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Simplicity and Integrity: The Anatomy of a Masterpiece

Curtis Evarts

Both Eastern and Western classics teach us that simplicity and integrity are qualities attained through invisible inner struggle, while outer complexity and frivolity generally reflect an undisciplined and vulgar inner world. Occasionally, moral principles can be reflected within the realm of material objects. One such object is a unique *huanghuali* corner-leg table (*tiaozhuo*) with everted flanges recently acquired by the Museum of Classical Chinese Furni-

ture, Renaissance, California (fig. 1). It displays the simple yet elegant form achieved during the late sixteenth century. Fashioned with the subtlest proportions and supported by an ingenious system of joinery, it reflects the principles of a late Ming master working as a law unto himself within the relatively self-constrained world of furniture-making.

Austere and refined, with its raised ends imparting a noble bearing, this otherwise severe, unwaisted



form has been softened with gently molded edges on the table top and the upper edge of the apron. Thick, strong legs turn and extend downward from the apron, terminating in vigorous hooves. Their silhouetted outlines were shaped with the subtlest amount of curvature to give the whole an animated yet restrained presence. This quality of refinement was also extended to the joinery, as every effort was made to conceal all internal mechanisms, especially those of the unique lightweight top, which appears to be a solid plank of *huanghuali*. In order to better understand and appreciate the unique features as well as the artistry of this table, it is necessary to take a broad look at types of tables, and, more specifically, corner-leg tables (*zhuo*).

There are two basic categories of tables in classical Chinese furniture: practical and sturdy recessed-leg tables (*an*), and elegant, yet more fragile, corner-leg tables (*zhuo*). The most common type to appear both in visual source material and in remaining extant examples is the recessed-leg table with double stretchers. This type was based on the classical architectural post-and-lintel model, and its relatively

simple, time-tested engineering principles. The character representing recessed-leg tables, *an* 案, can be divided into *mu* 木 and *an* 安, which can be freely translated as “tree, board” and “install, stability, peaceful, calm” respectively, reflecting the long horizontal tops and supporting splayed legs of these tables, which when properly proportioned convey a sense of balance and harmony.

The corner-leg table, *zhuo* (桌 or 棹), probably evolved from the early box platform as well as from the *zumizuo* pedestal (Evarts 36-8). This character can be divided into *mu* 木 and *zhuo* 卓, the latter, with connotations of “high, lofty, and distin-

Fig. 1, facing page. Corner-leg side table with everted flanges, Ming dynasty (1368-1644). *Huanghuali*; length 184.5 cm, depth 41.5 cm, height 87 cm. Museum of Classical Chinese Furniture, Renaissance, California.

Fig. 2, left. Woodblock print with lute and scholar's tables, Ming dynasty, Wanli period (1573-1619). Illustration to the play, *Sai Zhen Ge Ji*. After Fu 73.

Fig. 3, right. Woodblock print of robbers in a meat shop, Ming dynasty, Wanli period (1573-1619). Illustration to *Zhong Yi Shui Hu Zhuan*. After Fu 372.

