

THE INFLUENCE OF PRESENT DAY MODE OF LIVING ON
THE DESIGN OF CONTEMPORARY HOME FURNISHING FABRICS

by

VIRGINIA STOLPE LEWIS

A THESIS

submitted to

OREGON STATE UNIVERSITY

in partial fulfillment of
the requirements for the
degree of

MASTER OF SCIENCE

August 1962

APPROVED:

Redacted for privacy

Professor of Clothing, Textiles, and Related Arts

In Charge of Major

Redacted for privacy

Head of Department of Clothing, Textiles and Related Arts

Redacted for privacy

Chairman of School Graduate Committee

Redacted for privacy

Dean of Graduate School

Date thesis is presented July 28, 1962

Typed by Dora Maddox

ACKNOWLEDGMENT

I wish to express my sincere appreciation to Miss Joan Patterson, Acting Head of Clothing, Textiles and Related Arts, for assistance and encouragement; to my husband for his patience and understanding; and to my children for the time they have given me during the preparation of this thesis.

TABLE OF CONTENTS

CHAPTER	Page
I INTRODUCTION	1
II A HISTORY OF CONTEMPORARY DESIGN	3
III FACTORS INFLUENCING FABRIC DESIGN	15
Architecture	15
Frank Lloyd Wright (Beginning of Great Change)	15
The Contemporary House	27
Political-Economic Effects - The Emerging Consumer	43
New Trends in Home Furnishing Fabrics	46
New Fibers	46
New Finishes	54
Styling	61
Taste	67
IV CONTEMPORARY HOME FURNISHING FABRIC DESIGNERS	77
Dorothy Liebes	77
Boris Kroll	90
Jack Lenor Larsen	104
Alexander Girard	117
Marianne Strengell	129
Joan Patterson	135
Bittan Valberg	149
Lucienne Day	162
Astrid Sampe	168
V LIST OF CONTEMPORARY HOME FURNISHING FABRIC DESIGNERS CONTRIBUTING TO THE FIELD	185
VI CONCLUSION	195
BIBLIOGRAPHY	199

LIST OF FIGURES

FIGURE	Page
1. Startling combinations and disastrous results; this was the predominant type of architecture at the outset of Frank Lloyd Wright's career.	14
2. Frank Lloyd Wright believed that fabrics should correlate with architecture and furnishings. Illustration shows a good example.	25
3. A Frank Lloyd Wright built for the Quentin Blairs of Cody, Wyoming.	29
4. and 5. Two other views of the Quentin Blair home which show characteristics of a Frank Lloyd Wright house.	30
6. Floor plan - Century 21 Home of Living Light, Seattle World's Fair, 1962.	32
7. and 8. Frank Lloyd Wright's idea of allowing light into our homes, is carried out in different forms in our contemporary homes of today. Century 21 - Home of Living Light, Seattle World's Fair, 1962.	33
9. and 10. Color is being exploited in contemporary homes today as never before. Illustrations are rooms in Century 21 - Home of Living Light, Seattle World's Fair, 1962.	36
11. and 12. Floral print drapery used as wall dividers. Shown at Century 21 - Home of Living Light, Seattle World's Fair, 1962.	37
13. and 14. Wall dividers made from fabrics. Frederick and Nelson Co., Seattle.	38
15. Floor plan - The American Home of the Immediate Future, Seattle World's Fair, 1962.	40

FIGURE

Page

16. and 17. This home offers family privacy within a limited land area - The American Home of the Immediate Future, Seattle World's Fair, 1962. 41
18. The window walls open into a central patio bringing the outdoors into the living area - The American Home of the Immediate Future, Seattle World's Fair, 1962. 42
19. A wall hanging, used as an accent, on plywood paneled walls - The American Home of the Immediate Future, Seattle World's Fair, 1962. 65
20. Dorothy Liebes, top weaver and designer, shows curtains she designed for the theatre at the United States Pavilion, Brussels World Fair. 78
21. Dorothy Liebes at her looms working on curtain she designed for theatre at the U.S. Pavilion, Brussels World's Fair. Sample of one type of gold Lurex she used in the curtain. 79
22. Hand-woven fabrics designed by Dorothy Liebes for the late Frank Lloyd Wright. 81
23. Dorothy Liebes' use of color, texture, and sense of scale. U.S.A. International Fabric Display. 83
24. Boris Kroll, Master Weaver, of Boris Kroll Fabrics, Inc. 91
25. "Chartres" from the Boris Kroll Transitional Collection. Awarded Citation of Merit, 1960, by American Institute of Designers. 94
26. Ariel Jacquard Woven Tapestry "Awari" warp print, designed by Boris Kroll, received the A.I.D. Award, 1960-1962. On display at Interiors Pavilion, Seattle World's Fair, 1962. 98
27. Jack Lenor Larsen, outstanding weaver and designer, of Jack Lenor Larsen, Inc. 105

FIGURE	Page
28. Primavera, first hand printed velvet in the United States, 1961, 100 percent siliconed. Designed by Jack Lenor Larsen, Inc.	107
29. Obelisk, handprint on linen, by Jack Lenor Larsen.	110
30. "Diagonal Stripe Weave" by Jack Lenor Larsen, Inc.	112
31. Alexander Girard, outstanding architect and fabric designer. Designs fabrics for Herman Miller Company.	118
32. Marianne Strengell, great weaver and industrial designer, former head of Weaving at Cranbrook Academy of Art.	130
33. Marianne Strengell hand-woven fabric with use of plastics, U.S.A. International Fabric Display.	132
34. Joan Patterson, Designer and Head of Clothing, Textiles, and Related Arts, Oregon State University.	136
35. Linen draperies, casement cloth, upholstery fabrics and rug. Designed by Joan Patterson.	139
36. and 37. Linen upholstery fabrics designed and woven by Joan Patterson.	141
38. Fabric woven for vertical bamboo blinds on screen.	142
39. All linen warp and wood strip weft, used for place mats or lamp shades.	142
40. and 41. Linen cloth and table mats. Designed and woven by Joan Patterson.	144
42. Linen and wool rug techniques - designed by Joan Patterson.	145
43. Bamboo and linen blind with linen draperies, linen and wool pillows on linen upholstery fabric on sofa. All designed by Joan Patterson.	147

FIGURE	Page
44. Persian wool rug designed and hand-woven by Joan Patterson.	148
45. Swedish designer, Brittan Valberg, hand knots swatch to guide weavers who will produce finished rug.	150
46. Standard Colorways for Valberg Rugs.	152
47. Cantaloupe, designed by Bittan Valberg for Cabin Crafts, Inc.	154
48. Moon Missile, designed by Bittan Valberg for Cabin Crafts, Inc.	155
49. Sky City, designed by Bittan Valberg for Cabin Crafts, Inc.	156
50. Whirlpool, designed by Bittan Valberg for Cabin Crafts, Inc.	157
51. Red Hills, designed by Bittan Valberg for Cabin Crafts, Inc.	158
52. Pompeii, designed by Bittan Valberg for Cabin Crafts, Inc.	159
53. Wheatfield, designed by Bittan Valberg for Cabin Crafts, Inc.	160
54. Lucienne Day, top designer of printed fabrics in Great Britain, designs for Heal's.	163
55. Rock Rose designed by Lucienne Day for Heal's Fabrics, London, England.	167
56. Astrid Sampe, top designer and interior decorator of Sweden.	169
57. Rya rug designed by Astrid Sampe for the Dag Hammarskjöld Library at the United Nations Building in New York. On display at the Swedish Pavilion, Seattle World's Fair, 1962.	172

FIGURE	Page
58. "Thermidor", first printed velvet, awarded gold medal in California State Fair, designed by Astrid Sampe. N.K.	174
59. "Soldis", 100 percent unbleached linen drapery fabric designed by Astrid Sampe. N.K.	177

LIST OF PLATES

PLATE	Page
1. Chartres - from the Boris Kroll Transitional collection, awarded Citation of Merit 1960 by the American Institute of Decorators- \$20.00 per yard.	95
2. Arabic Stripe - 78% Rayon and 22% silk, designed by Boris Kroll.	96
3. (1) Daphne - 63% Nylon, 37% Silk - Designed by Boris Kroll.	99
(2) Sienna - 85% Rayon, 15% Cotton - Designed by Boris Kroll.	99
4. (1) Montparnasse - 60% Rayon, 40% Nylon- Designed by Boris Kroll.	100
(2) Cobalt-Amethyst - 56% Rayon, 44% Nylon - Designed by Boris Kroll.	100
5. (1) Magenta - 57% Rayon, 43% Nylon- Designed by Boris Kroll.	101
(2) Cobalt-electric - 67% Rayon, 33% Nylon - Designed by Boris Kroll.	101
6. Primavera, velvet cotton 100% siliconed, the first printed velvet in the United States - designed by Jack Lenor Larsen, Inc.	108
7. Obelisk - 100% Linen designed by Jack Lenor Larsen, Inc.	111
8. Quatrefoil - 100% cotton designed by Alexander Girard - used for draperies in Century 21 Plywood Home of Living Light - Seattle World's Fair 1962.	120
9. Grid - 55% Linen, 40% Rayon and 5% Goatshair designed by Alexander Girard - used for draperies in Century 21 Plywood Home of Living Light - Seattle World's Fair 1962.	121

PLATE	Page
10. Flores - designed by Alexander Girard - used for a wall divider at Century 21 Plywood Home of Living Light - Seattle World's Fair 1962.	122
11. April - designed by Alexander Girard - used for wall divider in Century 21 Plywood Home of Living Light - Seattle World's Fair 1962.	123
12. Translucent Drapery - 100% Linen with cotton nub accent - designed by Joan Patterson.	140
13. Ducatoon by Lucienne Day for Heal's, London, England - awarded Gold Medal at California State Fair 1959 - 100% cotton.	165
14. "Rock Rose" designed by Lucienne Day - Heal's, London, England.	166
15. Thermidor - first printed velvet - designed by Astrid Sampe - awarded Gold Medal in California State Fair.	175
16. "Soldis" unbleached 100% linen - designed by Astrid Sampe.	178
17. Prisma - 100% linen - designed by Astrid Sampe.	179

THE INFLUENCE OF PRESENT DAY MODE OF LIVING ON THE DESIGN OF CONTEMPORARY HOME FURNISHING FABRICS

CHAPTER I

INTRODUCTION

We are living in exciting times. Never have home furnishing fabrics been any lovelier or more unusual than they are today. They are produced in every conceivable combination of color, print, weave, texture and material known to the designers. Today's finishes make it possible to utilize every type of fiber to its utmost. New dyes and new fiber blends have brought about fabrics of great beauty and durability.

