese palatial platform. A special "spandrel" panel is designed to cover the slab between stories, decorated with the same tracery as the windows above and below so as to give the harmonious look of a single-story building.

The second solution is effective. The Yenching buildings look convincingly Chinese throughout and it is difficult to immediately identify any foreign elements, to the extent that many Chinese beholders have taken the campus for historic Qing architecture. Together they comfortably enclose scaled courtyards or quadrangles, as Murphy tellingly preferred to call them, achieving a spatial quality that echoes the "stately courts" of the Forbidden City while also evoking the American campus model (Fig. 11).

## The Problem of Corner Columns

Beyond its proportional framework, traditional Chinese architecture also has a long tradition of tectonic expression, with façades in which structural elements and enclosing surfaces are visually differentiated from one another, partly through variations in depth. Murphy noted that traditional Chinese wooden columns are set within walls and half-protrude from the wall surface in a frank, assertive expression of their structural role, whereas the wooden partitions between the columns recede, showing that they are merely a thin layer of enclosure. Most of Murphy's new buildings, however, were built in reinforced concrete rather than wood, to meet modern structural and thermal performance needs. A concrete wall is much thicker than a traditional wooden one, making it impractical to directly copy a traditional design. Murphy therefore created a wall assembly separating the exterior and interior layers (Fig. 12), taking advantage of concrete's plasticity to form engaged columns with all the correct detailing, such as

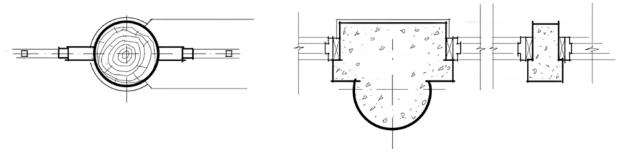


Figure 12: Comparison of real wood columns in traditional Chinese construction versus engaged columns in Murphy's concrete wall assembly (Drawing by the author after Sicheng Liang, *Qingshi Yingao Zeli*, and Murphy's Junior College building in Yenching)

entasis. The exterior elevation becomes a cast relief that freezes traditional wooden elements into the masonry.

Such translating of wooden architectural forms into masonry was not new. Precedents range from the Han dynasty *Que* monuments to numerous grottos and masonry pagodas across China, not to mention the theorized development of ancient Greek architecture from wooden construction. When Murphy designed engaged Chinese columns, he made sure that a little more than half of the column emerged from the wall (Fig. 12). This is an optical refinement known to architects of the Western classical tradition. Exposing exactly half of the column makes the protruding portion seem like less than half, whereas exposing a little more makes it look just right.

There is another fascinating feature where Murphy's walls turn a corner. In traditional Chinese architecture, a single column is usually placed at the corner as an intersection of the colonnades running along two façades. Another common practice is to wrap the corner column in a little masonry at the end to anchor the colonnade, similar to an *antae* wall in early Greek temples. Although visually heavy, such end walls do not directly bear any structural load. They often stop short near the top of the columns embedded in them, exposing the upper tip of the column shaft and the bracket sets above, revealing the true structural members.

In most cases Murphy drew the embedded column and the *antae* wall accurately, except for a few buildings such as the School of Religion at Yenching University, where

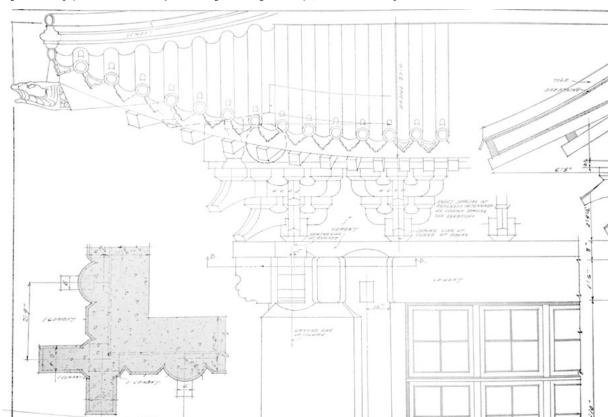


Figure 13: Murphy, McGill, and Hamlin, Junior College, Yenching University (Talbot F. Hamlin Papers)

an additional column is placed right next to the end of the antae, resulting in a double column at the corner (Fig. 13).