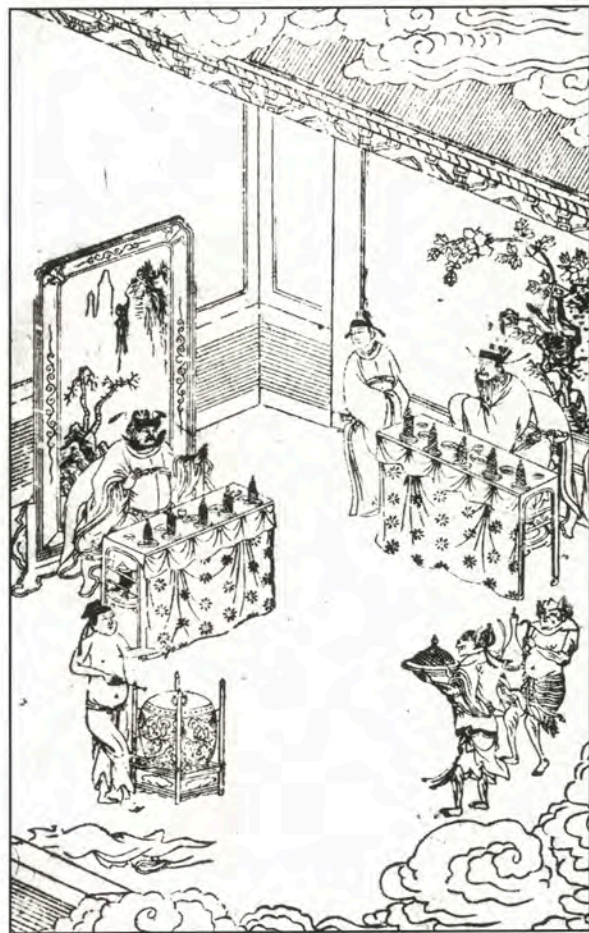


guished,” reflecting the early use of this form in ceremonial events. By the sixteenth century, the use of hardwoods enabled its box-like structure to be reduced to the minimally essential, and the austere simplicity seen in the Renaissance table was attained. During this period, unwaisted tables were often depicted in the scholar’s studio, serving both as desks and lute tables (fig. 2). A Wanli period woodblock print from the *Zhong Yi Shui Hu Zhuan* (fig. 3) indicates how ubiquitous this type had become, as common robbers are depicted eating *baozi* in a small meat shop furnished with such unwaisted stools and table. Another print (fig. 4) depicts three acrobats performing an amazing balance routine on the top of a corner-leg table—a reminder that we cannot be too dogmatic about the usage of furniture in the past nor about the extreme loads that a typical table might have been expected to bear. Many of these tables, as shown in sixteenth-century woodblock prints, are used as dressing tables, dining tables, altar tables, and side tables displaying antiques (Fu 60, 69, 73, 372).



Although the unbraced corner-leg table is illustrated from time to time during the seventeenth and even the early eighteenth century (Zheng, *juan* 6), it appears to have been mainly a sixteenth-century phenomenon.

Toward the end of the sixteenth century, woodblock prints begin to depict added supports on the legs of corner-leg tables, such as giant’s arm braces (Fu 532, 677, 682, 945; Zhuo 1988, 528, 844), double stretchers (Fu 194; Zhuo 1988, 618, 622, 636), humpback stretchers (Fu 699; Zhuo 1988, 859, 912; Zhuo 1985, 85), and spandrels (Zhuo 1988, 870). From a technical point of view, only precise and intelligent joinery systems coupled with good luck could prevent the breakdown and loosening of a table’s corner-leg mortise-and-tenon joint over a long period of use. And without the benefit of additional reinforcing devices such as spandrels, stretchers, or curved corner braces to distribute the forces multiplied by the leverage of the table’s long legs, a condition of instability gradually develops that even



Gustav Ecke admitted “does not inspire confidence,” referring to his own lute table of similar form. He went on to write, “Such design . . . would deserve to be cast in metal” (Ecke, p. XXII, pl. 15). Even when dense hardwoods were employed, this minimalistic design may have compromised long-term utility in the pursuit of elegance and simplicity of line.

Although giant’s arm braces and stretchers had been in use since the Song dynasty, evidence from paintings and woodblock prints would appear to indicate that they fell out of fashion until the late sixteenth century, when they were once again incorporated to solve an inherent design problem of insufficient structure. Giant’s arm braces were the least visually disturbing and provided triangulation between the leg and transverse frame structure. Early humpback stretchers were abutted to the apron, providing somewhat less triangulation between it and the leg, yet adding a harmonious continuous line. The use of visually disturbing double stretchers between the end legs of corner-leg tables (fig. 5), however, raises the question of whether some of these reinforcing devices might have been added to rejuvenate rickety old tables, and were later incorporated into a sturdier design for tables that were intended for common household use or were covered with table frontals for formal occasions. A *huanghuali* corner-leg table recently added to a private collection in Hong Kong provides evidence for this theory. On all four sides just below the aprons, elm stretchers were added to stabilize its wobbly legs, a condition probably created by years of lateral loading focused on its critical corner-leg joins. The added stretchers

Fig. 4, facing page, left. Woodblock print of performing acrobats, late Ming dynasty. Illustration to Sui Yang Yan Shi. After Zheng.

