VERSATILE DESIGN FOR OCCASIONAL TABLES

A CREATIVE PROJECT

SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE

MASTER OF ARTS

BY

GARY BIRK

ADVISOR - KENTON HALL

BALL STATE UNIVERSITY

MUNCIE, INDIANA

JULY 2011
THESIS ABSTRACT

THESIS: Versatile Design for Occasional Tables

STUDENT: Gary Birk

DEGREE: Master of Arts

COLLEGE: College of Fine Arts

DATE: July, 2011

PAGES: 30

The objectives involved with this creative project include, creative solutions to small table design with considerations given to human interaction with the tables. Consideration, at least in part, has been taken to utilize sustainable materials for production where structurally and aesthetically possible. Development of these tables through a creative, intuitive, design process with inspiration drawn from nature is a goal as well. Once actually created, another goal is to utilize the successfully completed tables as prototypes for possible production either through means of limited editions or mass production. An end goal is ultimately to develop a functional piece of art.
STATEMENT OF THE PROBLEM

Gravity dictates the use of planar surfaces for daily functions. When we eat or drink a flat surface is usually needed to enable this process. A book, newspaper or computer eventually gets set down. A table lamp needed to light the pages of a book needs a place to set as well. Most in the Western world would still consider a surface such as a table, necessary. For some of us, that table may be a cardboard box, wooden crate or other re-purposed object. Others may have something more luxurious or distinctly unique in mind when purchasing a table. Perhaps whimsical or structurally interesting pieces are sought out for the purpose of setting their cup of coffee on. Perhaps even a beautifully designed table for displaying coffee table books. This creative project explored the design of small occasional tables made from a variety of materials.
REVIEW OF INFLUENCES

During our existence, few things remain constant. Our daily lives are in constant flux, progressing and evolving. Outside, the sky’s color and clouds are ever-changing. The terrain varies greatly from one locale to the next. On a clear day, however, what anchors sky to earth is constant. The horizon line is an artistic influence and exists everywhere, whether viewed from one’s front door, driving down the road or sitting in an office high-rise. Giorgio de Chirico was masterful at portraying the distant horizon in his paintings. de Chirico’s works create an atmosphere of calm dream-like vastness coupled with anxiety-ridden tension. Seemingly random objects juxtaposed with architectural structures set the stage for an event to unfold, although unknown to the viewer. In de Chirico’s L’incertitude du poete (The Uncertainty of the Poet), a paradox of the sensual and the lifeless are set against a distant, clear horizon. A headless statue and fruit capture organic curves that contrast the crisp linear horizon.
In architecture, strong horizontal lines were a hallmark of Frank Lloyd Wright’s Prairie School style. Wright’s projects reveal his involvement with the design of the interior where he usually designed the furnishings and finishes for these structures. His designs incorporated nature to a great extent, usually abstracting elements from nature and re-interpreting them with strong geometric angles and shapes. During his Prairie School period, the furniture he designed and had produced for these projects usually had a heavy and oftentimes cumbersome quality to it.
Sculptor and designer Isamu Noguchi achieved great success as a sculptor. With his ability to create abstract organic forms, often planes of stone interlocked without permanent connections, he became a key figure in the modernism movement of the mid-twentieth century. Noguchi also became well known as a furniture and furnishings designer. One of the most iconic pieces of mid-century modern furniture design is the wood and glass table he designed for furniture manufacturer Herman Miller. Designed in 1947, the coffee table is constructed of two pieces of walnut, with similar flowing, curved, sculptural qualities that Noguchi’s artwork exhibits. The walnut slabs interlock and hold a $\frac{3}{4}$” thick, rounded, triangular-shaped piece of glass. In 1954, Noguchi also designed a small table/stool made out of wire rods and wood for Knoll Associates.
Knoll Associates became a major influence in the design and marketing of modern furniture during the mid twentieth century. After her husband Hans Knoll passed away in an automobile accident in 1955, Florence Knoll who had been integral in the company’s success, took over (Larrabee and Vignelli 222). The company had gained success by hiring architects, artists and designers to design their lines of furniture. These pieces were being designed by well-known architects and designers such as Eero Saarinen, Jens Risom and Harry Bertoia (Larrabee and Vignelli 77). Florence Knoll herself designed several pieces during this timeframe that are still being produced by the company today. Mrs. Knoll’s furniture designs were typically straightforward, minimal, and usually practical for the needs of the streamlined, contemporary office and home of the mid-twentieth century. She is considered an influence on this creative project, not only from the standpoint of being an acclaimed furniture designer, but also because of her notable interior design background and shrewd business sense.
Florence Knoll, Table Desk.