Today is a great period for designers. For the first time in two hundred years they are being recognized. This recognition hasn't taken place since the eighteenth century when furniture designers such as Chippendale and Duncan Phyfe were known by their furniture. Until recently manufacturers purchased designs from designers and sold the designs under a manufacturer's trade name and the designers received no recognition. But today the designer's name is often more important than the manufacturer's name on many items of home furnishings.

Manufacturers are spending more money today on fabric research than at any other time in history. Designers are expressing their creative ability with an unusual zest and are driving to produce fabrics that are works of art.

In this study I would like to examine and emphasize the influences in our way of life today that have brought about this great change in design of contemporary home furnishing fabrics.

CHAPTER II

HISTORY OF CONTEMPORARY DESIGN

Modern Design

In 1789 the French Revolution ushered in a new world order. It brought to an end a development in architecture that had lasted for a thousand years. Baroque and Rococo had been the last original styles. They were succeeded by neo-classicism, which went back to the architecture of ancient Greece and Rome. At the same time the effects of the French Revolution began to be felt, the difference between secular and sacred buildings disappeared. The classical temple was used for a church, a theater, a national memorial museum or a ministerial building. The very age that revolutionized life was trying to cling to the past. The architectural forms of ancient Greece were copied and practiced as if they were all committed from memory. The Gothic Revival, a New Renaissance, a rehashed version of Baroque, a second Rococo, all made their appearance. The rise of industrialization and international trade brought a new prosperity. The new rich turned to architecture characteristic of an earlier aristocracy. Factories were made to

appear as royal palaces, power stations were made to resemble castles, railroad stations took on the guise of cathedrals.

But the inspiration of the engineers lacked the feel of the true artist and the campaign of William Morris in the 1860's was directed against this complete lack of feeling for the essential unity of an object of design. The fundamental meaning of Morris' doctrine was clearly expressed in the lectures which he delivered between 1877 and 1894. He defined art as "the expression, by man, of his pleasure in labor." Real art must be "made by the people and for the people, as a happiness for the maker and the user." He didn't want art for a few, any more than he wanted education for a few, or freedom for a few. He asked, "What business have we with art at all unless all can share it?" He tried to combat the effects of the increased use of mechanization for he considered it an evil to society. He would have nothing to do with machine production. It was his fear that the introduction of the machine would expel the "joy of the maker" that encouraged craftsman in his struggle. From the start he felt the full impact of the industrial revolution in production. To him it meant the end of the craftsman and of hand manufacture. It meant the end of a kind of luxury. His work on the

revival of handicraft is constructive, but parts of his teaching were destructive. Striving for handicraft alone meant striving for conditions of medieval primitiveness. But since Morris wanted art "by the people and for the people," he would have to admit that cheap art was impossible, that all art costs time, trouble and thought. The problem was that his work was expensive at a period when practically all objects of everyday use were manufactured with the aid of machinery. His products were purchased only by a narrow circle. However, his efforts were not all in vain.

He founded a firm of artists whose products were sound of form and showed good craftsmanship. Together they designed and made all manner of furniture, fabrics, carpets, etc. Their belief was that the artist by also being a craftsman could be saved from annihilation by the machine. But his ideas and achievements could not halt the movement towards mass production. Following in the footsteps of Morris but making at the same time the transition into modern steel age architecture were men like Walter Crane who persisted as a disciple of Morris. Men like Ruskin and Sullivan saw clearly the distinction between functional beauty and

ornamentation. Sullivan sums up this school of thought when he states:

....Ornament is mentally a luxury, not a necessary...." It would be greatly for our esthetic good, if we should refrain entirely from the use of ornament for a period of years, in order that our thought might concentrate acutely upon the production of buildings well formed and comely in the nude (74, p. 13).

At the same time in Europe the leaders of Art Nouveau, which started as a handcraft school, soon realized that ornamentation had no place in the machine age. They demanded a new kind of simplicity with the emphasis on form rather than on decoration. Adolf Loos, who wrote his first essays for newspapers and periodicals in 1897 and 1898, pointed out: "To find beauty in form instead of making it depend on ornament is the goal towards which humanity is aspiring."

Van de Velde, who lectured between 1894 and 1900, concluded ornament could be expressed in the structure of the design. His was a contrast to Morris' art because of the beauty he saw in the product of machines. Van de Velde exclaimed: "The powerful play of their iron arms will create beauty, as soon as beauty guides them." Six years later Van de Velde was even more explicit

when he said: "Why should artists who build palaces in stone rank any higher than artists who build them in metal?" "The engineer stands at the entrance to the new style." Engineers are "the architects of the present day." What we need is "a logical structure of products, uncompromising logic in the use of material, proud and frank exhibition of working processes." A great future is prophesied for iron, steel, aluminum, linoleum, celluloid and cement. As to the appearance of objects in the house, Van de Velde pleads for "that lost sense of vivid and strong, clear colors, vigorous and strong forms, and reasonable construction," and praises the new English furniture for its systematic discarding of ornament " (75, p. 13).

These engineers whose ambition it was to produce functional, practical and durable works, welcomed new inventions and, above all, new materials such as cast iron, rolled iron, steel, concrete and ferro-concrete, and although at first they restricted their use to the building of bridges and highways, they later came to include real architecture. The first great American architect of the 20th century age of steel is Frank Lloyd Wright, who was, in 1900, the only practicing modern architect in the United States. In 1901, he

wrote the following statement on the machine:

An artist's limitations are his best friends. The machine is here to stay. It is the forerunner of the democracy that is our dearest hope. There is no more important work before the new architect now than to use this normal tool of civilization to the best advantage instead of prostituting it as he has hitherto done in reproducing with murderous ubiquity forms born of other times and other conditions and which it can only serve to destroy (74, p. 21).

As the newly-rich citizens built themselves elaborate residences at relatively low cost, with machines turning out in a few hours what it had once taken artists and craftsmen weeks to create, a few men such as Morris were trying to thwart this movement, but the machine buildings arose as they never had before. They were structures with iron frames, glass walls and domes, designed by engineers. London's Crystal Palace, Chicago's skyscrapers, the famous Eiffel Tower, all were to become the first great monuments to the art of the engineer, and the architects realized that if architecture were to become truly modern, free from imitations of historical conventions, it was the engineer working with new materials who must supply the inspiration.

Overseas again, the modern movement took on force and destiny when the Bauhaus was founded in 1919. Walter Gropius,

an outstanding architect, started the Bauhaus in Weimar, Germany. The aim of his teaching at the Bauhaus was to bring about a modern architecture. Because of its progressive activities, designers all over the world are still indebted for the training given there. Although Gropius' first building was a factory of ferro-concrete, glass, emphasizing modern engineering techniques, he had the greatest respect for William Morris and called him one of the spiritual fathers of the Bauhaus. He included handcrafts in the Bauhaus curriculum, considering them an important subject. However, his weavers, carpenters, gold-and-silversmiths did not aim to produce works of art. They sought to supply industry with good designs. Thus a new kind of artist, the industrial designer, was born. Hostility towards the machine ceased to exist, while respect for the craftsman was maintained. Architecture had found a true style.

In 1925, Paris held an International Exposition of Modern Architecture and Design. More than 20 nations participated. It was the first recapitulation of twentieth century design. By 1929, New York stores had worked several years exploiting the Paris Exposition. Macy's and Lord and Taylor presented an extensive

showing of modern interiors and accessories. Macy's display embraced six European countries, and Lord and Taylor's was 100 per cent French. These displays attracted a great deal of attention to the new concepts, attention that continued on through the depression until, 1939 and the New York World's Fair, which attracted millions and influenced millions along these lines.

While this was going on in America, the Bauhaus was wiped out by Hitler in 1935 because it stood for internationalism and not for nationalism. Mies Van der Rohe headed the Bauhaus from 1932 to 1935, following Gropius' resignation.

Mies Van der Rohe, one of Europe's leading architects, started his work in the early 1920's and was dedicated to structural perfection in an age of science. He felt that when technology reached its real fulfillment, it transcended into architecture. Some of his most daring projects, the glass skyscrapers, date from his earlier period in the 1920's, a time when he earned lasting fame for his Barcelona Chair, first shown at the International Exposition of 1929. In 1938 he became a permanent resident of the United States. Here he became head of the architectural department of the Illinois Institute of Technology. In Chicago he has built a spectacular

series of glass Wall Street frame apartment skyscrapers fronting Lake Michigan. His Seagram Building is one of the finest examples of a skyscraper in New York. Since his retirement from the Illinois Institute of Technology he has devoted full time to his private architectural practice (4, p. 16-17).

