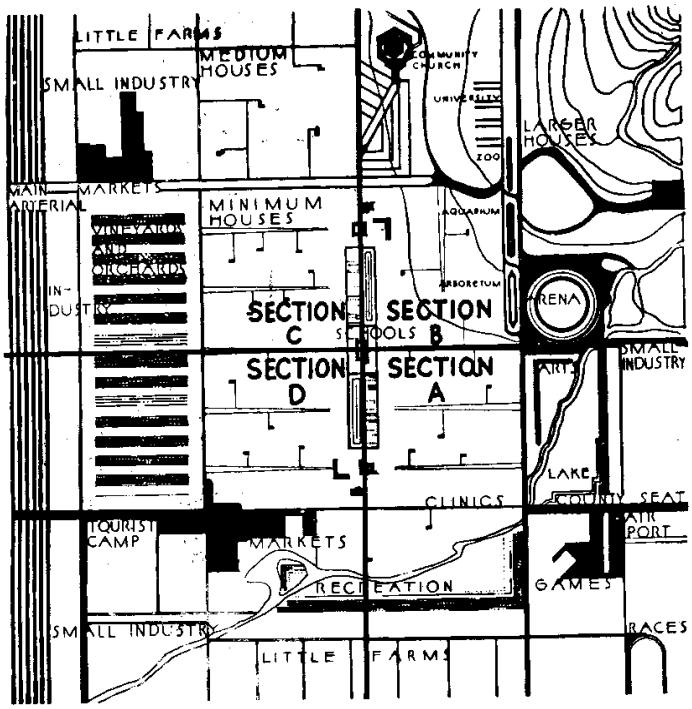
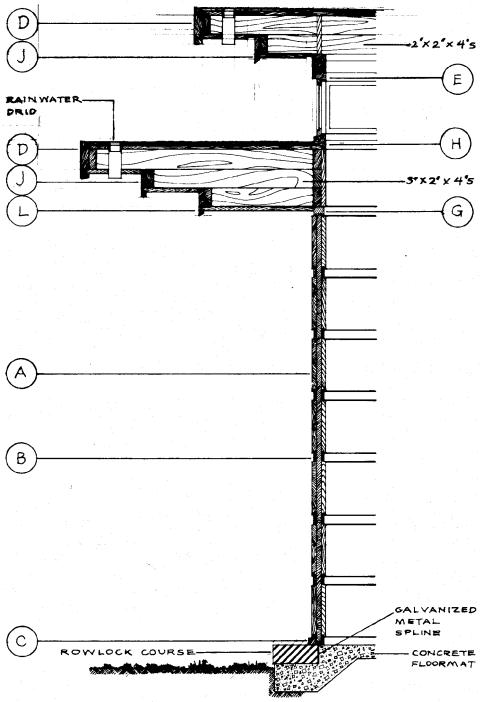
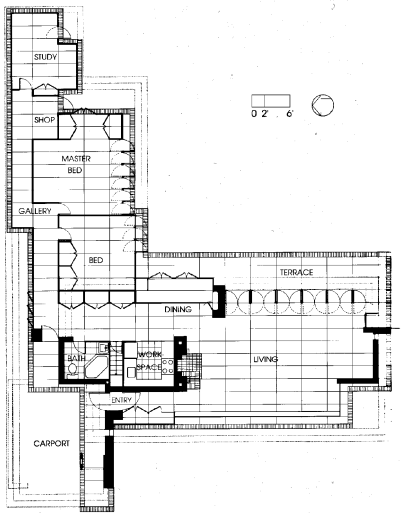
BROADACRE & SQUARE USONIANS



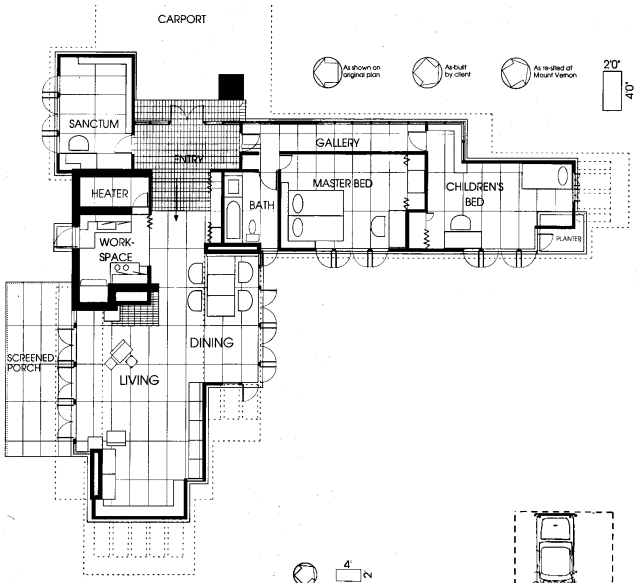
Broadacre City, 1935



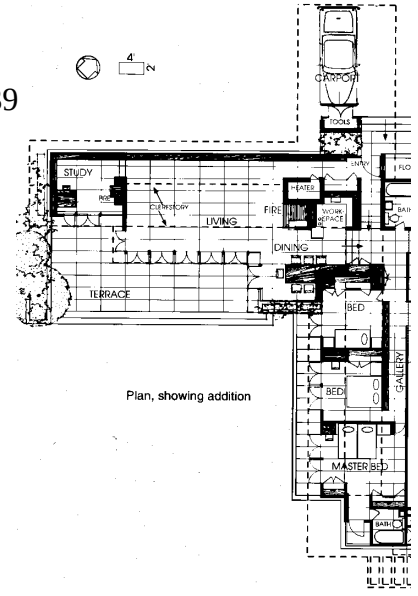
Typical Usonian Wall Section



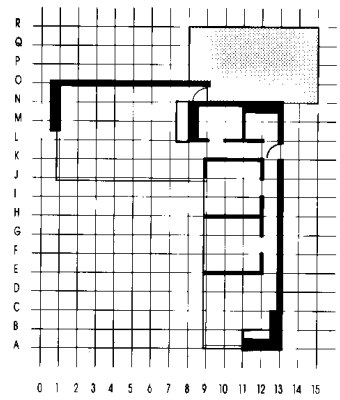
Jacobs 1936



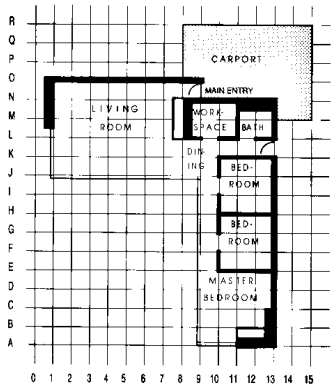
Pope-Leihey, 1939



Rosenbaum, 1939

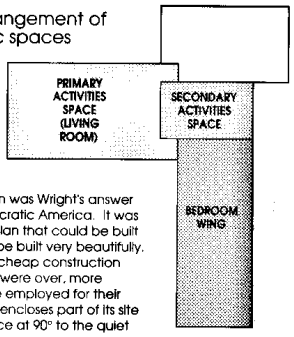


Basic (90°) L plan (with back gallery)