The Cinderella Table designed by Jeroen Verhoeven in 2004 is a fantastic, high tech plywood sculpture. Viewing this piece of furniture in person at the Victoria and Albert Museum in London, June 2010, was pivotal. The increased potential of using plywood in contemporary furniture became even more evident. Having dealt with contemporary furniture for a number of years, most plywood furniture encountered had been of the molded variety, essentially sheets of veneer that have been glued together and then molded into a variety of shapes. Verhoeven’s piece has been created with flat pieces of plywood, producing mass, which is then shaped. “The table is made up of 57 layers of birch multiplex, which are individually cut, glued, and then cut again with a CNC machine.”(Lefteri 16) The result: sculptural possibilities not realized with molded plywood and capitalizing on the prominent linear quality of the plywood’s edge within the piece. These elements combined with the table’s curved free-flowing form, reveals a
unique, complex, sculptural piece of furniture that seems simultaneously free and controlled, surreal and functional. It is furniture that becomes art.

Jeroen Verhoeven, ‘Cinderella’ Table. 2004. Plywood.
DESCRIPTION OF THE CREATIVE PROJECT

Whenever we as humans build something, whether complex or simple, there is usually a design process that precedes final construction of the created object. It may be as simple as drawing several lines onto paper and cutting a board to size. More often a series of steps takes place from idea conception to completion of a given product, project, building, etc. With the development of tables for this project the process started with ideation which included and utilized fairly common and easily accessed materials, turning them into finished pieces with unexpected end results. Some of these materials included plywood, OSB (oriented strand board) and laminated wood, all acquired locally.

The initial format for these tables was for usage as smaller, unique by most standards, occasional tables. The ideas behind these tables became a series of sketches on paper. The sketches, often simple lines, curves and shapes, became more refined with production in the studio. In addition to inspiration garnered through the works of artists, designers and forms occurring in nature, these table designs also come from experience gained as an interior designer having worked in the field for more than twenty years. This experience and the experience of producing various forms of artwork has lead to an intuitive process in which creativity synchronizes with the design process to produce an item that combines form and function. The form of these tables, while often organic, maintains a somewhat rigid or linear quality enabling a more viable means of production.
The first table produced, #1, explores the use of inexpensive, readily available materials that provide performance and durability. This table’s design and construction attempts to utilize plywood in a manner different than what is typically seen with molded plywood furniture. It is this straightforward approach to a planar surface that becomes intriguing. The table utilizes one sheet of birch plywood that is 4 feet wide, 8 feet in length and \( \frac{1}{2} \)” thick. The top is composed of a double layer of the plywood allowing for stability and a sense of proportion that is visually appropriate for the size of the piece. The legs are produced by gluing layers of the remaining plywood, cutting three triangular wedges and shaping them with various wood shop tools.
#1. Birch plywood, 21 3/8” x 21”
The second table of this project, #2, is composed of birch plywood as well. The triad of legs are joined together at the center forming a structure that holds a circular piece of glass. The layers of the plywood legs are slightly angled exploiting the layering and graining of the plywood. This layering is further enhanced by viewing the tops of the legs through the glass top. While contemporary in the use of materials and its smooth somewhat organic form, it is also reminiscent of more traditional furniture containing a simplified classical feel to the profile of the legs and feet. During the production of this particular table, the legs were accidentally broken when dropped onto the floor. The breakage occurred due to the lack of structural integrity associated with the small horizontal pieces of plywood that were glued together. Ultimately these legs were re-glued and shaped. This structural deficiency became another problem requiring a design solution for the tables yet to come in this project that were to utilize this glued-up plywood technique.
#2. Birch plywood and glass, 19 7/8” x 13”
Table #3 is an experiment that deals with the structural qualities of the layered plywood. Fir plywood is employed with noticeably thicker layers of veneer than what was used on the first two tables. The legs are thin compared to tables #1 and #2. This combined with the structural problems encountered during the production of table #2 made additional support a requirement for this design. The linear straight cuts enabled quick production of this prototype to test the stability of the structure. The additional support is achieved by inlaying a strip of walnut (a spline) that runs perpendicular to the layers of plywood. The contrasting woods and thicker layers of veneer produce a more pronounced patterning of wood. Lower quality grade plywood combined with thicker layers of veneer in the plywood, lead to the warping of the legs after production. The four legs all bent outward. The walnut spline however, seems to have held these pieces of plywood together. While simple, the design of this table is reminiscent of the contemporary yet classic Parson’s table.
#3. Birch plywood and walnut, 20” x 19” x 19”
Table #4 is a small table composed of birch plywood and OSB (oriented strand board). Again this table uses inexpensive and readily available materials for the legs. The OSB is also considered for environmental sustainability, since OSB is manufactured by utilizing most of the available wood from trees being harvested and by using smaller faster growing tree species. Because the thin OSB used for this table is brittle when cut into small pieces, the legs require some mass to keep the OSB from breaking. Again a strip of walnut is inserted perpendicular to the layers of plywood and OSB to give the legs additional structural integrity. Free-flowing organic cuts were made into the glued-up layers and then shaped, giving the piece characteristics similar to human arms or legs. The table is topped with polished granite, achieving a strong contrast between colors and materials used. The use of materials also highlights a contrast in what is often seen as luxury vs. economy or exclusivity vs. commonplace.
#4. Birch plywood, oriented strand board and granite, 17 1/4” x 17 1/8”
The fifth table in the series, #5, is an occasional table. The plywood used for the legs contains 52 layers of plywood glued together. These layers incorporate the walnut spline for structural integrity, however the walnut spline becomes more evident here. The walnut and plywood legs are shaped with organic curves and are softened along all edges to reveal a bone-like quality, combined with a controlled order in the layering of plywood. The table top has random-angled strips of American black walnut, ash and Brazilian walnut. The varying woods create visual contrast and while random in appearance have a great deal of refinement and control in assembling and finishing of the piece.
#5. Plywood, walnut, ash and Brazilian walnut, 21 5/8” x 24”
#5 (Detail)
Table #6 is also an occasional table. The progression of the previous tables incorporated a mostly horizontal, linear quality to the plywood applications. This table has evolved into something more disorderly. While maintaining three similar legs and similar wedge sections assembled to create the top. The use of laminated wood combined with plywood for the legs creates a more random linear appearance. This patterning of laminated wood and plywood is now tilted more vertically. Existing finishes from laminated wood manufacturing are left intact, including stained coloring and printing from the wood manufacturer’s production. The wood patterning on the top is also more chaotic in it’s random-appearing assembly. Color is more pronounced on the table top with the use of purpleheart, yellowheart and American black walnut, being finished with tung oil to enhance the natural color inherent to the woods. The sensual curved qualities exhibited in most of the tables produced during this project, are also found in the shaping of the legs for this particular table, however this table incorporates some of the curves into the shape of the table top. These “cut-outs” in the top allow more visual access to the sculpted and graphic qualities of the table’s legs.
#6. Fir, purple heart, yellow heart, walnut and plywood, 21 1/2" x 24"
The seventh and final table of this creative project is titled *West Memphis Arc & Saw*. This piece makes a noticeable departure in design and construction from the prior pieces. Laminated wood beam material used in building construction is glued together for width, creating large slabs. Traditional architectural details combine with organic forms to produce profiles cut into the two slabs. These two slabs interlock to create the table base. The interlocking slabs lock into place with a third piece of solid walnut. Consideration for conservation of materials is also evident in the way pattern pieces for the slabs create a profile that line up with additional pieces being cut in the production process. Color usage is expressed with pink stain on one of the slabs and olive green on the other. A coherent chaos unfolds as the organic human-like forms merge with rigid architectural elements, all of which leap into an eclectic dance reminiscent of Italian Memphis design from the early 1980’s. With it’s kitsch rustic west-of-Italy Americana wood finish, the linear quality and mechanism’s to produce the table are also implied in the title.
West Memphis Arc & Saw
CONCLUSION