Contemporary with the Bauhaus was Piet Mondrian, the painter and artist, who has done more to influence contemporary design than any other man in this century. Born in 1872 in Holland, he died in 1944 in New York City. The value of his work was the division of space, the matter of composition and the use of space. The Kleenex box is an adaptation of one of his paintings. He used the square as the basis of all his paintings. He proved that the statement "there is nothing more uninteresting than a square" was false. It is a matter of the use of proportion. The abstract designs of Mr. Mondrian emphasized bright primary colors and simple basic forms. They were congruent with the new structural approach in architecture. To understand Mondrian is to understand abstract art. He was trying to get behind nature to the first element. There was a deep spiritual quality about Mondrian's search for art forms which would express universal laws. As time passes students of Mondrian's art have discovered his mounting influence not only on

artists but on various forms of industrial design. It is a fascinating game to pick up a newspaper or a magazine and note examples of his influence (47, 30-31)

Whether they know it or not, the architect, the layout artist, the sign painter, and even the counter girl who wraps a candy box assymmetrically with a gay ribbon all owe a debt to a lone Dutchman named Piet Mondrian (67, p. 68).

Modern Design in Fabrics

With the new structural approach in architecture, home furnishing fabrics, which are inherently related to architecture, had also to change in design, to correlate, to complete and make it livable.

Paul Frankl was one of the most outstanding advocates of the new art in America. His sky-scraper furniture was very interesting to those who understood what he was trying to do. At first he used fabrics from Europe, those of the French school. Raoul Dufy was an important designer representing the earlier period of this new design (59, p. 320-322). He designed textiles with wood blocks and all of his fabrics at first were printed in this way. His principles of design were built on the belief that color was not essential; therefore,

although he later permitted the use of color, his first designs were in black and white. He also did floral prints in abstract designs with beautiful flowing lines to go with the new architecture.

In the printed modern designed fabrics Ruth Reeves was the most outstanding American designer at the time (59, p. 321-322). Her printed textiles were inspired mainly by Peruvian and Guatemalan atmosphere, and were in abstract form to go with the new type of architecture.

Dorothy Wright Liebes of America stands out as the greatest pioneer in the modern design of woven home furnishing fabrics. She exploited color and texture, experimenting with every type of fiber, color combination, weave, and texture. She believed that the use of combinations of fibers and materials in fabrics brought a richness and depth of quality. Her use of clear vibrant colors, elaborately textured surfaces, and effects with bulky yarns, opened a new concept of what could be done on handlooms. Her colorful blinds and screens combined bamboo, wood stripes, glittering warps from the use of aluminum and metallics, plastics and other materials that had never been used before (25, p. 3; p. 34).



Figure 1. Startling combinations and disastrous results; this was the predominant type of architecture at the outset of Frank Lloyd Wright's career.

FACTORS INFLUENCING FABRIC DESIGN

Architecture

Frank Lloyd Wright (Beginning of Great Change)

Science, technology, and industry had made their advances to the point that a new world was waiting to be born. A new architecture was in its making. In its creation Frank Lloyd Wright brought about the beginning of the great change.

When Wright began his architectural practice in Chicago in the 1890's, a basic change already had occurred in the American way of life. The self-sufficient family which produced most of the food it ate, the clothes it wore, the furniture it lived with and the very house that sheltered it, were already declining. A new type of family was appearing, the consumer family. Instead of producing what it ate and wore, it bought goods from the stores with earned wages. Today the words "home-made" and "hand-made" are terms of praise. Fifty or seventy-five years ago, these same words were terms that belittled and were despised. It was the hard and offensive labor connected with their preparation, and not the product itself that brought the contempt. It meant stupefying heat of the kitchen on a July day, the miserable labor of the wash tub and the odor and flies

from the pig pen. Most homes were little factories and most wives were slaves to a sweatshop schedule. In this period most houses were uncomfortable to live in and unbeautiful to look at. It is no wonder that these women worked so hard to create front yards, front doors, front rooms, such as parlors, to conceal the ugliness of the rear. They had to have an occasional escape from the grinding routine of the preindustrial housekeeping. For these women, cleanliness was a constant struggle. Sometimes they were able to gain some comfort but beauty almost never.

They, of course, were enthusiastic toward the laborsaving, comfort-making devices which American factories were turning out when Frank Lloyd Wright began to work.

Thanks to industrialization, the never-ending drudgery of housekeeping was lifted from the woman's shoulders. She was able to enjoy the comfort, leisure and self-respect which in the past had belonged only to the rich or servant-attended woman.

For architects an even more important change had taken place. The same process which was removing from the house the causes of hard labor, inconvenience, and discomfort was also removing the causes of most of its ugliness. For the first time in history the home

of the average family could be a thing of beauty, not consisting just of the parlor or the front yard but all of it, inside and out. It could be an object of pleasure and delight.

Frank Lloyd Wright was the first American architect to fully comprehend this new fact. He exploited its exciting possibilities. His contemporaries used all the new things such as central heating, plumbing and electricity very enthusiastically, but they forced them into the same old molds and conventional designs.

Wright saw that all these developments taken together would demand a whole new system of architectural expression. A new kind of beauty was in the making. The same science and technology which had brought about such changes in family life had given the architect a whole new palette of building materials with which to work. Some of these materials were structural steel, reinforced concrete, plywood, and huge sheets of rolled plate glass. Wright stood almost alone in his theory that these materials should be used boldly, honestly, in new forms, and not tortured into traditional ones. Through this independent approach, Wright was able to make very important architectural contributions to design. Many of these became standard elements in the modern house.

In 1900, all architects were quick to include in their houses central heating through hot air furnaces or steam heat. Only Wright could see its ultimate implications. It could make obsolete the old honeycomb plan of boxy, air-tight rooms. If all rooms could be kept equally comfortable with almost invisible heat sources, they could flow freely into one another. Doors and whole walls could be eliminated. The rooms of a house could dissolve into one another. He invented the open plan, the plan which has enabled Wright to create such splendid interiors for which his houses have become famous.

In 1900, everyone was realizing the therapeutic value of the sunshine and was demanding more of it in his house. Plate and rolled glass had the possibilities of making windows of unprecedented size. Other architects used more glass but they used it in conventional patterns. They cut up their sash into Colonial rectangles, Elizabethan diamonds, etc. Only Wright saw the possibilities of huge transparent sheets. He saw that he could destroy the iron boundary between the indoors and out. He could extend the living area to include terraces, porches, and gardens beyond. He brought his interior space into a new and exciting nearness with nature.

His sense of wall was no longer the side of the box but an enclosure space for protection against storm or heat only when needed. It was also to bring the outside world into the house and let the inside of the house go outside. He also used large sheets of glass in ceilings to let more light into the home. They were commonly called skylights. He deplored the way people were cornered and suppressed by every right angle junction of two inside walls or a wall and a ceiling. He realized that the vertical corners of a box do not have to be the structural bearing points, so he simply took the corners out. In their place he put two sheets of glass, mitered them together without a corner mullion, and supported the roof at points farther back along the outside walls. Thus the corner window was born.

In 1900, electricity had come into use and of course everyone was demanding it in his house. Electricity made possible a totally new concept of illumination. Electricity made it possible to flood whole areas with light. Forms could be dramatized and textures enhanced. Only Wright in these early days understood this. The rest of the profession continued with fixtures of conventional form, candelabras, chandeliers, etc. Wright built the unadorned bulb

into the very fabric of the house. He made light become a source of pleasure and delight and not just a mere fixture. He was the first to introduce cove lighting.

Wright's great talent of transmuting simple technological developments into new experiences of great beauty and function was especially exercised in the way he used the developments that revolutionized the kitchen. New ranges, sinks, dishwashers, refrigerators, cupboards and counter spaces were being used more and more. The same force that removed the ugly chores from the kitchen also had removed the servants. The cook who formerly had canned peaches in the kitchen, was now canning them at the factory at a higher wage, and shorter hours. More wives than ever had to work in the kitchen. To Wright this meant that the kitchen must not only be labor-saving and convenient but a pleasant place of beauty such as the living room. If the homemaker was to spend much of her time there, she also should not be isolated from the rest of the family. Ahead of his colleagues, Wright took steps to destroy this separation, psychologically as well as physically. He developed the type of kitchen that became a part of the living room. He felt that women who do not mind bending over liked things compact;

they did not want to waste time running back and forth. Thus he designed his kitchens small and put things on ball bearings. For women who didn't want to bend over and preferred to stand up when they worked, he designed everything high - ovens up in the walls, etc. By making the kitchen small, the family could spend more money on spaciousness for the rest of the house. Wright always featured the kitchen as a "work space" and a becoming part of the living room. The kitchen being one of the main places for smells to originate, he made it the main ventilating flue of the whole house by carrying it up higher than the living room. All the air from the surrounding house was thus drawn up through the kitchen itself. The kitchen or "work space" was to be just as charming to be in or looked at as the living room.

The houses that he designed for young people could be expanded without deformity for the needs of a growing family. For children's bedrooms, he introduced the double decker bed. Two children high is the limit in most of his houses but he could put in a third.

The playroom was planned as part outdoors and part indoors to give children liberty for play. But it was to be expected that

they played all over the house. Wright's philosophy was that it is more important for the child to live in an appropriate, well-considered home development than it is for grownups; grownups are halfway through and do not have so much to lose or gain from the home atmosphere. "It is the childhood impressions that become most indelible"(98,p.169). For these reasons it is important that a child grow up in a home that is harmonious with an atmosphere that is serene and is for the well-being of the child. (98, p. 169).

Paint gave way to natural wood surface in Wright's effort to build everything in; such impediments as hanging and standing light fixtures, interior trim, gutters and downspouts gradually disappeared.

Wright didn't believe in attics. He wanted to get rid of the attic and the useless false heights below it. He also felt that a basement was an unwholesome place to have and he wanted to get rid of it, also, or bring it up out of the ground. Instead of lean brick chimneys bristling up everywhere he could see the need for only a broad generous one. The big fireplace in the house became now a place for a real fire. At that time, a real fireplace was extraordinary. There were mantles instead. A mantel was a marble frame

for a few coals in a grate or a piece of wooden furniture with tile stuck in it around the grate and the whole slammed up against the plastered, papered wall. The integral fireplace became an important part of a house designed by Frank Lloyd Wright.