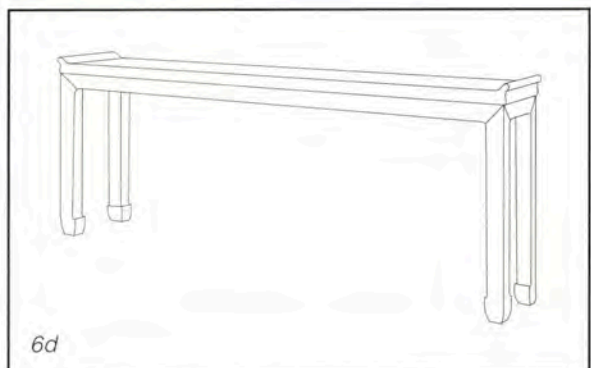
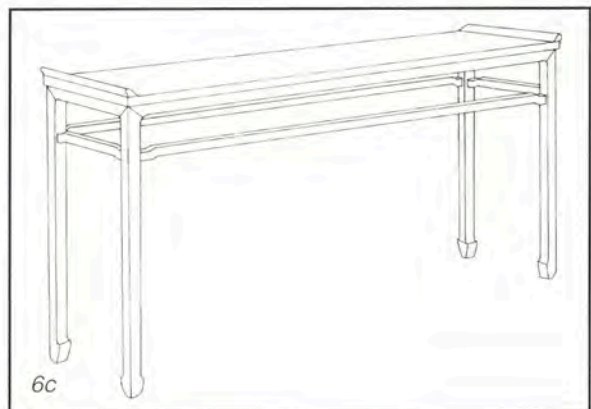
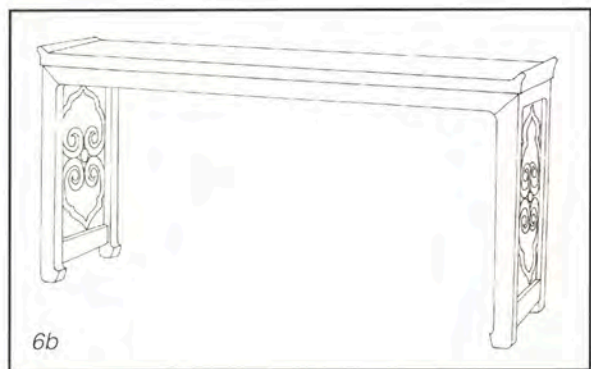
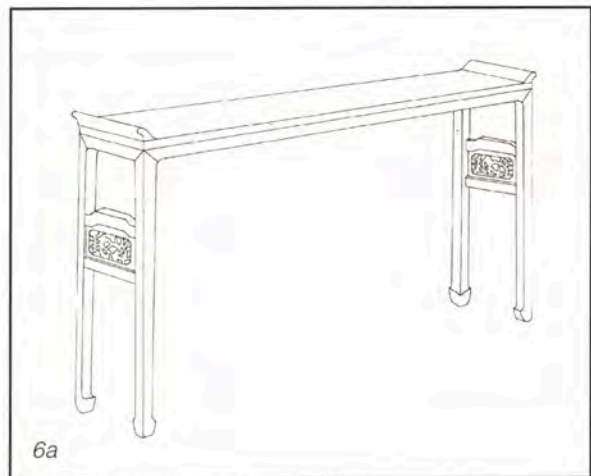
Fig. 5, facing page, right. Woodblock print of a banquet. Illustration to Si Sheng Yuan. After Chang 198.

Fig. 6a. Drawing of a corner-leg table with everted flanges and added double stretchers. Length 165.2 cm, depth 31.8 cm, height 82 cm. After Sotheby’s 5698.

Fig. 6b. Drawing of a corner-leg table with everted flanges and carved end panels. Length 177 cm, depth 40 cm, height 84 cm. After Wang 1990, 64b.