The uncompromising Frank Lloyd Wright and Florence Knoll were innovative and mastered their disciplines of architecture and design. Both of them breaking from imitated styles of the past. Noguchi created sculpture unlike other artists of his day and was able to transform furniture into functional, imaginative pieces of sculpture. The goal of this creative project was to create small tables that incorporated sculpture, craft, design and function into the process. They were to be functional pieces of art, taking into account occurrences in nature that are taken for granted by most. Past experience and intuition led the investigation. Successful implementation was tempered with trial and error. The entire journey has garnered innumerable experiences that have added to the patina of the artist’s life experience, layers that can be viewed in retrospect and drawn upon for future work. Perhaps even catching a glimpse of the metaphysical realm that was so visible to De Chirico. Moving beyond the repetitive “modern” furniture that’s knocked out today and knocked off from a few decades ago.

Ettore Sottsass, founder of the Memphis movement stated: “I think it is very hard to design a ‘beautiful table’: it does not depend simply on the tools and materials one uses, it depends on a subtle, fragile and uncertain sagacity which, sometimes, somebody—who knows how and who knows why—manages to channel into the design: a total perception of our cosmic adventure, as fleeting, ineffable and incomprehensible as it may be.” (Alessi 24)
Here, layers of history, nature and plywood offer up a place to set one’s cup of contemplation.
EXHIBITION STATEMENT

This creative project has allowed for investigation of the artist’s observations linking the every-day or overlooked and commonplace with the unseen, unexpected and nonconforming. This unseen mesh intertwines, connecting objects, psyche and surroundings. Commonplace objects and materials, a table or sheet of plywood, seemingly aspire to be different, yet pertinent. Looking through the chaos of life as days shorten, one thing that remains ever-changing yet constant is the luminous horizon that seeks our gaze. Many of the pieces involved here draw upon that distant linear quality of the horizon and it’s interaction with nature-inspired curvatures, where one can perhaps catch a glimpse of bone, an arm, a weathered stone or some other interpretation by those who can see. Interpreted and guided by the artist’s hand, these pieces attempt to capture Promethean qualities in their lively displays of planar support, which enhances the ultimate purpose of a table.
WORKS CITED


IMAGES CITED