He used the human being as a scale and brought the whole house down in height to fit a normal person. He believed in no other scale than the human being.

He used several different shapes of roofs. His most popular style was the sloping roof. It gave one a feeling of spaciousness inside, a sense of overhead uplift.

Wright's gravity heating system was concerned with floor heating. The pipes filled with steam or hot water were all in a crushed rock or gravel bed beneath the concrete floor. The reason he called it gravity heat was that heated air naturally rises. This method of heat was popularly known as "radiant heat" and it worked very nicely with concrete floors. It kept them warm; without it they would have been colder than wood flooring.

He felt that ornament was necessary but only in structural pattern. It was the imagination that gave natural pattern to structure.

Two terms of construction were developed by him. They were "plasticity" and "continuity." "Plasticity" was a term he used when he eliminated the separations and separate joints or the post and beam in favor of structural continuity. At first he had difficulty in getting help from engineers, for such design was all new to them. The engineer soon mastered the element of continuity in floor slabs. The upright and the horizontal where steel or plastics entered into construction were welded together as one and were able to work together as one. A new world of form opened up.

Wright felt that rugs, draperies and furnishings should be suitable to the house. Since his architecture was organic the furnishings should also be organic. The textures and patterns that sympathize in their own design and construction should do the same with the design and construction of the particular house they occupy. For instance a mobile should be composed of the design elements of the room in which it hangs.

Big or small, one of Wright's houses always has the grace and urban look of the mansion. He achieved this by demurely fitting it into its terrain. Its real size was never apparent.

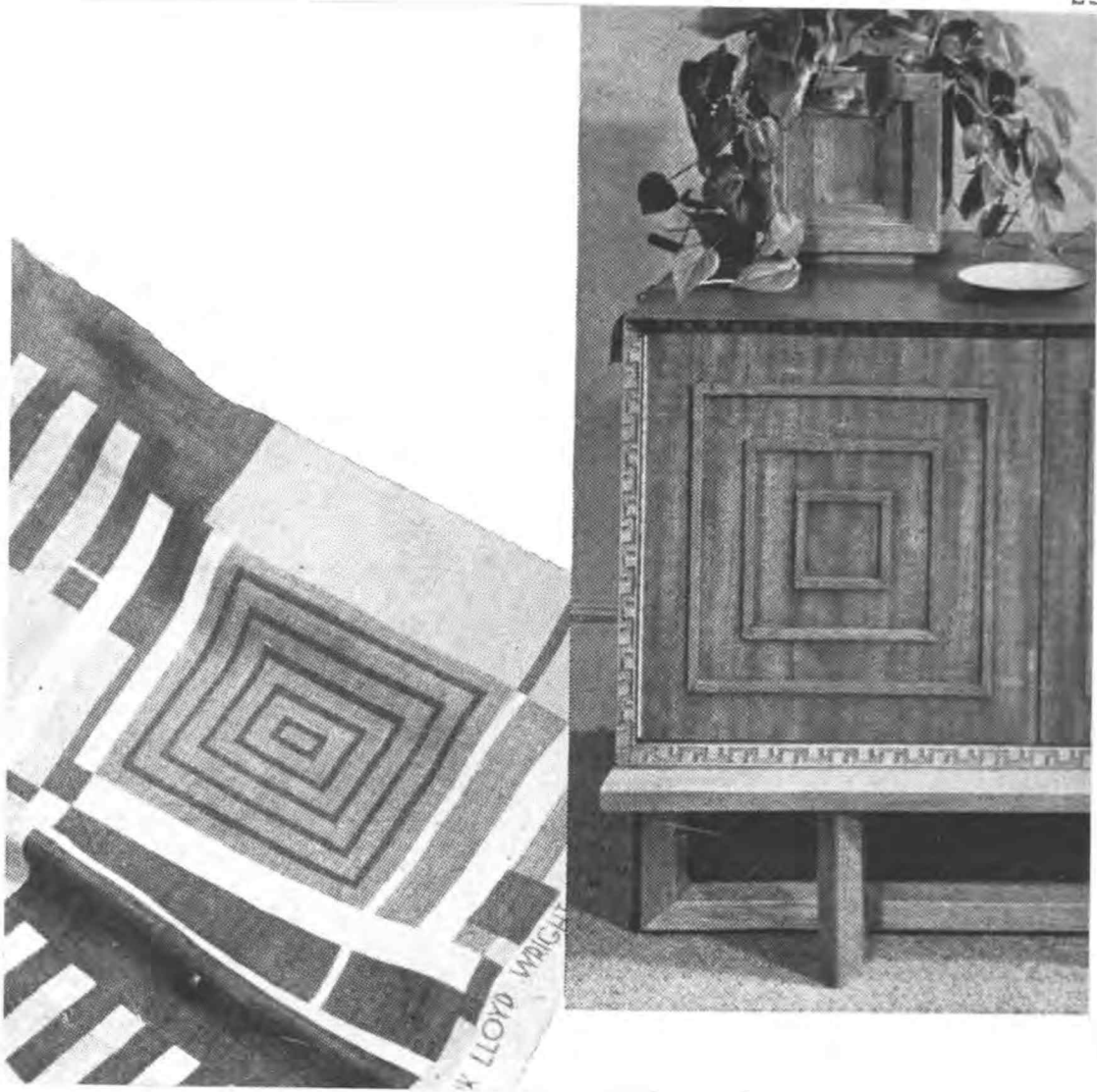


Figure 2. Frank Lloyd Wright believed that fabrics should correlate with architecture and furnishings. Illustration shows a good example.

To Wright all elements of a house were equally important and therefore equally beautiful. It had no "front" and consequently could have no "back." He was democratic in the choice of materials and could create interiors of unusual warmth and luxury with the simplest materials, such as wood, brick and plaster. At the same time, his contemporaries were using imported marbles, cut velvets and gold leaf with much less effect.

Wright had real feeling for the nature of materials and felt that other architects lacked this feeling.

Frank Lloyd Wright's definition of architecture is:

I know that architecture is life; or at least it is life itself taking form and therefore it is the truest record of life as it was lived in the world yesterday, as it is lived today or ever will be lived. So architecture I know to be a Great Spirit. It can never be something which consists of the buildings which have been built by man on earth....mostly now rubbish heaps or soon to be. Architecture is that great living creative spirit which from generation to generation, from age to age, proceeds, persists, creates according to the nature of man and his circumstances as they change. That is really architecture (95, p. 18).

In his London lectures of 1939, Frank Lloyd Wright said, "Every great architect is - necessarily - a great poet. He must be a great original interpreter of his time, his day, his age." (79, p. 11).

His ideas had a profound effect upon the new American home of today, and by 1953 were reflected in one million houses a year (33, p. 106).

The Contemporary House

A good contemporary house expresses something vital about the age in which we live. It should keep pace with our 20th Century business and industry.

A Frank Lloyd Wright home even today still arouses interest. However, houses designed on Wright's principles of "organic" architecture, houses that seem to grow from the ground, are becoming less common as time goes by because more and more of his innovations are being used in today's homes. Also, today's architects, using Wright's ideas, are building homes that bring us closer to nature. Outdoor living areas, once restricted to such semitropic regions as Southern California, Arizona, and Florida are now considered an essential part of modern home design every where. Where climate is mild, patios and walled gardens are planned as an integral part of the house and even in colder climates, large indoor building areas reflect Frank Lloyd Wright's desire to build

homes in harmony with nature. Today, with the ever-increasing emphasis on indoor-outdoor living, it is difficult to think "house" without also thinking "garden."

In contemporary homes the indoors and outdoors merge in a sweep of window walls. Often the ceilings also are of glass. Living space flows from one area to another often unconfined by interior walls. The development of new materials made walls unnecessary as roof supports. The natural beauty of such materials as woods and rocks, etc. is now considered as important as the ornaments, cornices, and pillars in historical homes once were. Homes of today have undreamed-of conveniences, modern lighting, air conditioned heating and cooling, and complete sanitation. A hallway from back door to front to cool our rooms is unnecessary now due to the air conditioner. The thermostatically controlled heating system gives the whole house even temperatures. Electronically cleansed air keeps the most delicate hues brightly free from airborne dust. Wall to wall luminous ceilings softly supplement abundant natural light. Many hidden servants are to be had such as the "Vacu-Flo" built-in vacuum cleaner. These are found in each room. The soil collected from each built-in vacuum goes



Figure 3. A Frank Lloyd Wright house built for the Quentin Blairs of Cody, Wyoming.



Figure 4.



Figure 5.

Two other views of the Quentin Blair home which shows characteristics of a Frank Lloyd Wright house.

through pipes to one area. Here it may be cleaned out at regular periods. Television, home music, and home movies are fitted into the walls along with the heating and plumbing. Working or storage walls are designed to liberate living space. Richly patterned woods are often used for these working walls.

Today the entrance hall, living space, dining space and kitchen may all be one area. Room dividers are very popular as separations. They may be taken down or put up depending on the activity for which the area is to be used, allowing home space to be adaptable. Gay prints and fabrics of coarse, loosely woven textures are often being used as dividers.