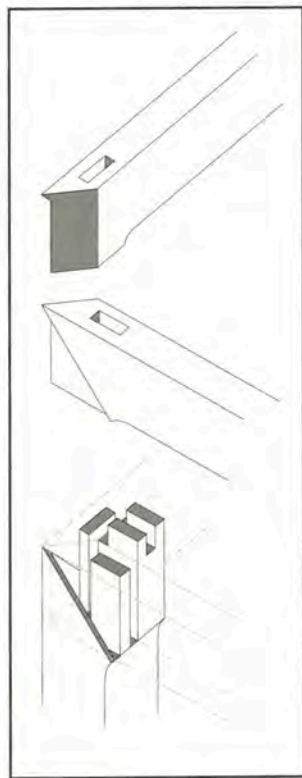
Fig. 6c. Drawing of a corner-leg table with everted flanges and humpback stretchers. Length 186.7 cm, depth 48.2 cm, height 89.5 cm. After Sotheby’s 5567.

Fig. 6d. Drawing of a corner-leg table with solid top. Length 211 cm, depth 37 cm, height 85.7 cm. Private collection.



have since been removed and the legs' counterpart mortise scars have been neatly filled. Now, with its corner-leg joins tightly refitted, the table is restored to its original form, recapturing the minimalistic taste prevalent in the late Ming dynasty.

Only four other unwaisted tables with everted flanges, similar in form and size to the Renaissance table, are known to this author. It is of particular interest to note that three of these have various forms of additional decorative reinforcements that visually disrupt their otherwise plain silhouettes. One has rather discordant double stretchers framing a carved open-work panel at each end (fig. 6a), whose placement adds bracing yet lacks any concept of unified design. Another unsuccessful experiment in borrowing elements from the more stable recessed-leg table can be seen in a second example. Large, carved end panels were inserted between the end legs and bordered by the apron above and a double-mitered stretcher placed awkwardly just above the horsehoof feet (fig. 6b). Although the stability may have been improved, the heavy, cumbersome elements drag down the light, upturned ends. The third table much more successfully utilizes humpback stretchers (fig. 6c). Their simple lines harmonize with the original minimalistic form while providing an additional horizontal binder—mortised through the legs several inches below the aprons—around the open-ended box-like frame. The remaining table (fig. 6d) has no reinforcements and is fashioned from particularly thick members to support its solid top, giving it the somewhat thick and heavy characteristic of *huozhuo* ("humble gravity"; see Wang 1992, 44). From the thick legs, stout tenons were cut, hidden behind the half-lap miters (fig. 7). The strength of this join is

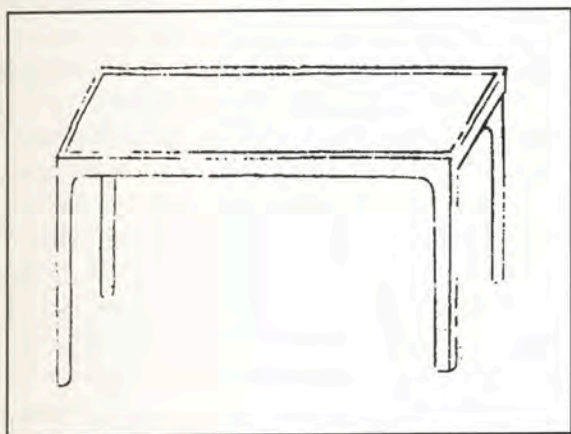


greater than the more typical corner-leg joins, whose tenons are generally cut from the apron rather than the leg. A vertical tenon can penetrate through the entire width of the apron, and its increased length provides greater resistance to lateral forces. Working in harmony with gravity, this join provides a stable platform for the beautifully grained, solid plank top.

As Craig Clunas has noted, the terms *zhuo* and *an* appear to be used indiscriminately in the *Lu Ban Jing*. In it, a recessed-leg table (*an*) is referred to as *yi zi zhuo* (一字桌) or "character one table," as its long horizontal top resembles the character for "one" (*yi* —) (Ruitenbeek 259-263). Other sources, however, do seem to reveal some consistency in the use of these terms. In his *Treatise on Superfluous Things* of about 1615-20, Wen Zhenheng uses the term *bi zhuo* to describe wall tables, and also mentions that they may have everted flanges (Clunas 1988, 51). Of four tables illustrated in the late Ming encyclopedia of 1609, *Sancai tuhui*, one is a corner-leg table and is termed *shu zhuo* or writing table (fig. 8a) and another is a waisted corner-leg table with everted flanges (fig. 8b) called *yan ji* or, literally, "table with swallow tails." Other than this, there is almost no evidence from visual source material that the form with everted flanges ever existed. And in fact, very few examples of corner-leg tables with everted flanges remain, while numerous recessed-leg tables (*an*) with everted flanges have survived, popularly called altar tables by Westerners for most of this century and *tian chan ji* in the *Sancai tuhui* (Wang Qi 1330).