Murphy's use of double columns is foreign to traditional Chinese architecture and may be traced to Renaissance and Baroque designs, such as Palladio's Basilica in Vicenza, where the façade series is ended with double columns as a visual anchor. The extremely close spacing in Western classical architecture is not a problem because the capital is not substantially wider than the column diameter.

But as Murphy placed double columns at the corner, the immediate problem was the collision of the bracket sets (dougong) supposed to be directly supported by each column. There is simply not enough space for two bracket sets side by side, as they have an inverted pyramid shape in which each tier of the wooden bracket protrudes farther than the one below. If traditional craftspeople had dealt with this narrow spacing, they might have altered the bracket design to join the horizontal members and lock the two sets together (these have a poetic name, yuanyang jiaoshou gong, "mandarin-duck-holding-hands bracket", as is occasionally to be seen on the upper tiers of a corner bracket set). Lacking an intimate knowledge of the craft, Murphy got round the problem by displacing one bracket set off the column grid.

Although, in blending the two traditions, this misalignment reflects a conflict, having architectural elements turn a corner while maintaining all their geometrical parameters is a problem shared by both traditions. As an example, to turn a triglyph around a corner in the Doric order, one must either vary the column spacing or the size of the metope or the size of the triglyph itself, and there is no single solution that is most satisfying. Murphy's subtly misaligned bracket suggests that designing in traditional Chinese architecture is as intellectually stimulating as in other traditions, about not just reproducing shapes but also piecing together a puzzle. Doric or Chinese, such ingenious corner treatments add richness to architecture.

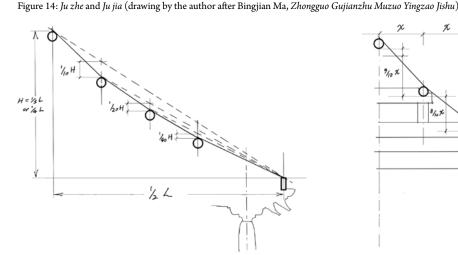
### The Problem of Curving Roofs

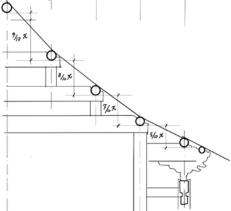
A massive, upward-curving roof was a striking feature of traditional Chinese architecture from its inception to its twilight in the Qing dynasty. Through the work of Yingzao Xueshe, we now know that those graceful roof curves were achieved by a calculated placement of purlins forming a segmented curvature. Traditionally there are two methods for determining the position of each purlin: either a series of deductions from the roof's overall triangle (ju zhe, lit. "raise and deduct") or a series of increments in each rise (ju jia, lit. "raised frame"). In either case, the curving roof has an underlying geometry of ascending triangles (Fig. 14), and the tiles and mortar above the rafters smooth out the curve.

The intricacies of ju zhe or ju jia were not known to Murphy when he designed his Chinese Revival buildings for Ginling or Yenching. He had to devise his own theory to guide the construction of roof curves. Instead of triangles, he reconstructed the curvature through a series of inverted arcs. The section drawing for the Faculty Club building in Yenching University clearly marks the center points and radii of these arcs (Fig. 15).

As a result, roofs in Murphy's built work are generally stiffer and slightly higher than traditional examples. His geometric method is evidently incorrect in hindsight, but it was a scholarly attempt to reverse-engineer a traditional roof shape as seen in field surveys or photographs. In the section drawing for the Faculty Club, the rooftop seems to follow a straight line, but according to the annotations, it is in fact an arc with a radius of 150 ft (45 m), whose center point is so high in the sky that it cannot be shown. It is hard to know if this enigmatic curve could ever be accurately executed, but as a drawing it suggests an unprecedented way of perceiving a roof - as if it were carved out of a massive, imaginary sphere.

Murphy's theory of roof curvature arose from a profound difference between traditional Chinese and traditional