Open plans call for floor coverings other than wall-to-wall carpeting, since certain areas will become traffic lanes, and wall-to-wall carpet cannot be turned to distribute the wear. A solution for this problem has been reached in many homes by having the same kind of flooring throughout the house. Cement, terrazzo, flagstone, wood parquetry, asphalt tile, rubber tile, vinyl plastic tile, or cork, all offer special advantages. Rugs are often used to accent certain small floor areas to add color and contrast or

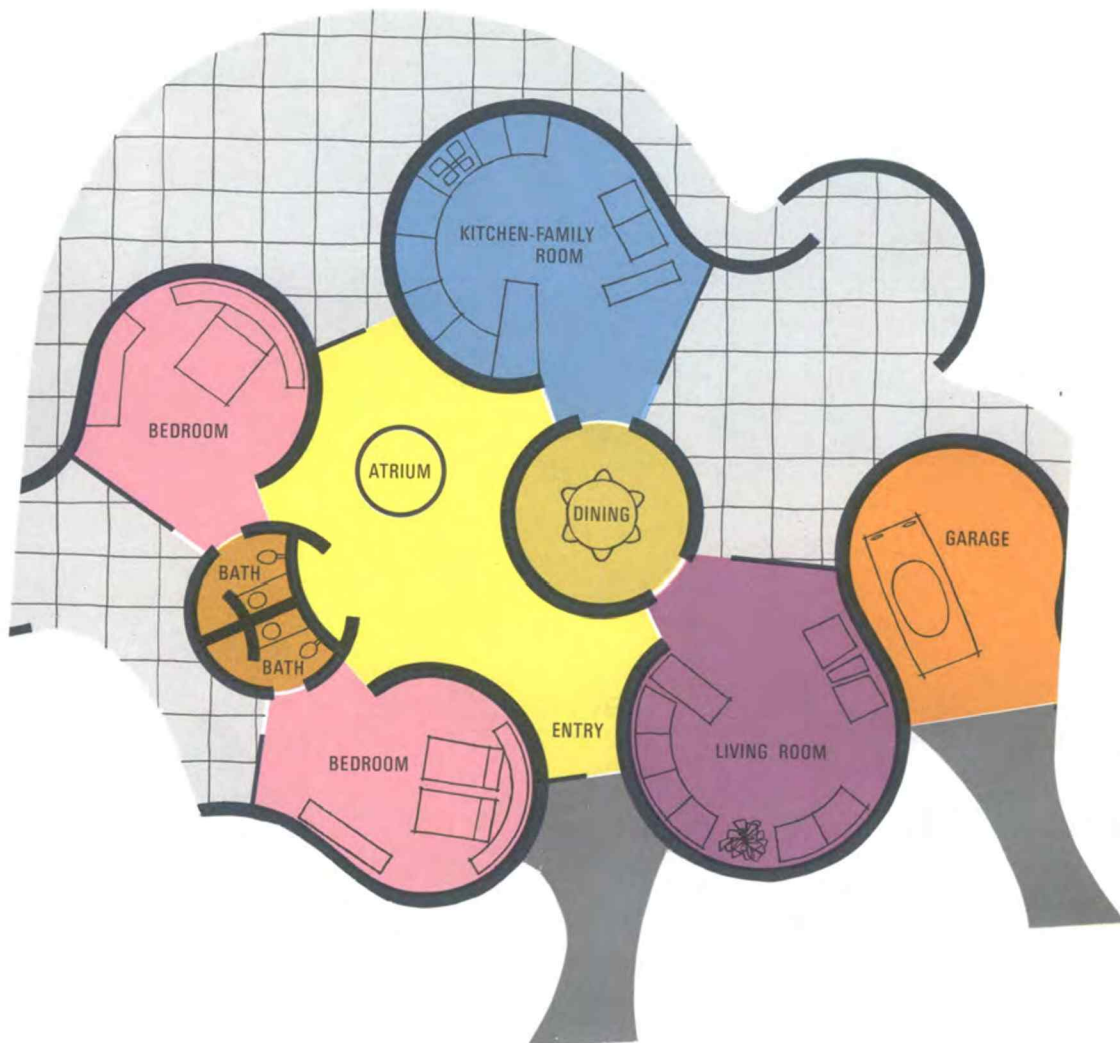


Figure 6. Floor plan - Century 21 Home of Living Light, Seattle World's Fair, 1962.



Figure 7.



Figure 8.

Frank Lloyd Wright's idea of allowing light into our homes, is carried out in different forms in our contemporary homes of today.
Century 21 - Home of Living Light, Seattle World's Fair, 1962.

to make a particular grouping more important in the room composition. The relative smallness of these contrast areas in relation to the whole living space usually allows brighter rugs to be used as an accent. These accent rugs are being machine made to resemble the beautiful hand woven rya rugs. Bittan Valberg helped Cabin Crafts Company convert her designs into machine designs. These rugs can be the whole center of room interest. Some of them are so beautiful that they are being used as wall hangings.

Huge window walls may give a room an attractive natural picture, which often serves as a mural. Such windows are left undraped to allow a view of the ever-changing scene. When these same windows open on a view we want to shut out but still allow light to enter, they may take the attractively draped man-made sheer fabrics because of their easy care, durability and insulating qualities. Fiberglas is particularly excellent for this type of casement. Draperies of loosely woven, coarsely textured fabrics with a hand-woven appearance, are popular in rooms with a wood and rock finish.

That draperies should be in harmony with the surroundings is a maxim of Frank Lloyd Wright. Harmony is achieved through

keying the color, texture, and patterns of the draperies with the materials already established in the home.

Cotton, linen and rayon are the most widely used fibers in the upholstery field because they are less costly than the more durable fibers such as wool and mohair. Nylon is an excellent upholstery fiber, strong, easily cleaned, but at present more costly than most other upholstery fibers (77, p. 248).

Designer upholstery fabrics for today's purposes may be blends of wool warp and orlon filler. Fabrics designed by Edward Wormley for upholstery or drapery use also blends of natural with synthetic fibers. He has used spun rayon, linen, cotton, and spun silk to make unusual texture effects.

Two homes of interest are "the American Home of the Immediate Future" and the "Century 21 Plywood Home of Living Light" now being shown at the 1962 Seattle World's Fair. Both of these homes were built on the theory that in the future, more and more people must be squeezed into less and less land and gardeners and domestic help will be harder to find. "The American Home of the Immediate Future" is built of properly proportioned modules of living space units, each room having its own private patio. The center of the modules has



Figure 9.



Figure 10.

Color is being exploited in contemporary homes today as never before. Illustrations are rooms in Century 21 - Home of Living Light, Seattle World's Fair, 1962.

Figure 11.



Figure 12.

Floral print drapery used as wall dividers. Shown at Century 21 - Home of Living Light, Seattle World's Fair, 1962.



Figure 13.



Figure 14.

Wall dividers made from fabrics. Frederick and Nelson Co., Seattle.

a large patio upon which all window wall areas open giving the home complete privacy. The "Home of Living Light" is built around the same idea, a home without surrounding property. It is shaped of interesting circular modules with the patios inside the main walls of the house to allow for outdoor living. It offers privacy for every member of the family, providing them with a view of the outdoors, yet effectively shielding them from the neighbors. This home differs from "The American Home of the Immediate Future" in that it is built on the open plan, using room dividers of gay floral print fabrics to divide room space. Beds can be folded up and room dividers removed allowing a variety of uses of space in the home. Fabric colors used for home furnishings are very vivid but are used in amounts that accent the brown of the beautiful plywood walls.

In contemporary homes, fabric is used in conjunction with the glass wall as a method of heat control. It is also used to filter light, to let it in or shut it out of the house. Fabric is used to insure privacy, to deaden sound, and to partition one space from another. In short, it serves as an architectural element (77, p. 250).

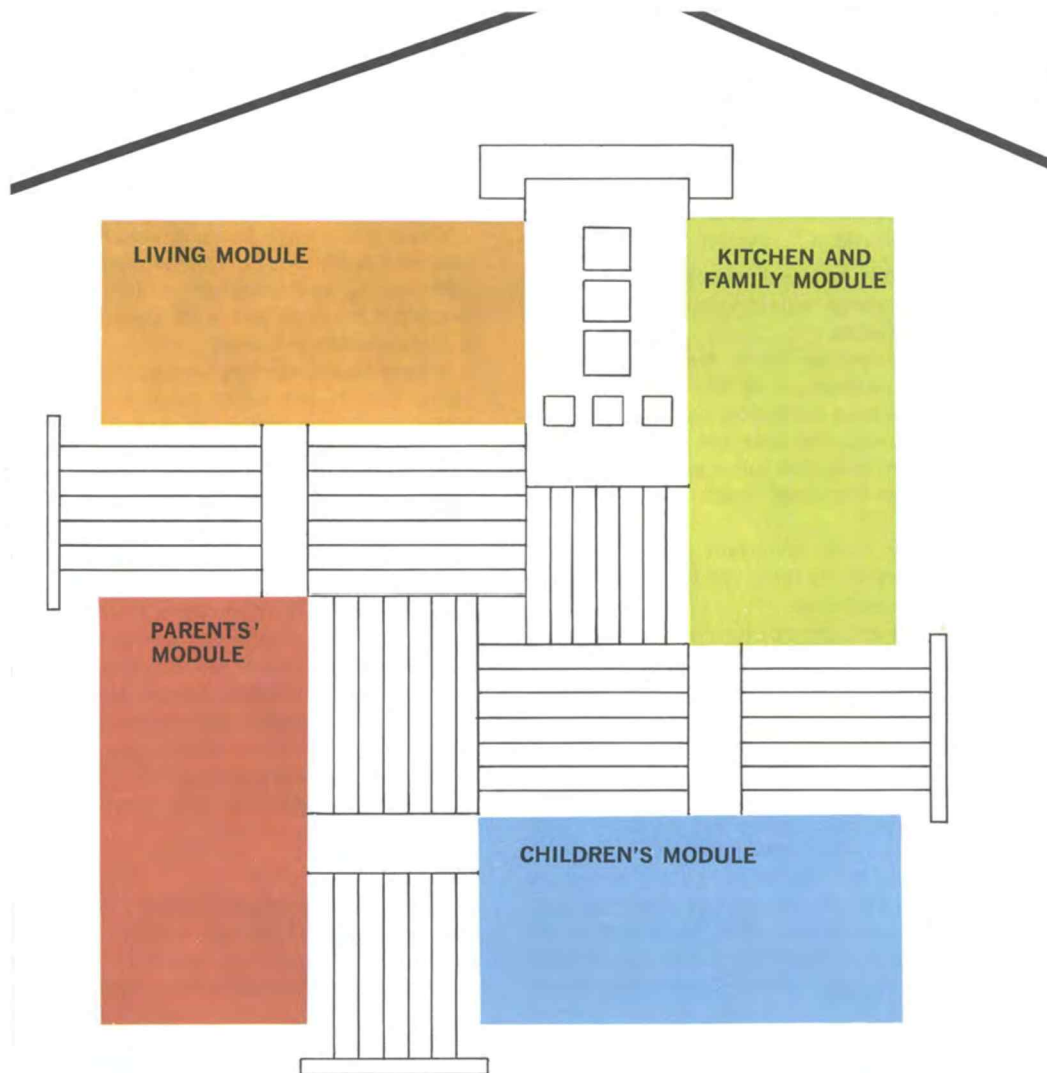


Figure 15. Floor plan - The American Home of the Immediate Future, Seattle World's Fair, 1962.