Everted flanges, a term first encountered in Ellsworth's *Chinese Furniture* and since adopted by most Westerners, are called "flying-cloud raised-corners" (*feiyun qijiao*) in the *Treatise on Superfluous Things*, in the discussion on wall tables (*bizhuo*) (Wen 41). In modern Chinese, these elements are more generically called "raised ends" (*qiaotou*) (Wang 1990, I, 194) or more literally "upturned heads." Nevertheless, they seem to be a uniquely Chinese convention, tending to impart to armrests, stands, and tables a spirited challenge to gravity. There is evidence to suggest that tables with everted flanges have been used as altars since the late Zhou dynasty (Handler 49). Tang and Song dynasty illustrations depict writing tables with everted flanges (see, for example, Jin Chushi's "King of Hell" in the Metropolitan Museum, New York, and Wang Wei's

"The Scholar Fu Sheng" in the Osaka Municipal Museum). Tables with everted flanges were often utilized in Buddhist rites (Zhuo 1988, 26) as well as in connection with ancestral worship, yet there is sufficient evidence to suggest that those without were also used for such rites (Zhuo 1988, 27, 36). During the Ming and early Qing dynasties, however, those with everted flanges are more often depicted placed



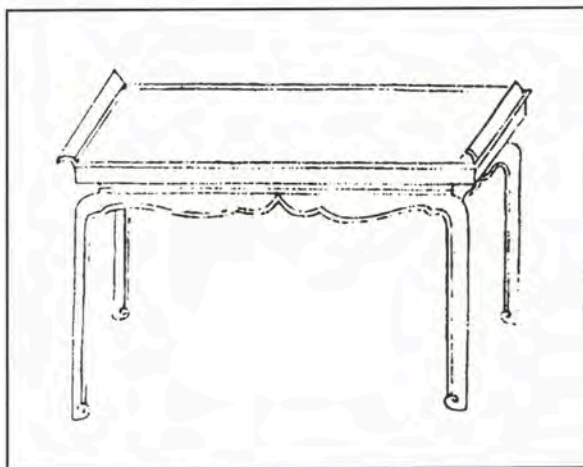
against a wall and displaying a few carefully arranged antiques.

Wen Zhenheng also explains that "natural tables" (*tianran ji*) have tops made from one solid plank of finely figured hardwood "such as *huali*, *tieli*, or *xiangnan*." This construction certainly would have conformed to the longstanding Chinese tendency toward naturalism, and would have provided an excellent working surface for a writing or painting table. He further implies that they were sometimes enhanced with everted flanges or "flying corners" (*feijiao*) (Wen 42), which "must not be too sharp, but smooth and rounded, which is the antique pattern" (Clunas 1991, 42). Craftsmen often utilized "bread-board ends" or "everted flanges" to conceal the end grain of solid panels or planks; even more important, however, was the strength derived from the long grain direction of these end pieces, which when fitted to tenons extending from the solid panel, helped to control warping and splitting.

These tables were quite heavy, and long narrow

ones were susceptible to sagging, a condition even more exaggerated in corner-leg tables (*tiaozhuo*) because the top spanned a greater distance, receiving support from the legs only at the extreme corners (Wang 1990, I, 59). An even more serious structural problem, however, is created by lateral loading to the top-heavy, solid-plank table, increasing the pressure on joinery that was usually scaled to bear the lighter load of a panel-and-frame top. As it seems that tables were often moved to perform various functions, both indoors and in the garden on uneven ground, this pressure would gradually have broken down even the most sophisticated joinery.

Chinese craftsmen must have been aware of these structural problems, since they probably also repaired broken furniture. That some struggled to find solutions by creating original designs can be seen in a few extant examples, which illustrate attempts to reduce the weight of the table tops while maintaining the appearance of the preferred solid top. A very long *huanghuali* recessed-leg table at the Palace Museum has a solid top nearly three inches thick. To reduce the weight of this immense plank, wood was removed from its underside, leaving a large concave hollow visible only from below (Wang 1990, I, 65). A second, more common, technique was to select a solid plank half the width that it should appear to be.