Spaces of an L plan with gallery at inside of L (front gallery)

Tripartite arrangement of domestic spaces



BASICS OF THE L-PLAN USONIAN HOUSE

The L-plan Usonian design was Wright's answer to the dilemma of Democratic America. It was a compact single-story plan that could be built cheaply, but could also be built very beautifully. The Depression required cheap construction but, once it and the war were over, more expensive materials were employed for their beauty. The basic L plan encloses part of its site by placing the living space at 90° to the quiet space.

The basic design principle that brought about the Usonian house is the same as that which Wright had established early in his career. The prime activities space, the living room, dominates the design, but even more so here than in his Prairie works. Secondary activities, the workspace (kitchen) in particular, are allotted minimal space, and the bedrooms, upstairs in early work and Prairie designs, are brought to ground level.

The drawings presented here are simplified, to make design principles all the more obvious.

In the plan at the upper left, similar to the first L-plan Usonian, the Jacobs First Residence (S.234), the main entry leads directly only to the living room, without forks to each of the other activities areas, as was the norm in all Wright's designs. Wright allowed this simplification in his least expensive Usonian designs, though a secondary entrance would lead to these areas and actually provide a common center for pedestrian traffic.

The living room of a Usonian home is its largest space. From the workspace, small enough to do all the work by turning, rather than walking, the housewife has a view down the gallery and can be in the dining or living areas quickly.

Usually there is a fireplace in both the living room and master bedroom, as well as any additional guest bedroom. The utilities space may be at level or located below ground. More than this, details are not shown, for it is space, and how it is organically organized for human habitation, that is our prime concern.

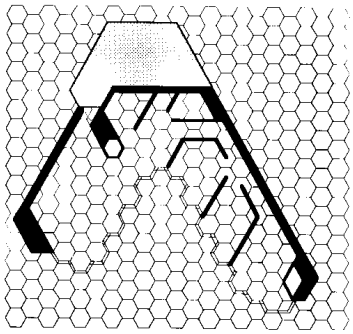
In the drawings of Usonian structures here and t... follow, thinnest lines other than the grid lines re... walls, floor to ceiling (or soffit) doors or window... are room partitions, usually of sandwich wall co... Thick walls are exterior walls, perhaps with transl... windows. Thick blocks are the masonry masses from w... the roofs are cantilevered.

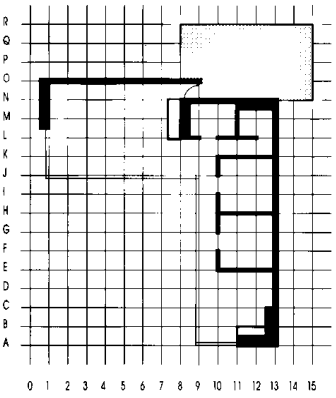
The attempt has been made throughout the Usonian drawings to keep each specific space the same size whatever the unit module or configuration, though the nature of organic design precludes this being made an absolute condition. Throughout all variations, standard elements are kept as regular as is practical, so that underlying design principles may be most easily observed.

Creative detailing, so much a part of Wright's genius, is beyond the scope of these demonstrations of Usonian possibilities. How a simple 90° L can be turned into plans of other angles, or how it can be curved, and how the simple alteration of one area can affect the entire spatial concept is the creative aspect dealt with here.

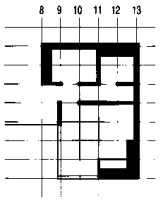
If a basic 4' dimension is applied to the unit module for most of the Usonian drawings here and following, each module (except some circular segments) would be 16 square feet yielding in the basic Usonian L plan on the previous page 1552 sq. ft. and in the Hex below, 1568.

60° Hexagonal plan
(Inside L plan set on hexagonal module)



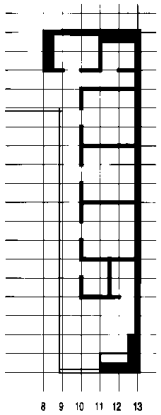


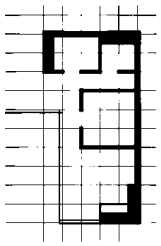
3 bedrooms, 1 bath, a fairly common Usonian arrangement



1 bedroom, 1 bath

4 bedrooms, 3 baths



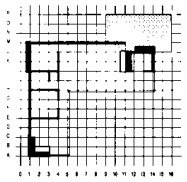


2 bedrooms, 1 bath

USONIAN BASICS (2)

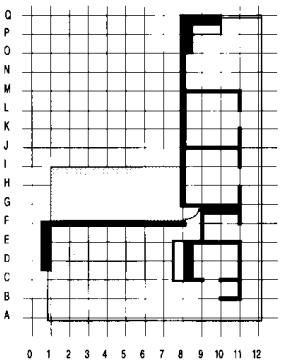
USONIAN homes can be built for any size family. The bedroom wing is extended with as many bedrooms as needed for the children, and terminated by the master bedroom. If the family should grow beyond expectations, the wing can be extended. The wall between pairs of rooms can be removed, and bunk beds installed, as another way to accommodate a large family. Yet another arrangement of bedrooms, the cluster plan, is shown with in-line plan variations.