Figure 16.



Figure 17.

This home offers family privacy within a limited land area.- The American Home of the Immediate Future, Seattle World's Fair, 1962.



Figure 18. The window walls open out into a central patio bringing the outdoors into the living area - The American Home of the Immediate Future, Seattle World's Fair, 1962.

Political-Economic Effects--The Emerging Consumer

During World War II the United States sent millions of men into other countries of the world. These men, although living in critical times, learned customs of these nations. They sent home the the arts and crafts of other lands and acquainted their families and friends in the United States with these arts. This all had a marked influence on our tastes as consumers and as a result home furnishing fabric designs have since been influenced by the art of other countries.

The War proved a great advantage to American women, for they were able to work in the productive activities of the nation and many of the barriers that had restricted the occupations of women were removed. It carried American women nearer to the equality of men and gave them a taste of added income and a higher standard of living. The American woman enjoyed her freedom so much that after the War, she chose to stay on working outside of the home. She has now become the aggressor in the home, for approximately an estimated sixty percent of the money spent in the home is spent by

the woman. Women have gained more authority over the appearance of their homes than they have ever had before. They do the selecting of the furnishings that go into a home and usually have full say. Their purchasing power as consumers has become greater.

After the War men coming home from the service were given the opportunity of furthering their education through the G. I. Bill of Rights. Men received educations that they could never have otherwise afforded, as many of them were married and had children. Many doctors, dentists and teachers, etc. received their training through this bill. This gave them greater purchasing power and a much higher standard of living than these families would otherwise have had.

Labor unions bringing about a shorter working day and week with higher salaries combined for unskilled labor have increased the standard of living and leisure time for this group, and have also produced a greater purchasing power consumer.

Many families are moving from the farms toward urban areas, as they want a taste of this prosperity that the farm wasn't giving. Their purchasing power is different in the urban area from what it

was on the farm. They use a greater part of their purchasing power for home furnishing products, because their lives and homes are different in the city. On the farm more money went out to the business of farming than it did for home furnishings.

The great increase of consumer credits, the purchase of so much down and so much a month has given the consumer greater buying power. He can purchase large items that he couldn't possibly afford otherwise. Whole houses may be decorated and furnished with so much down and so much per month. Together with the above reasons; a higher birth rate, a lower mortality rate, and greater longevity have created a mass consumer which has developed as never before.

Along with this mass consumer consider these achievements of our modern world:

- (1) Atomic power may be used for manufacture on a virtually inexhaustible scale.
- (2) Cybernetics gives the power of machines to think like men.
- (3) Macromolecular Chemistry enables us to build new materials with pre-determined character by synthesizing the chemical units.

This mass consumer has made it possible for designer houses and manufacturers to afford to go all out to develop new fibers, finishes, dyes and special styling to please him.

The consumer's interest in better home furnishings and his willingness to pay more for them was one of the drapery trade's explanations for jobber willingness and even eagerness to get higher priced draperies for this year's selling.

New Trends In Home Furnishing Fabrics

New Fibers Used for Home Furnishing

Due to the fact that the domestic servant is now a person of the past and that more and more homemakers are taking employment outside of the home, the trend is towards "self-service" in the home for the members of the family. Children are being taken more into consideration, and modern thought is that the home should be a pleasant environment for them. In order to get enough spare time to enjoy and keep up a home, the homemaker must furnish it practically.

Man-made fibers in the field of textiles in everyday use are performing wonders when it comes to saving time and labor. As in

natural fibers there is no one fiber ideally suited to every purpose, but each has its own strengths and weaknesses.

Nylon is known for its outstanding strength. It is slow to soil and retains its original shape permanently. It deteriorates in the sun, but resists abrasion (17, p. 258). Nylon has a pleasant natural luster and is used in rugs, upholstery and draperies (84, p. 183-185).

Orlon feels warm to the touch, is soft and dries like wool, is tough, has good elasticity, and is moth and mildew resistant, as are the other synthetics. It has an excellent resistance to degradation by sunlight (17, p. 295). Orlon is used for curtains and blankets. (84, p. 191-192).

Dacron is a fabric of low moisture regain and high strength; it is unaffected by moisture, sheds wrinkles and resists stretching, and is one of the best of all fibers for "wash and wear" due to crease-resistance (17, p. 287). Soft, light weight, bulky and warm, it is used primarily for upholstery. It is also used in replacing cotton for filling in sofa and chair cushions. It is usually wrapped around foam rubber-filled cushions or used alone and leaves a soft and luxuriant effect similar to down (84, p. 205-206).

Acrilan is a strong and durable, washable, and fast drying fabric which sheds wrinkles and is highly resistant to sunlight degradation (17, p. 333). It is bulky but light in weight and is a warm material. Used predominantly in blankets, rugs and carpets, it resembles wool and has a semi-dull luster (84, p. 193-194).

Dynel, a fire resistant fiber, is washable, resists mildew, retains softness, will not shrink or stretch and absorbs very little moisture (17, p. 336-338). It is adaptable for fabrics from thick pile to sheer nets, but is generally used for draperies, bedspreads, upholstery, and blankets (84, p. 199-200).

Fiberglass is a glass fiber which is moderately strong, non-inflammable but sheds short fibers if abrasion occurs. It does not soil easily, nor deteriorate readily from sunlight, and the elastic recovering is virtually 100 percent (17, p. 402). It has a cold, hard slippery texture and is primarily used for curtains, draperies, lamp shades, and tablecloths. At one time fibers came only in white because they would not take dye baths, but now casement cloth and drapery fabrics in Fiberglass are available in colors applied before weaving. This new process was developed

by the Owens-Corning Glass Company and has a new range of texture and color. These textures can be had in sheer boucles, marquissettes, woven stripes, plaids or nubby weaves such as tweeds (84, p. 228-230).

The impact of man-made fiber fabrics in the home is great. Fresh styling, brighter colors, longer wear are being brought to home furnishing fabrics by man-made fibers. Manufacturers have their own special testing laboratories in which their scientists are constantly trying to improve these fibers in strength, fade resistance, and fabric finishes, to make them the loveliest, sturdiest and most practical fabrics possible.

A home can now be entirely furnished with man-made fiber fabrics. However, there are no miracle fibers. The only miracle is the overwhelming variety of available fibers, each with its do's and don'ts. The encouraging factor is that because of the variety of choice, there does exist a fiber, which if properly selected, will do the job required of it, and we must exercise great prudence in our selection. One must first consider the label for it is the only available source of information about any fabric which one may

choose. In making a selection one must have an understanding also of the causes of deterioration of the fibers. The amount of exposure to sunlight is the most important form of deterioration that must be considered. If the sun shines directly on the fabric for more than four hours a day, it is classified as heavy exposure. The only fibers recommended to hold up under these circumstances for casements are fabrics of glass (76, p. 111-113). In average casement exposure, when sunlight is filtered or reflected rather than allowed to directly strike the surface, fiber fabrics of glass would last longer. Fabrics of rayon, acetates, Fortisan, celaperm, linen, chromspun, or cotton will hold up best if woven into a heavy fabric, since shears deteriorate faster (76, p. 111-113). Minimum exposure, which includes heavily shaded areas such as interior hangings or wall dividers, will take any type of fabric.

Another important consideration when one is selecting man-made fibers is the dimensional stability. The trade name for sagging, hiking or shifting is "up and down" (76, p. 111-113). If threads are too fine for the weight of a bulky fill, sagging will

occur. A fabric will last longer and sag less if the warp and fill are of a more even weight. The "up and down" motion is the result of atmospheric conditions. When humidity is high, many fibers absorb moisture. This swells the fiber, and causes the warp to pull up (76, p. 111-113). When it is dry, the weight of the fill will drag the fabric down, usually in an uneven way. It is best to select a fabric of 100 percent stable fiber or one which has a warp in a blend of a fiber that is stable. Some examples are; glass, Dacron, acrylics and linen. Most cellulosics will hike and sag under damp conditions (76, p. 111-113).

In brown or yellow streaking the cellulosics are more susceptible. It is the result of the finishing processes and the oxidation of the organic material of the fibers.

Wilting in hot humid weather will occur less in tightly constructed and crisp fibers. A tightly spun linen is a good example. Batistes have the lowest performance rate (76, p. 111-113).

It is in the sheer, elegant, transparent curtains that man-made fibers have won their greatest acclaim. The aesthetic qualities of

the man-made fibers appear best in transparent casements. There is an extremely fascinating play of daylight which one has the advantage of enjoying through the transparency of man-made fiber casements. As the fibers are very strong, it is easy to spin them into fine yarn counts which will not break down in the loom. These curtains are easy to wash, and dry quickly, and the resiliency of the fiber makes it unnecessary to iron them.