The outer edges were then built up to double the thickness and shaped with a molding whose profile would conceal the join (Ecke, pl. 75). This technique diminished the weight of the top by approximately forty percent and yet still provided a solid working surface. An even greater weight reduction was achieved with a third technique, quite intricate, and

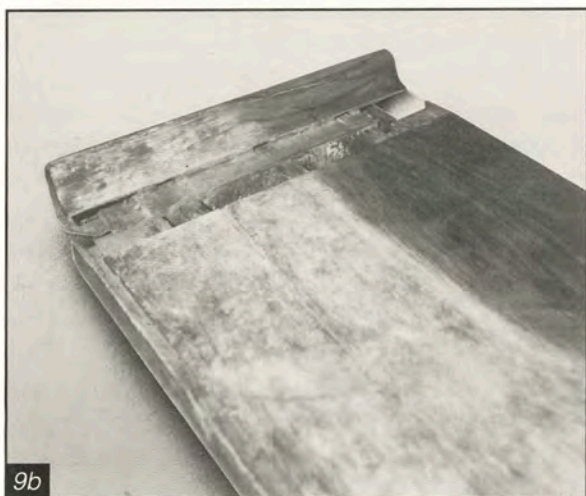
Fig. 7, facing page. Detail of corner-leg join from figure 6d.

Fig. 8a, above. Drawing of a writing table, 1609. From the Sancai tuhui. After Wang Qi 1330.

Fig. 8b, right. Drawing of a corner-leg table with everted flanges, 1609. From the Sancai tuhui. After Wang Qi 1330.



9a



9b



9c



9d

seen for the first time on the corner-leg table in the Renaissance collection.

This table on first impression appears to have a solid *huanghuali* plank top. A view from the underside, however, surprisingly reveals common panel-and-frame construction with supporting transverse braces. In order to unravel this mysterious construction, it was necessary to disassemble the table and expose its inner intricacies. The top was first removed from the base by knocking it off the double-lock tenons protruding from the top of each leg and the two loose tenons inserted in each of the two long aprons. An unusual double-lock tenon arrangement was discovered, with one of the tenons cut in an L-shape and stepped (fig. 9a). The top's end frame member and everted flange are of one piece, as is typical, and each piece was removed by knocking it straight off the end, revealing three long narrow tenons on the short side of the panel, sliding out from deep mortises in the flange (fig. 9b). Fully removed, an inner complexity began to emerge, as an unusual blind dovetail tenon was exposed that interlocks with a reciprocal mortise in the long frame member's tenon (fig. 9c). When all are in place, the flange member and the frame members sandwich the panel and are pinned and locked together with the leg's protruding double-lock tenons. The cross section, viewed with the everted flange frame member removed, shows the panel mitered along its long edge and set into a wide rebate cut into the frame (fig. 9d).

The panel appears to be conventionally held in place by three transverse braces. As the long frame



9e

members are separated from the panel, however, dovetail mortises, cut into the underside of the panel, begin to appear every nine inches along its edge. When fully removed, their counterpart wedge-shaped dovetail tenons—carved from material left in the wide rebated areas of the long frame member—are exposed (fig. 9e).

The dovetail tenons had been precisely cut and were completely undamaged. It was apparent to the restorers that the table top had never been disassembled, so it is of interest that traces of a thin, reddish-colored lacquer, used for supplementary adhesion, were found inside this series of joints and along the long mitered edge.