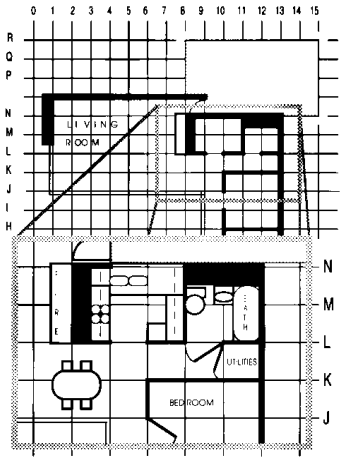
The Usonian L-plan type house is capable of infinite variety. Wright started with an inside (90°) L, then developed an in-line (180°) version of the Usonian house. Further extension to 270° gives an "outside" version of the L. The Prime Activity and Quiet spaces meet at the Workspace, keeping the tripartite arrangement of spaces intact. Wright would, however, try most any possibility; move the bedroom wing to the other side of the living room for instance, even though this plays havoc with tripartite spatial arrangement.



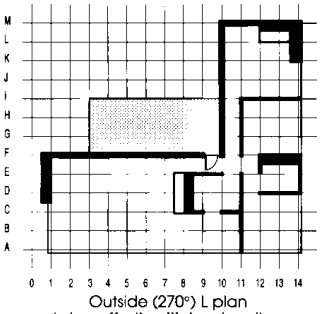
Inside L, Opposed wing variant of the standard L-plan Usonian house (half size)

Outside (270°) L plan, front gallery





Workspace blow-up



Outside (270°) L plan
(wing offset), with back gallery

F.L. Wright: Precedent, Analysis & Transformation

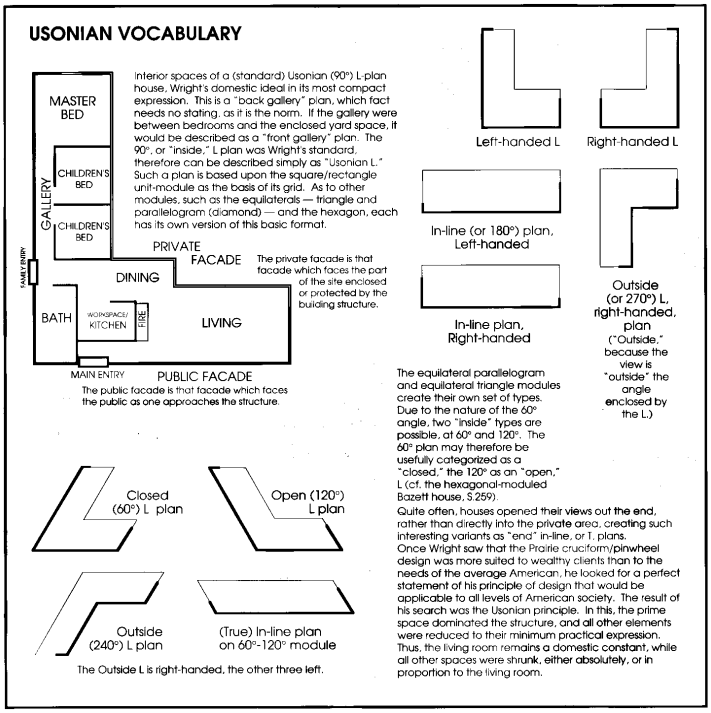
Prof. Kai Gutschow

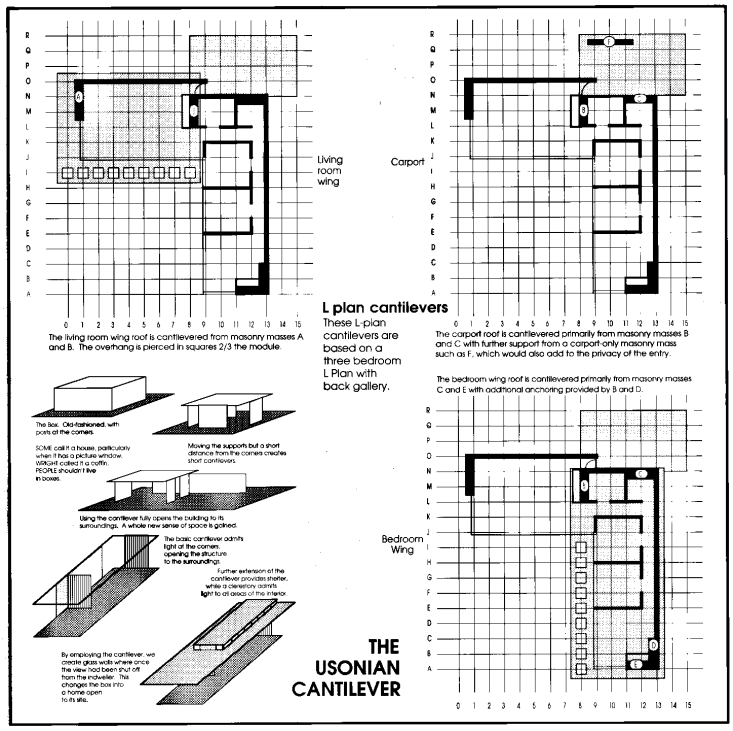
CMU, Arch 48-441 (Project Course) Spring 2005, M/W/F 11:30-12:20, CFA 211