Man-made fiber casements can be heat set and the pleats are permanent. Pleating effects in casements are quite new; they were first introduced by Jack Lenor Larsen, when he worked with Astrid Sampe doing the interior of Dag Hammarskjold's Library in the United Nations Building, which was opened on November 16, 1961. Along the full length of the inside wall hang pleated casements of white man-made fibers, designed by Jack Lenor Larsen. Astrid Sampe designed the green and white rya rugs.

Glass-fiber fabrics may possess the soft drape of silk. They possess a beautiful mother-of-pearl lustre, the reflection of which gives the room an exceptional beauty when light shines through it. They are practical in that they cannot burn or become degraded

from intense sunshine, neither are they affected by moths, grubs, or other insects, and they are dirt-repellent. Glass-fiber fabrics can be readily screen-printed. Many homes have opened their doors to these textiles. They are especially adaptable to large glass walls in which the light is needed but not the view outside the window.

Man-made fiber rugs and upholstery can be shampooed. Scatter rugs may be machine-washable. Casement curtains, if made from glass, can be washed without ironing. In upkeep man-made fibers have been a boon to the housewife, especially to those with large families. They have not only saved time but also expense in cleaning bills, and manufacturers are working constantly with designers and science technicians to improve these man-made fibers in strength, fade resistancy, styling and fabric finishes.

Wash and wear fabrics have not only been developed for clothing but also in drapery materials. DuPont advertises "wash and hang" 100 percent Dacron tissue poplin casements and draperies in a variety of prints and patterns (91, p. 26-28).

New Finishes

For over thirty years, water repellent finishes have been applied to textiles to provide protection against rain, and to provide resistance to water-borne stains. However, the conventional water-repellent products do not resist oil-borne stains, and it was not until a few years ago that such oil-resistant finishes were introduced.

Some home furnishing fabrics today, in the better grade lines, can be purchased with finishes that give them a repellency to oil-borne and water-borne stains in conjunction with the established automatic-washable, little-or-no-ironing features of the fabrics. In addition to these finishes certain fabrics may be given a finish that will flameproof them.

Joseph Bancroft & Sons Co. have been licensed by Minnesota Mining and Manufacturing Co. to apply "Scotchgard" stain repellent to Bancroft decorative fabrics. The repellent is being applied to Bancroft's "Everglaze" and "minicare" fabrics which already have the established automatic-washable, little-or-no-ironing features (27, p. 24).

As a result of these endeavors a wide range of finishes has been developed, among them are finishes that give fabrics characteristics that enable them to resist fire, repel water, give a change of odor, give additional strength, and repel soil and oil. However, the chemists are still at work to improve what has been accomplished and to further research in this field. Some of the new synthetic finishes are the following:

Scotchgard is the brand name for a stain repellent which is a fluorochemical treatment for fabrics. It enables fabrics to resist water-borne stains which are based on liquids such as milk, ink, and party drinks. It also gives fabrics resistance to oil-borne stains brought about by oily liquids such as salad oil and motor oil. Because the individual fibers are protected, household dust and soil tend to "sit up" on the surface of the fabric, the company advertises it as the "locked in, 3-way protection" (85, p. 3).

Sylmer is the brand name for a water repellent put out by Dow-Corning Corp. Its textile finishing agents are based on silicone resins. Sylmer contains the water resistant qualities of

silicone resins. It is applied to fabrics without injuring the hand or appearance. Fabrics finished with this method repel water and water-borne stains such as coffee, soft drinks, and other "sweet" stains. Oily stains can be more easily and completely removed when fabrics are finished by this process. Sylmer-finished fabrics breathe, as only the tiny fibers are surrounded with silicone, and all air spaces between the fibers remain open. Sylmer also gives fabrics a greater degree of resistance to wrinkling and can be combined with Pyroset Do, Syncide, synbac, synset, synfirm, synfix and all non-chemical finishes (85, p. 5). This finish has been developed successfully for rug and upholstery fabrics.

Silicone finishes are among the most satisfactory as they give not only water repellency, but improved tear strength and abrasion resistance. Around each fiber, the silicones form a flexible film (84, p. 298).

Inpregnole is a brand name for a product of Warwick Chemical Company. This process impregnates a wax-type chemical formula into a fabric to achieve a high degree of water repellency. It is used whenever a high degree of water repellency is required. Wax

particles penetrate the fabric but leave no film to cover air spaces and prevent breathability. It provides semi-durable water repellency on cotton, linen and rayon fabrics without discoloration. It may be applied alone or in combination with syncide, synbac, synset, synfix and synscent and all non-chemical finishes (85, p. 6).

Aston is a brand name for a finish which has been developed by Onyx Oil & Chemical Company for processing on fabrics containing synthetic fibers. It provides a hygroscopic surface, which absorbs moisture from air. This surface allows the fabric to disperse electrical charges rapidly and to increase the moisture absorbability and thus gives to synthetics the more desirable properties of natural fibers. At the same time Aston-treated fabrics retain the important features of these synthetics such as shape retention, low shrinkage, high strength, and crease resistance. By reducing the tendency to static accumulation, Aston eliminates the attraction of lint and dust from the atmosphere. It prevents the clinging of fabrics one to the other as well as the hazards resulting from electrical sparks. It is highly durable to laundering

and dry cleaning. Aston may be applied alone or in combination with the non-chemical finishes (85, p. 7).

The following finishes are produced by Synthetics Finishing Corporation:

Syncide gives fabrics a hygienic protection treatment. This process retards, inhibits and resists the growth and action of fungi, mold, mildew and rot thus making fabrics rot-resistant. It also retards the development of odors due to bacteria and the like (85, p. 8).

Synbac is a surface coating of various adhesive materials that are applied on the back of fabrics of all kinds. It gives fabrics ravel-resistance, prevents yarn slippage, improves seam strength, and is easily cut due to better weave stability. It also gives increased abrasion resistance to the fabric face. Synbac fabrics provide a non-slip surface which prevents shifting of fabric on furniture. An improvement of hand without stiffening is also accomplished in this finish (85, p. 9).

Synset is a finish given by impregnating fabrics with thermosetting resins. This gives fabrics greater dimensional stability through control of shrinkage and stretch caused by atmospheric

changes and dry cleaning. It also retains the favorable characteristics of resiliency and crease-resistance. A more casual, attractively fitted drape than conventionally processed fabrics results (85, p. 10).

Synscent is an odor neutralizer. It neutralizes objectionable odors and prevents their appearance. It imparts, not one, but many pleasing fragrances to upholstery, draperies and all types of decorator fabrics, thus making them as pleasant to smell as they are to sight (85, p. 11).

Synfirm is a finish which imparts strength and durability to a fabric without altering the fabric's original appearance. It allows producers to make fabrics heavier, firmer or more resilient, depending on what is desired (85, p. 12).

Synsoft is a finish which performs in the opposite way to synfirm. It softens firm fabrics or minimizes the harsh effects of rough fabrics. A delicate look and hand to fabrics may be obtained through this finish without reducing strength or durability (85, p, 12).

Synfix is a finish that improves color bleed or wet and dry crocking of fabrics containing direct dyes (85, p. 12).

Pyroset Do is a trade name of a fire retardant finish. It is produced by the American Cyanamid Company. It has been tested and accepted by the New York Research Corporation for the American hotel industry, it has also been approved by the New York City board of standards and appeals; and the marshall of the State of California has approved this treatment on fabrics for use in that state. It may be applied to cotton, rayon, wool, mohair, or combinations of these fibers. It will not protect acetate, nylon, acrylic, or other themoplastic fibers; however, many of these fibers are basically non-flammable (85, p. 4). No finish is truly flame-proof; it changes the nature of burning, charring, or glowing, and forms a self-extinguishing margin around a burning area (84, p. 294).

An article, "Report on Casement Fibers, " (85, p. 4) stated the following on finishes:

It is not essential to apply finishes to casements. However, it certainly can do no harm to apply a Scotch-garding to such fibers as wool or cotton that attract dust. In some cases it does soften and improve the hand. It will make dry cleaning easier, as Scotchgard repels both oil and water based stains.

Styling

Due to the developments of new finishes, more of the natural fibers such as cotton, linen, wool and silk are being used by designers in the home furnishing fabric field; however, have reached a point where they are not only tough, impervious to stains and easily cleaned, but more important, they are finally really beautiful, appropriate and adaptable enough to take their place with the many different kinds of natural fabrics and materials. The better and well-known designers have accepted many of the synthetics. They show a choice to the designer not only of textures, but colors, patterns and weaves. Synthetics seem to belong now as much as silk, cotton, wool, linen and leather.

Designer fabrics by Jack Lenor Larsen make use of fibers such as cotton, linen, silk, and synthetics all combined at times with gold, bronze, silver or copper metallic threads. Because of plastic coatings, these metals or colored threads will not tarnish. The new improved metallic pigments and printing methods have given sturdier gold-and silver-printed fabrics with a durable glint. Also printed velvet is big news in decorating as it has been

developed to the point that it is hard wearing and has a protective finish.

Boris Kroll has recognized that in our time, every aspect of our lives is changing, and we have arrived at a point in the interior design trades where the American woman not only wants beauty, but she is demanding beauty with durability (10, p. 156). He has met this challenge through the use of man-made fibers blended with natural fibers.

Dorothy Liebes said in an interview about man-made fibers on May 25, 1961:

"These fibers have one great virtue. They are shampooable. Moisture does not penetrate and they dry in two or three hours. They also have enormous abrasion resistance" (24).

She also stated in Handweaver and Craftsman that:

"With all textiles at present, the problems of wear and maintenance must be carefully considered, in the light of the disappearance of servants in homes and the rise of labor costs elsewhere. The textile designer's problem is to produce the effect desired within these limitations. He must combine beauty with practicality, possible with the new developments in fibers" (22, p. 20).

Thanks to the developments of slim synthetic yarns, sheers have never been sheerer. The new look of sheers is a patterned

colored look, giving the see-through curtain more of a drapery quality than ever. The wealth of printed sheers suggests that one fabric may be both curtain and drapery; also, the glass curtain may be patterned and the drapery plain.