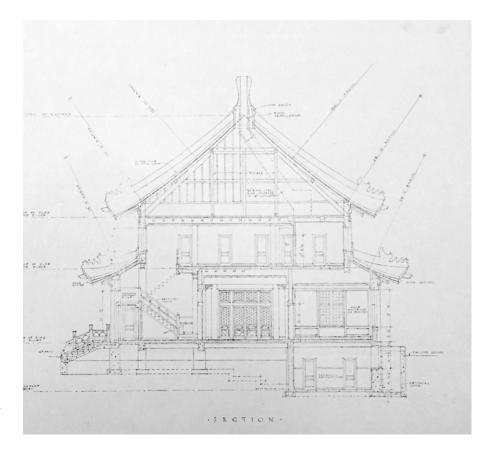
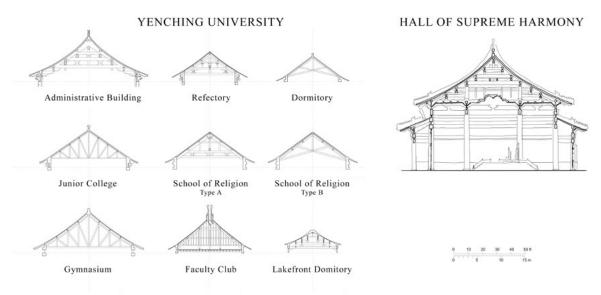


Figure 15: Murphy, McGill, and Hamlin, section drawing of the Faculty Club, Yenching University (Talbot F. Hamlin Papers)

Western building cultures. Ancient Chinese master builders were not trained in the Euclidean tradition. They made no use of irrational numbers, deeming them impractical for engineering work. For roof slopes they preferred to use integer ratios or, better still, Pythagorean triples (gougu shu). Moreover, ancient Chinese mathematicians divided the full circle into 365½ degrees, as opposed to the Babylonian 360-degree system. The Chinese system is useful for astronomy but harder to apply to earthly

structures (Liu 2014). All these mathematical tendencies made the circle a less popular design choice for ancient Chinese architects, except in extremely important buildings where circular symbology prevails, as circles were seen as representing heaven. If there were to be a symbol of a Chinese architect, it would be a wooden pole marked with critical measurements (*zhang gan*) rather than a pair of compasses.

 $Figure\ 16: Variety\ of\ roof\ types\ used\ in\ Yenching\ University, as\ compared\ to\ the\ Hall\ of\ Supreme\ Harmony\ in\ the\ Forbidden\ City$ 



Murphy, however, came from the building culture that produced the Pantheon of Rome. His auditorium at Tsinghua University is modeled on that famous low dome, following a lineage passed down from Hadrian to Brunelleschi to Palladio to Jefferson and Latrobe, and then to McKim, Mead and White. It was natural for Murphy to use arcs to construct the Chinese roof shape. Despite differences in culture, language, or design approach, it is fascinating that architects from different traditions should have seen curving shapes as ennobling forms, stretching toward the sky, and expended great effort in realizing them mathematically and physically.

Murphy also recognized the importance of the variety and hierarchy of Chinese roof types. The diagram of roof types used for his Yenching buildings shows a pragmatic division between exterior and interior treatments. For Murphy, the exterior had to achieve a consistent look across all building types, but the interior framing could take on different expedient forms, ranging from the traditional tailiang (raised beams) used in palaces to the simpler, efficient scissor truss. In a similarly pragmatic way, many technical devices were incorporated into the traditional roof form. The finial at the roof's apex, for example, became an opentop chimney. Although Murphy had not used dormers since his buildings in Yali, seeing them as disruptive of roof shape, he continued to use openwork with decorative patterns at gable ends and roof ridges to ventilate large, enclosed attic spaces.

Murphy's understanding of the Chinese roof hierarchy was intuitive: the more elaborate, the more important. This understanding was mostly correct, except in the complicated case of *wudian* and *xieshan* roofs. *Wudian* roofs are evenly hipped on all four sides, whereas *xieshan* roofs have a straight gable face turning into a smaller hipped eave

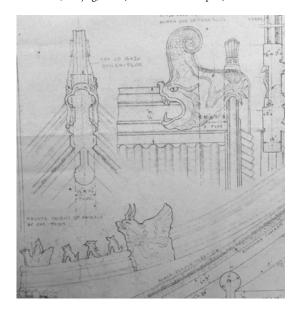
below. Traditionally, wudian is the most prestigious form and is reserved for the chief buildings of an ensemble, such as the Hall of Supreme Harmony. Xieshan roofs can be seen on secondary buildings such as the Gate of Heavenly Peace (Tian'anmen). But Murphy's design often reversed the two types. For example, in Yenching University, the Bashford administrative building has a xieshan roof, whereas the university gym is of wudian style. Yet even though Murphy's ranking of roofs is not completely correct, it helped him establish a clear hierarchy and formal order for his building ensembles.