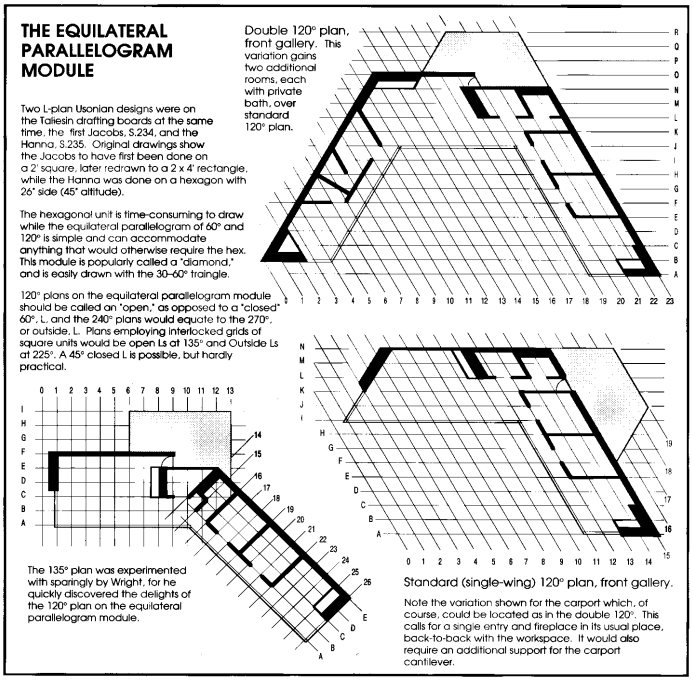
4/15/05

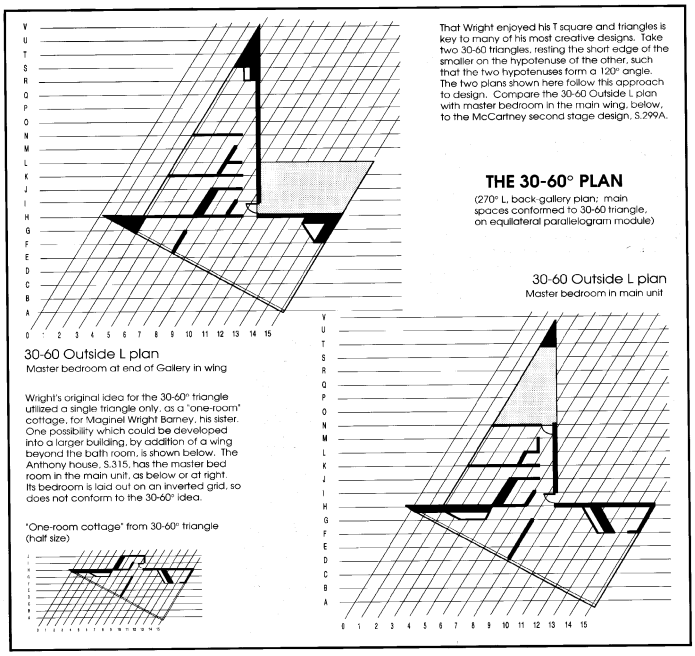
USONIAN ANALYSIS

Sergeant, John. FLW's Usonian Houses
Jacobs, Herbert. Building with FLW
Morton, Terry. The Pope-Keihey House
P. & S. Hanna. FLW's Hanna House
De Long, David. Auldbrass.
Reisely, Roland Usonia, New York
Rosenbaum, Alvin. Usonia. FLW's Designs...
McCarter, Robert. FLW. Ch. 9
MacKenzie, Archie. "Rewriting the Natural House," in McCarter, A Primer on Arch'l Principles
Burns, John. "Usonian Houses," in Yesterday's Houses...
Handlin, David. The Modern Home
Wright, Gwendolyn. Building the Dream









FLW CHRONOLOGY 1932-1959

1932 FLW **Autobiography** published, 1st ed. (also 1943, 1977)
FLW The Disappearing City published (decentralization advocated)
May-Oct. "**Modern Architecture" exhibit** at MoMA, NY (H.R. Hitchcock & P. Johnson, Int'l Style)
Malcolm Wiley Hse., Proj. #1, Minneapolis, MN (revised and built 1934)
Oct. **Taliesin Fellowship** formed, 32 apprentices, additions to Taliesin Bldgs.

1933 Jan. Hitler comes to power in Germany, diaspora to America: Gropius (Harvard, 1937), Mies v.d. Rohe (IIT, 1939), Mendelsohn (Berkeley, 1941), A. Aalto (MIT, 1942)
Mar. F.D. Roosevelt inaugurated, New Deal (1933-40) "One hundred days." 25% unemployment. A.A.A., C.C.C. P.W.A., N.R.A., T.V.A., F.D.I.C. started, abandon gold standard
*Hillside Theater, Curtain, outbuildings, Taliesin, Spring Green, WI
*Malcom Willey Hse., Minneapolis, MN (1933-34)

1934 ***Broadacre City** Masterplan (proj.), model begun
First issue of Taliesin magazine
Dec. FLW visits **Pittsburgh**, Bear Run site
First year of annual move to Arizona with entire fellowship, Chandler, AZ. Broadacre model made

1935 *Edgar J. Kaufmann Hse., (= **Fallingwater**), Mill Run, PA (1935-7)
*Lusk Hse., Huron, SD (proj.)
*Hoult Hse., Wichita, KS (proj., first Usonian)
Apr. Broadacre City model tours USA: New York, Pittsburgh, Washington DC, WI, MI
Apr.-June. "Second 100 Days." W.P.A. (1935-43); R.A.; Social Security; Rural electrification

1936 Jan. Fellowship at Chandler
*Herbert **Jacobs** Hse., (Usonian) Madison, WI
*Paul & Jean **Hanna** Hse., Stanford, CA (= "Honeycomb", additions 1946, 1956)
***Johnson Wax Admin**. Bldg., Racine, WI (1936-9; 1944-50)
China-Japan War; Spanish Civil War; Rome-Berlin Axis formed

1937 FLW sick with pneumonia, no trip to AZ in Winter 1936-7
*Herbert F. Johnson Hse., (= **Wingspread**) Wind Point, WI (vic. Racine)
*Kaufmann Dept. Store Office, Pittsburgh, PA
June. FLW travels to Russia to attend World Conference of Architects
Dec. Buys 800 acres of government land in Paradise Valley, AZ, becomes **Taliesin West**
Ministry of Education, L. Costa & O. Niemeyer, Rio de Janeiro, Brazil

1938 Jan. FLW in Time, Architectural Forum
***T-West** begun with construction of "SunTrap", Scottsdale, AZ (1938-present)
*Ardmore Suntop Homes, Ardmore, PA
*Florida Southern College Master Plan (& Pfeiffer Chapel), Lakeland, FL (1938-58)
*Fallingwater Guest Hse., Mill Run, PA
*Monona Terrace Civic Center, Madison, WI (proj., also 1954, constructed 1994)
*Midway Barns, Taliesin, Spring Green, WI
*Ben Rebhuhn Hse., Great Neck, NY
*Ralph **Jester Hse**., Palos Verdes, CA (proj., plywood, circles)
*Usonia II Cooperative Settlement, Okemos, MI (proj. vic. Lancing)
Sept. "House for $5000" Life Magazine
Villa Mairea, A. Aalto, Noormarkku, Finland, (1938-41)