When the table is reassembled, the long frame members slide neatly back into the dovetail mortises cut into the underside of the 1/2" thick panel (fig. 9h). With the close spacing of the dovetail mortise-and-tenon joints, the long mitered joint, where the edge of

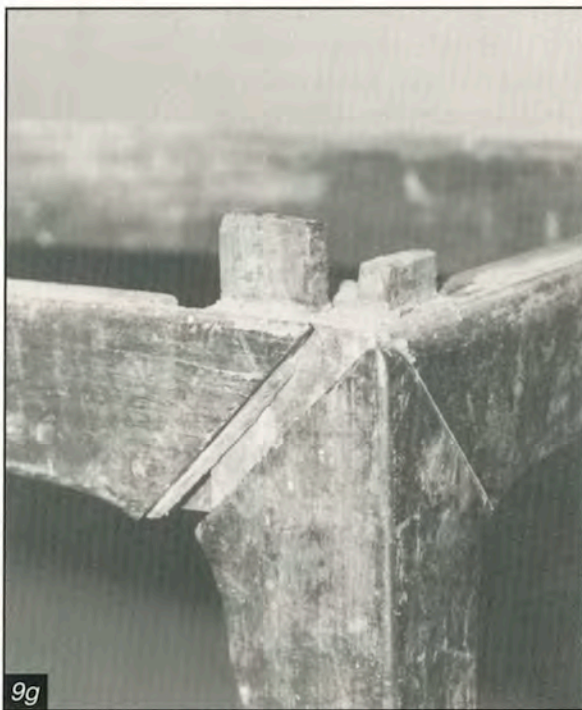


Fig. 9a. Detail of figure 1. Double-lock tenons.

Fig. 9b. Detail of figure 1. Everted flange being removed and exposing three tenons protruding from the panel.

Fig. 9c. Detail of figure 1. Flange frame member.

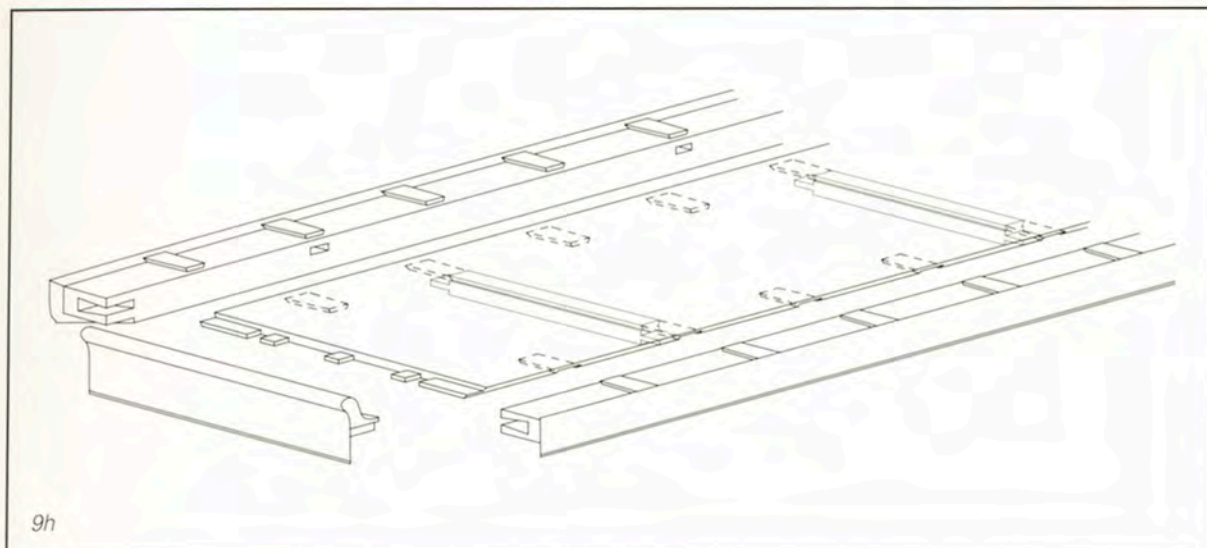
Fig. 9d. Detail of figure 1. A section through the table top.

Fig. 9e. Detail of figure 1. Dovetail keys in the frame-and-panel top.

Fig. 9f. Detail of figure 1. Dovetail keys cut back from inside edge of frame.

Fig. 9g. Detail of figure 1. Corner-leg half-lap miter-and-tenon join.

Fig. 9h. Exploded view of table top.



the panel meets the frame, is drawn and locked tightly together to prevent any warping—almost four hundred years later this panel remains completely flat. The end frame members, cut from timbers large enough to shape the “smooth and rounded” raised everted flanges, are then slipped into the tenons of the panel and into the large, complex mitered tenons extending from each long frame member. It is a remarkable example of design and execution and amazingly, when all the elements are fully assembled, not a hint is seen of the complexities within. Even the series of dovetail wedges were intentionally cut back 1/4" from the inside edge of the frame (9f), leaving no visible trace when fully assembled.