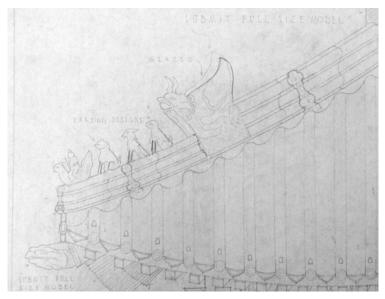
Other details in Murphy's design, such as tiles, rafters, and statuary on roof ridges, were meticulously drawn in line with traditional forms. Murphy may not have known the exact symbolism or story behind each detail, but he and his team took details seriously. As an example, their drawings of roof-ridge animals would receive pencil corrections adjusting the legs (Fig. 17).

#### **Conclusion: A Chinese Renaissance**

In the above three aspects of architectural innovation within tradition – multi-story treatment, corner execution, and roof curvature – we see that Murphy's work largely adhered to traditional Chinese proportions and principles, resulting in designs that are aesthetically pleasing and culturally viable. Instances differing from traditional principles sprang either from technological constraints, programmatic preferences, or cultural differences. In any case, Murphy's adaptations affected the overall image of his Chinese Revival architecture only minimally. Thus he enriched and advanced the language of traditional Chinese architecture, making it more flexible and applicable to addressing increasingly complex building programs and technologies.

Figure 17: Roof detailing. Left: Bashford administrative building, Yenching University, 1924. Right: gate to the Memorial Cemetery for Heroes of Revolution, Nanjing, 1931 (Talbot F. Hamlin Papers)





As suggested by the analogies drawn above, traditional Chinese architecture and Western classical architecture are parallel canons. Murphy's interpretation of traditional Chinese architecture is comparable with the way that Renaissance architects interpreted classical architecture. Both closely studied and borrowed architectural forms from ancient precedents, and at the same time creatively adapted traditional elements to suit modern programs and building types.

In Murphy's case, the question of cultural appropriation is irrelevant and out of context. Murphy was certainly not Chinese by birth, but he immersed himself in China and its architecture, spent years living and working in the country, produced designs that are contextually and culturally pertinent, and mentored an emerging generation of Chinese architects who were proficient in both traditions, eventually leading to an architectural movement that promoted an "intrinsically national style" (minzu guyoushi).

Prefixing "American" as a hybridizing adjective to venerable European nouns was a trend in the United States around the turn of the twentieth century: "American Vitruvius", "American Vignola", and above all an "American Renaissance", as a collective effort to shape the cultural identity of a young nation. Comparable to how American architects codified Gothic, classical, and Renaissance precedents, Murphy's "Chinese Renaissance" followed a similar path. From carefully selected Chinese precedents, he distilled a system of his own to translate a traditional vocabulary of wood and terracotta into concrete and steel, while also accommodating modern programmatic requirements. Through his work he proved that traditional Chinese architecture could be creatively revived without losing its cultural significance. A hundred years on, Murphy should be placed among other great architects of his generation, such as Bertram Goodhue or John Russell Pope, for the best of his work does indeed resemble a Chinese Renaissance.

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# Biography | Biografía | Biografía

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<sup>&</sup>lt;sup>1</sup> Murphy, "Address before Peking Language School".

<sup>&</sup>lt;sup>2</sup> Ernst Boerschmann (1873-1949) was a German architect and sinologist best known for his research and publication on Chinese architecture. His *Chinesische Architektur* (1925) and *Baukunst und Landschaft in China* (1926) featured an abundance of photographs and drawings of China's historic buildings. See Lai, Delin. 2011. *The Influence of Ernst Boerschmann on Modern Chinese Architecture*. Tianjin: Tianjin University.

<sup>&</sup>lt;sup>3</sup> Murphy wrote "... with the aid of the splendid photographs and measured drawings of the Forbidden City published by the Imperial Museum of Tokyo..." in Murphy, Henry K. 1926. Adaptation of Chinese Architecture. *The Oriental Engineer*, vol. 7, 3. He was likely referring to *Photographs of Palace Buildings of Beijing*, published in 1906 by the photographer Ogawa Kazumasa in collaboration with the architect Ito Chuta

<sup>&</sup>lt;sup>4</sup> Primary sources were the "Henry Killam Murphy Papers (MS 231). Manuscripts and Archives, Yale University Library" and the "Talbot Faulkner Hamlin papers and architectural records. Located in the Department of Drawings and Archives, Avery Architectural and Fine Arts Library, Columbia University".