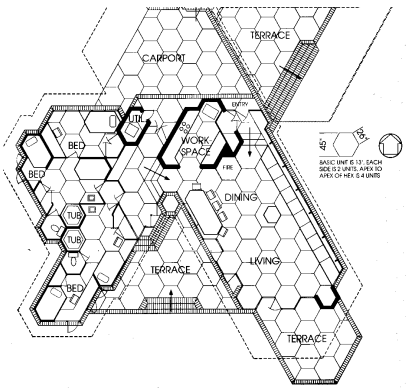
1939 *Loren **Pope-Leighy Hse**., Falls Church, VA (1939-40, moved to Mt. Vernon 1964)
*Leigh Stevens Hse. & Estate (= Aldbrass) Yemassee, SC
*Stanley **Rosenbaum Hse**., Florence, AL (additions 1946)
*Bernard Schwartz Hse., Two Rivers, WI (copy of Life Hse., Sept. 1938)
*Goetsch-Winkler Hse., Okemos, MI (also 1949 proj.)
*George **Sturges Hse**., Brentwood, CA (additions 1942)
Invited to lecture in London, later published as An Organic Architecture
Gone with the Wind, Wizard of Oz, Grapes of Wrath published

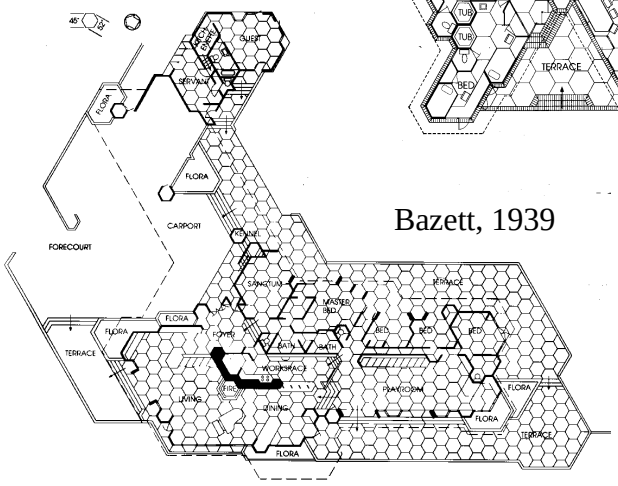
1939-45 **World War II in Europe** (US joins 1941)

1940 FLW solo exhibit at MoMA, New York (includes model Usonian Hse.)
FLW Foundation established, tax-free educational organization
*John C. Pew Hse., Madison, WI
*Theodore Baird Hse., Amherst, MA
*Gregor Afflek Hse., Bloomfield Hills, MI (1940-1)

	*Arch Oboler Hse., (= Eaglefeather) Malibu, CA (proj.)
1941	Anthology FLW: On Architecture ed. F. Gutheim, published
	S. Giedion's Space, Time and Architecture
1942	*Quadruple Housing (= Cloverleaf, for F.H.A.)
	H.R. Hitchcock, In the Nature of Materials (first English FLW book)
1943	*Solomon **Guggenheim Museum**, New York (1943-59, construction begin 1956)
	*Herbert **Jacobs Hse. II**, (= Solar Hemicycle) Middletown, WI (1943-8)
	Revised edition of Autobiography (first 1932; 3rd ed. 1977)
	Ayn Rand, The Fountainhead published (movie with Gary Cooper, 1949)
1944	***Johnson Wax Research Tower**, Racine, WI
	"Glass House," Ladies Home Journal
	*Midway Farmhouse, Taliesin, Spring Green, WI
1945	*V.C. Morris Hse. (= Seacliff), San Francisco, CA (proj.)
	Aug. end of World War II
	FLW, When Democracy Builds published (revision of "Disappearing City")
1946	*Calico Mills Dept. Store, Ahmedabad, India (proj. for Sarabhi)
	*Ayn Rand Hse., (proj. Hollywood, or Redding, CT)
	*Roger Lacy Hotel, Dallas, TX (proj.)
	Edgar J. Kaufmann Desert Hse. by Richard Neutra, Palm Springs, CA (1946-7)
1947	***Point Park Community Ctr**., Pittsburgh, PA (proj., scheme #2 1948)
	***Unitarian Church**, Madison, WI
	*Usonia II Housing, Pleasantville, NY (incl. Sol Friedman Hse., 1948)
1948	Jan. FLW issue Architectural Forum
	***Morris Gift Shop**, San Francisco, CA
	*Sol Friedman Hse., Pleasantville, NY
	Equitable Bldg., by P. Belluschi, Portland, OR; GM Technical Center, by E. Saarinen, Warren, MI
1949	Feb. 26. FLW meets with Pres. Truman about Taliesin power lines; APS lines installed at T-West
	*Usonian Automatic Hse. (proj., concrete blocks)
	*San Francisco Bay Bridge (proj.)
	Awarded AIA Gold Medal
	FLW, Genius & Mobocracy published (on Louis Sullivan)
	Glass House, by P. Johnson, New Canaan, CT
1950	*David Wright Hse., Phoenix, AZ
	*Zimmerman Hse., Manchester, NH
	Chapel of Notre-Dame-du-Haut, by Le Corbusier, Ronchamp, France (1950-4)
	Bavinger Hse., by Bruce Goff, Norman, OK
	UN Building in New York completed
1950-3	Korean War
1951	Jan. FLW issue Architectural Forum
	*E.J. & Lilianne Kaufmannn Hse. (= Boulder Hse.), Palm Springs, CA (proj.)
	*Cabaret Theater added, dining room glassed in at T-West, Scottsdale, AZ
	FLW Exhibit "60 Years of Living Architecture", Gimbels Dept. Store, Philadelphia. Travels to Florence, Zurich, Munich, Rotterdam, NYC, LA, Mexico (1951-3)
	Lever Hse. Office Building, S.O.M., New York, 1951-2
1952	*Harold **Price Tower**, Bartlesville, OK (1952-6)
	*Point View Apt. Tower, Pittsburgh, PA (1952, 1953)
	*Hillside Playhouse burns, rebuilt, Spring Green, WI
	Aaron Green Arch'l Office opened, San Francisco, CA
1953	*Riverview Terrace Restaurant, (= Visitor Center), Taliesin, Spring Green, WI
	*Masieri Student Library & Residence, Venice, Italy (proj.)
	***Point View Residences**, Pgh., PA (proj.)
	FLW, The Future of Architecture published
	Hugh Downs interviews FLW on TV (cf Mike Wallace interviews, 1957)
1954	***Beth Sholom Synagogue**, Elkins Park, PA
	***Hagan Hse**., (= Kentuck Knob) Uniontown, PA
	*FLW Apt. in Plaza Hotel, New York City
	*Harold Price Hse., Phoenix, AZ
	FLW, The Natural House published