Below, an extra-thick apron half-lap miters and joins with a long, thick tenon securely to the leg. A small additional tongue extending from the apron's mitered edge fits a counterpart groove in the mitered shoulder of the leg, keying these lapped surfaces for a long-term flush fit (fig. 9g). The lightweight top is then set upon this sturdy lower frame, fitting tightly into the protruding tenons, whose placement and configuration have been intelligently conceived to resist lateral loading as well as to lock and pin the complex frame-and-panel members of the top tightly together.

The remarkable joinery system and exquisite proportions of this table reflect the genius of a master who was able to synthesize form and function with beauty. To answer the question, “Was it practical to have to put so much effort into such a design?”, one can turn to Wen Zhenheng's writings on the moral nature of things, as he reflects upon the attitudes of a bygone era. “In making utensils the men of old valued utility without sparing expense; thus, their manufactures were extremely well prepared, unlike the slap dash attitude of the men of later times . . . they delighted in refined elegance and did not vainly add inscriptions and value only signatures” (Clunas 1991, 79). Only a master could have created such a table—his inscription and signature is apparent in the concept and execution of the piece itself. It is a fitting tribute to his expertise that it remains in nearly perfect condition four centuries after its construction.

Author's note: I would like to thank Sandra Lai, who supervised the restoration and photography of this remarkable table, and whose enthusiastic conversations and written notes were not only informative but inspiring.

WORKS CITED

- Chang Bide. *Mingdai Banhua Xuan*. 1st ed. Taipei, 1967.
- Clunas, Craig. 1988. *Chinese Furniture*. London: Bamboo Publishing Ltd.
- . 1991. *Superfluous Things: Material Culture and Social Status in Early Modern China*. Urbana and Chicago: University of Illinois Press.
- Ecke, Gustav. *Chinese Domestic Furniture*. Rutland, Vermont: Charles E. Tuttle, 1962.
- Evarts, Curtis. “The Development of the Waisted Form and Variations in Its Joinery.” In *Journal of the Classical Chinese Furniture Society* 1:3 (Summer 1990), 36-45.
- Fu Xihua. *Zhongguo Gudian Wenxue Banhua Xuanji* (Selected Woodblock Illustrations to Classic Chinese Literature). 2 vols. Shanghai, 1981.
- Handler, Sarah Ann. *Pieces in Context: An Approach to the Study of Chinese Furniture Through an Analysis of Ming Dynasty Domestic Hardwood Examples in Kansas City*. Ann Arbor: University Microfilms International, 1983.
- Ruitenbeek, Klaas. *The Lu Ban jing: A Fifteenth-Century Carpenter's Manual*. 2 vols. Unpublished Ph.D. dissertation. University of Leiden, Holland, 1989.
- Sotheby's, New York, Sale 5567. *Fine Chinese Decorative Works of Art*, April 23 and 25, 1987.
- . Sale 5698. *Fine Chinese Decorative Works of Art*, April 7 and 8, 1988.
- Wang Qi. *Sancai tuihui* (Pictorial Encyclopedia of Heaven, Earth and Man), 1609. 3 vols. Shanghai: Shanghai guji qubanshe, 1985.
- Wang Shixiang. 1990. *Connoisseurship of Chinese Furniture: Ming and Early Qing Dynasties*. 2 vols. Hong Kong: Joint Publishing Co.
- . 1992. “The Merits and Defects of Ming and Early Qing Furniture.” In *Journal of the Classical Chinese Furniture Society* 2:2 (Spring 1992), 42-57.
- Wen Zhenheng. *Zhang wu zhi* (Treatise on Superfluous Things). Compiled 1615-20. *Yishu congbian* 29.257.
- Zhuo Wu. 1988. *Zhongguo banhuashi tulu*. 2 vols. Shanghai.
- . 1985. *Zhongguo Guben Xiqu Chatawan*. Tianjin.
- Zheng Zhenfeng. *Zhongguo Gudai Mukehua Xuanji*. 10 vols. Beijing, 1984.

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