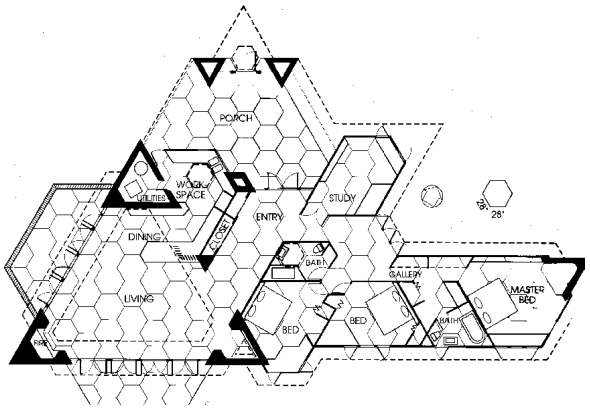
HEXAGONAL USONIANS



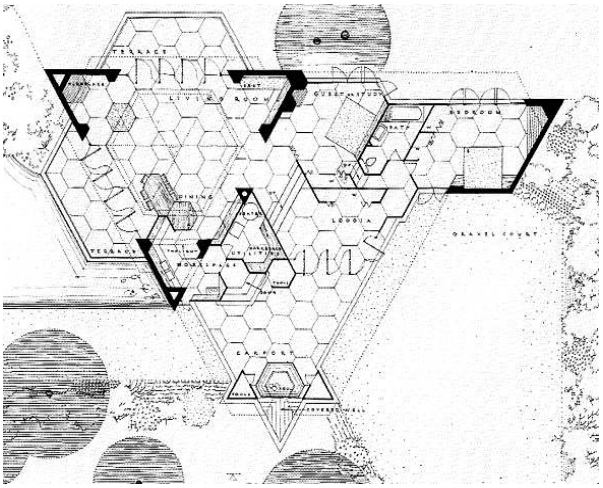


Bazett, 1939

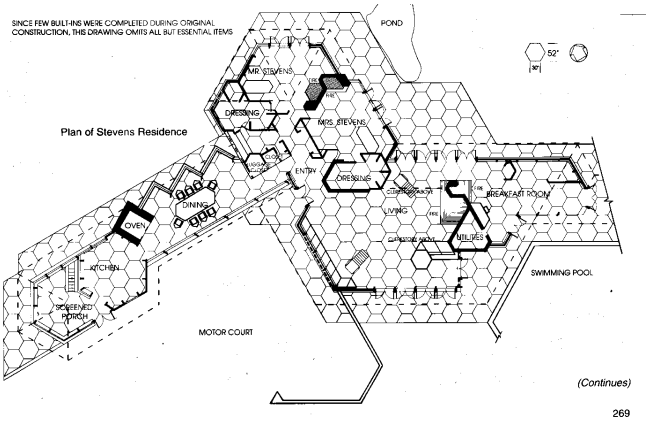
Hanna, 1936



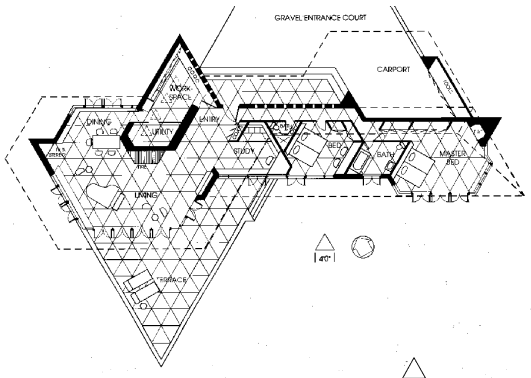
Richardson, 1940



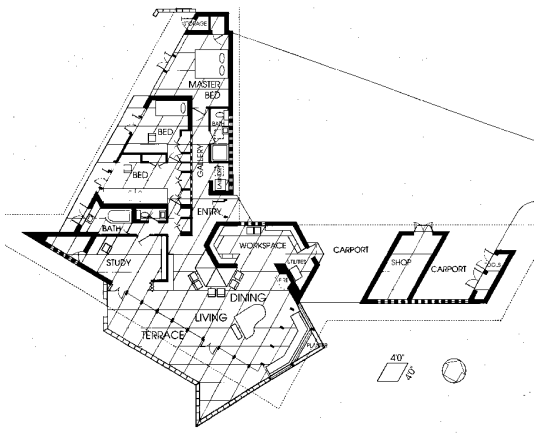
Sundt, 1941



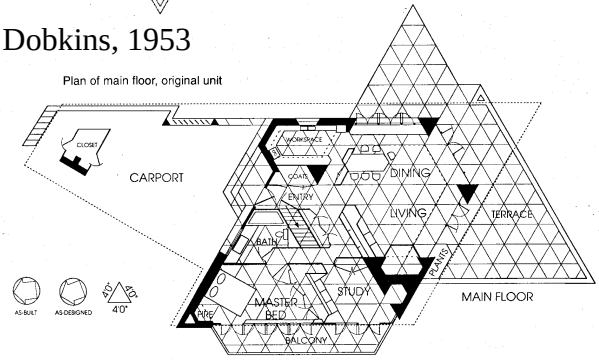
Auldbrass / Stevens, 1939



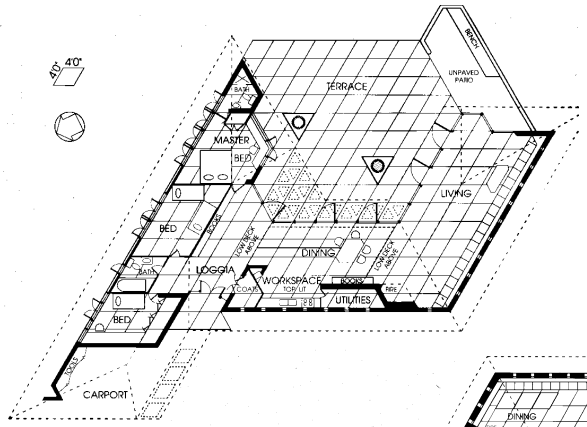
Dobkins, 1953



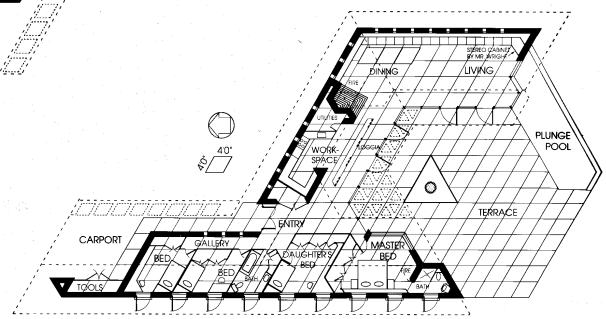
McCartney, 1949



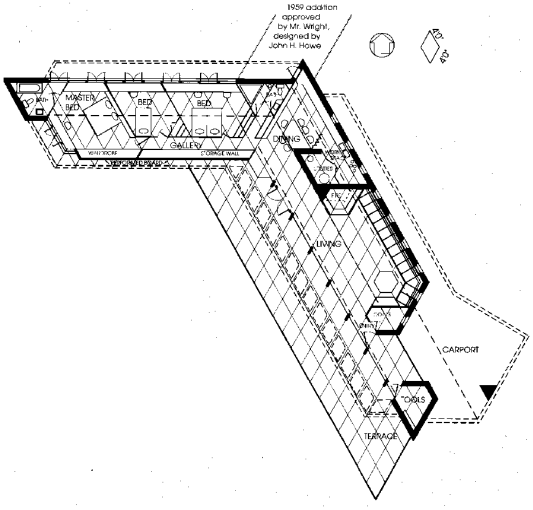
Reisley, 1951



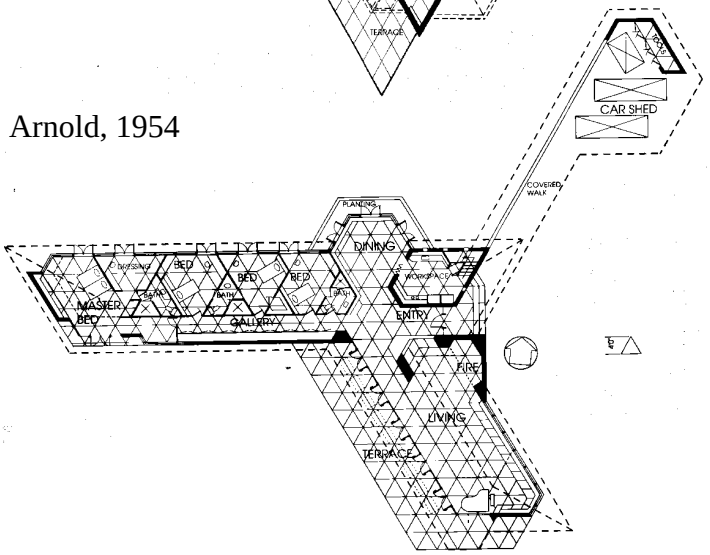
Mathews
1950



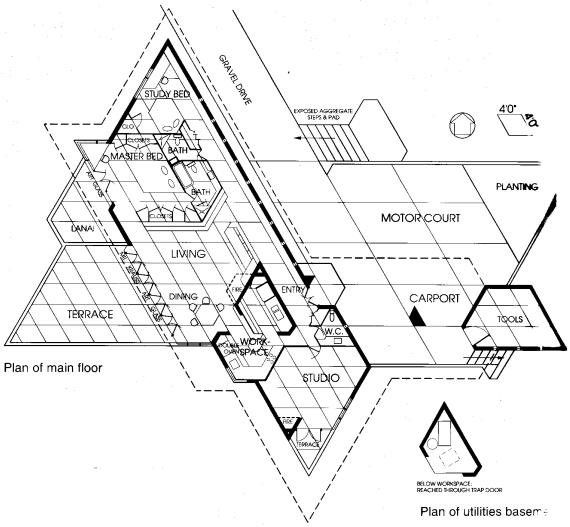
Smith, 1950



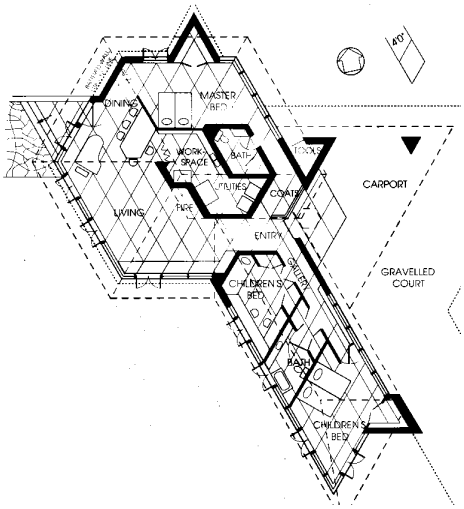
Arnold, 1954



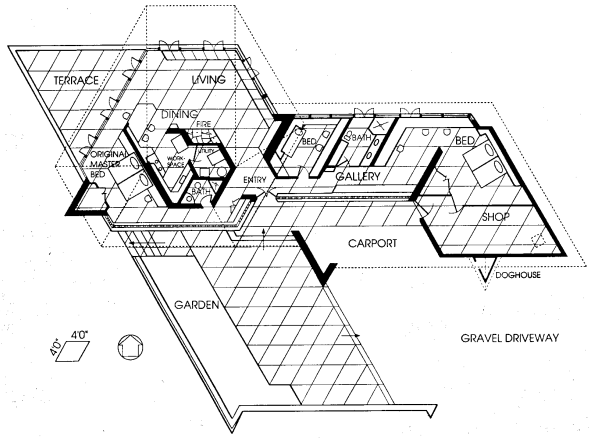
Friedman, 1955



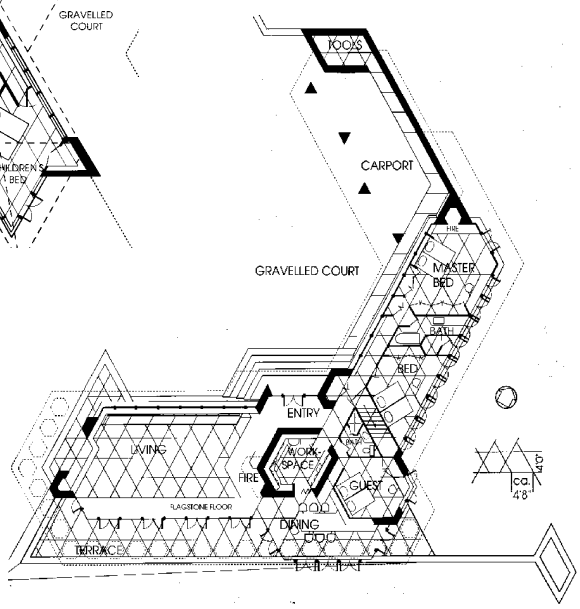
Kraus, 1951



Kinney, 1951



Berger, 1950



Hagan, 1954

COMPARISON BUILDINGS for KENTUCK KNOB

HEXAGONS & 30/60°

Bay Windows on early homes
Martin House, Buffalo, NY, 1904 (windows)
Midway Gardens, Chicago, IL, 1914 (decoration)
Imperial Hotel, Tokyo, 1915-1923 (esp. furniture & decorative work)
Bogk House, Milwaukee, WI, 1916-17 (decoration)
A.M. Johnson Desert Compound, Death Valley, CA, 1922-25 (project)
Nakoma Country Club, Madison, WI, 1923-24 (project)
Kindergarten & Playhouse for Barnsdall, Los Angeles, 1923 (project)
Doheney Ranch, Los Angeles, 1923 (project)
Lake Tahoe Summer Resort, CA, 1922-1924 (project)
Freeman House, Los Angeles, 1923-1924 (concrete block pattern)
Taliesin III Apprentice Quaters & Chicken Coops, 1925
San Marcos in Desert Resort, Chandler, AZ, 1928-1929 (project)
Cudney House, Chandler, AZ 1929 (project)
Steel Cathedral, NYC, 1926 (project)
St. Marks Towers, NYC, 1927-31 (project)
Ocatilla Camp, AZ, 1928
Taliesin Drafting Studio, 1932 (hearth & structure)
Wiley House, Minneapolis, MI, 1933 (terrace)
Fallingwater, 1935-38 (30/60° used to lay out plans)
Kaufmann Office, Pittsburgh, 1937
Hannah House, Stanford, CA, 1936
Herbert Johnson House, Racine, WI, 1937 (playroom)
Manson House, Wausau, WI, 1938
Florida Southern College, Lakeland, FL, 1938ff. (Pfeiffer Chapel, Roux Library, Minor Chapel)
Sidney Bazett House, Hillsborough, CA, 1939
Armstrong House, Gary, IN, 1939
Auldbrass Plantation, Yemassee, SC, 1938
Stevens House, Yemassee, SC, 1940
Community Church, Kansas City, MO, 1940
Wall Residence, Plymouth, MI, 1941
Richardson house, Glen Ridge, NJ, 1940
Nesbitt House, Carmel, CA, 1941 (project)
Sundt House, Madison, WI, 1941 (project)
Guggenheim project, NYC, 1944
Friedman Vacation Lodge, Pecos, NM, 1945
Unitarian Church, Madison, WI, 1947
McCartney Residence, Parkwyn Village, Kalamazoo, MI, 1949
Hughes House, Jackson, MS, 1948
Lamberson House, Oskaloosa, IO, 1948
Walker Rsidence, Carmel, CA, 1948
Anthony House, Benton Harbor, MI, 1949
Reisley House, Pleasantville, NY, 1951
Davis House, Marion, IN, 1950
Berger House, San Anselmo, CA, 1950
Mathews House, Atherton, CA, 1950
Palmer House, Ann Arbor, MI, 1950
Smith House, Jefferson, WI, 1950
Gillin, House, Dallas, TX, 1950
Kraus Residence, Kirkwood, MO, 1951
Glore Residence, Lake Forest, IL, 1951
Kinney House, Lancaster, WI, 1951
Rubin House, Canton, OH, 1951
Edgar Kaufmann Chapel, Mill Run, PA, 1951-52 (project)
Chahroudi Cottage, Lake Mahopac, NY, 1951
Teater Studio, Bliss, ID, 1952
Price Tower, Bartlesville, OK, 1952
Andreton Court Shops, Beverly Hills, CA, 1952
Point View Residence, Pittsburgh, 1952-53 (project)
Boomer Residence, Phoenix, AZ, 1953
Cooke House, Virginia Beach, VA, 1953
Dobkins, Residence, Canton, OH, 1953
Beth Shalom, Synagogue, Elkins, Park, PA, 1954
Arnold House, Columbus, WI, 1954
Hagan House, Chalkhill, PA, 1954
Thaxton House, Bunker Hill, TX, 1954
Fawcett House, Los Banos, CA, 1955
Heritage-Hernredon Furniture Line, 1955
Friedman House, Bannockburn, IL, 1956
Arizona State Capitol, Phoenix, 1957 (project)
Olfelt House, St. Louis Park, MN, 1958
Albin House, Bakersfield, CA, 1958
Stromquist House, Bountiful, UT, 1958
Pilgrim Congregational Church, Redding, CA, 1958

OCTOGONS & 45°:

FLW Home & Office, Oak Park, IL. 1898
Bagley House Library, Hinsdale, IL 1894
Chauncey Williams House, River Forest, IL 1895
Romeo & Juliet Windmill, Taliesin, 1896
Furbeck House, Oak Park, 1897
River Forest Golf Club, 1898
Husser House, Chicago, IL, 1899
Willits House, Highland Park, IL 1901 (ceiling, prow)
Glasner Residence, Glencoe, IL 1905
Robie House, Chicago, IL, 1909 (prow)
Beach Cottages, Dumyat, Egypt, 1927
T-West, Scottsdale, AZ, 1937
Guggenheim Scheme, NYC, 1944 (project)
Walter house, Quaqueton, IO, 1945
Elam House, Austin, MI, 1950
Lindholm Service Station, Cloquet, MI, 1956

OTHER

Fallingwater, 1935-38 (30/60° used to lay out plans)
Usonian Model House, “60 Years of Living Architecture” Exhibit, Guggenheim Site
Notz House, Brierly/Berndtson
Douglas House, Ross, PA, P. Berndtson, 1962