Like a barometer, home furnishings fabrics register the growth of new interests. Today there is a definite variety in the patterns and weaves of our fabrics. There are inspirations from the Orient, Scandinavia, Mexico, Morocco, Siam, and Java. There are floral compositions, geometrics, stripes in prints and in weaves. Fabrics are designed to have a painted look. Prints have the crisp hand-painted beauty, giving almost a dimensional color to pattern, like the real substance of pigment laid on a canvas. One can see the precious, custom-order look of batik and hand painted fabric in every type of pattern, from the oriental through the damask to the floral bouquet.

The same hand-made look is also to be found in the woven fabrics. There is a wide range of prints, weaves and yarns inspired by the hand-made look. A large proportion of them reveal a design approach directly or indirectly derived from hand-made

fabrics. It was believed in recent years that these subtle qualities in fabrics could not be produced by the machine and could not be seen in volume products. Today we have machines that think like men, and are able to produce these lovely fabrics with the hand woven appearance. There is a growing audience for these sophisticated product ideas in this country. These trends have influenced our modern designers because they are based on the craft of weaving a combination of appeals in construction, color, design and motif which can be easily adopted to modern machine production (29, p. 54).

Color trends are becoming more vivid. The large amount of wood and the neutral tones used in contemporary homes have brought about the need of bright colors in design for contrasts and accents. Colors are designed to go together in fabrics that were unheard of in the past. They actually fight one another, but it gives the fabric more life and brightness for accents. Color runs riot over flowered and striped cottons and cotton velvets to be used in small items such as coverings for love seats, sofa pillows, chair seats. The designers are exploiting color as they have never done before.



Figure 19. A wall hanging, used as an accent, on plywood paneled walls - The American Home of the Immediate Future, Seattle World's Fair, 1962.

Heavy-textured fabrics to go with the wood and rock in contemporary homes are also being exploited by designers. Loosely woven, heavy-textured fabrics are being used for room dividers as well as for draperies. Room dividers are being used more and more in contemporary homes because of the easy flow of space from room to room made interchangeable through the use of a divider.

The consumer, through his purchasing power, has endorsed these recent fabric trends. For this reason there seems no doubt that this trend is likely to continue.

Taste

Taste is defined by Webster as "the ability to notice, appreciate and judge what is beautiful, appropriate or harmonious; or what is excellent in art, music, decoration, clothing, etc." Taste is choice. Our possessions reflect our taste. We are constantly called upon to make decisions that give our taste away.

We are all consumers. Every time we make a purchase, however humble, we are consciously or unconsciously using our power to choose. Poverty of taste, like shortage of goods, narrows choice. It is the knowledge of the principles fundamental to good taste that determines the type of choice we will make. This knowledge must be acquired through study and observation for good taste is based on trained judgment. One must have the ability to distinguish between the well designed, distinctive and aesthetically satisfying, and the undistinguished commonplace. It is not only necessary to know the principles of good design but one must apply them consistently and wisely. Taste is

determined not by cost but by the quality of the objects chosen. Taste is molded, to a very large extent, by the things which surround us. The family taste is trained by the objects selected by the home maker. As we surround ourselves with beauty, art actually becomes a part of our lives and personalities. We learn to appreciate that which is beautiful. No matter how well trained the home maker may be in the knowledge of the principles of good design, there are usually limitations in her way. Her choices may have to represent a compromise between available goods at the particular time and place of purchase and the amount of money to be spent. However, if she refuses to buy what is available because it is not pleasing to her eye or does not fit into her way of life, she can, as a consumer, greatly influence the "trade."

One characteristic of taste is the awareness of and respect for the various influences on culture. A nation's taste is the measure of its culture. In America, our taste is conditioned primarily by the country's architects, artists, writers and intellectual leaders whose business it is to sell goods and services.

However, Ball, in The Art of Interior Design, states:

Creative artists and scientists are not the sole producers of a civilization. Pilots cannot steer a ship which harbors a mutinous crew. There must be directive from both the helm and the hold. This interpreter in the artistic world is the person of taste. Taste is the creative force which can alter the common mind to adjust to new levels of culture (5, p. 252).

When patterns of taste are dictated by purely commercial consideration this capacity is stunted, and nearly all taste must conform to the average, and therefore reflects mediocracy.

Good taste is traditionally the taste of the "upper" classes, the artistically proficient, or the learned. However, the taste makers of today are not only the educators, the intellectuals, the writers and the designers but also the manufacturers.

Richard Gump, in Good Taste Costs No More, states:

Manufacturers in all branches of the home furnishings trade, backed by their million-dollar promotions; are far more potent influences on our physical and mental habits, our emotions and tastes than all we may learn through schools, libraries, galleries or museums! They are the basic caterers of our culture, and whether we are to be cretins or creatures of refinement depends on our choice of their wares (41, p. 116).

Russell Lynes' book, the Taste Makers, points out that the history of taste in America has been a cycle of pretention and fantastic notions. The whole historical process is detailed from the emergence of the common man and public taste in the 1820's, through the growth of individual fortunes and private tastes of the latter part of the 19th century, to the corporate taste of today (62, p. 341).

In 1828, when Andrew Jackson was elected president, there came with him a new "age of the common man" and the beginning of the Age of Public Taste. Taste became everybody's business and not just the business of the cultured few. It was not until the common man became a buying power that the tastemakers, as we know them today, had any real function. They tried to discipline everyone to a higher appreciation of the arts and to nicer sensibility to their surroundings. They aroused public interest, but they found that Public Taste was not to be controlled. They then turned to Private Taste during the latter part of the 19th century. They aimed at individuals. The rich were selected as models. There is no easier or more pretentious way to spend money than on building palaces. The American millionaires, such as the Vanderbilt family, invested as much money in the erection of

dwellings as any of the royal families of Europe. During this period, the attitude of the architects toward their profession is reflected in the following quotation from Richard Morris Hunt.

The first thing you've got to remember, is that it's your client's money you're spending. Your business is to get the best results you can following their wishes. If they want you to build a house upside down standing on its chimney, it's up to you to do it, and still get the best possible results (62, p. 131).

"Glitter and Gold" was the foolproof formula. We see the popularity of overdecoration in all periods of prosperity. Gorgeousness was mistaken for good design and gold leaf for good taste.

Richard Gump, in his book Good Taste Costs No More, (41, p. 51) describes the 1893 Chicago Exposition where a group of eminent artists and architects sat at a council table and decreed that the best of all possible worlds was that of ancient Greece and Rome. They predicted that their re-creation of the "Classics" for the Exposition would seize the imagination of the country and become the fashion of the day. Sullivan, America's first great modern architect, whose own building was the most original contribution to the exposition, saw through their plan and recognized

the damage being done. He said it would last for half a century, and he was right, for its ghosts continue to haunt us to this day.

Andrew Jackson Downing called for the abolition of "poor and tasteless temples" and the substitution of "beautiful durable and convenient mansions," built in the Gothic manner (62, p. 21-337). Charles Lock Eastlake preached the need for "simplicity" and "sincerity." The arguments of the prophets of modern design, stressing suitable use of materials and expression of function in the hope of elevation of the mass taste, saw no results at that time (62, p. 97-337).

Coming up to date, the architect in the not too distant past didn't stand much more of a chance. The forces working against him for control of the public mind in the '40's and early '50's were too many and too strong. Taste was in the hands of one of the most powerful pressure groups of all time. The forces of advertising and merchandising, aided by radio, guided the major processes of creation. They determined all forms of useful and decorative design with one ultimate aim: To achieve the biggest

potential "sell." There were pressures on tastes from all sides.

In New York the fabric market has had two distinct groups, the "Uptown" group and the "Midtown" group. Traditionally the two have been worlds apart in taste. The "Uptown" group, catering largely to decorators, architects and designers, has had a simpler and more sophisticated approach to design. These decorator houses produced fabrics in relatively short runs and at high prices. The "Midtown" group, catering to the volume department store, was dedicated to long runs of fabric at popular prices. The "Midtown" market felt that it must give a lot of value for the money spent. This feeling was interpreted to mean that it must overdecorate its products. Until recently most "Midtown" converters did not feel they were doing justice to a pattern unless they designed it with as many as nine to twelve separate colors in addition to metallic gold or silver. Such patterns often enjoyed a run of up to a million yards. The converters' remarks were: "This is not my taste but that's what the public wants." The artists and designers who labored in this over-decorated group seldom had any conviction in their work (66, p. 62-67).

This is now changing; Dolph More, a converter from the "Midtown" group has broken with this tradition. His remarks are: "Popular taste is improving. It is now possible to sell to the mass market the type of design which was once considered the province of the 'Uptown' decorating houses (66, p. 62-67).

There is now a general belief that the level of public taste in America is rising (13, p. 114). Higher income and national prosperity have increased the contact of our people with the cultures of other lands. Through education and travel, public exposure to good taste and good design is influencing the rising level of popular taste. A good example of how "American Taste" is changing was provided when Chicago's State Street merchants decided to install new street lights. They looked at more than a hundred designs and hired experts to help them. Considerable "good taste" went into these lights and the merchants really tried.

This will continue, for it is through our young people that this country grows. Young people have different goals from those of their parents; they have the advantage of a good education,

which helps them to become interested in art, literature and in all facets of culture. They have the money to travel and they are traveling. They have never known poverty; therefore, they do not see the making of money as a life goal. They are seeking broader horizons and different satisfactions, and as a result are developing finer tastes.

When we speak of taste in the home furnishing fabrics field we mean to describe an attitude, a point of view, a direction which has been maturing slowly over the past decade but one whose cumulative impact has had the effect of revolution in public taste. This revolution is the latest in a continuing series of revolutions which have brought numerous changes to fabrics for household uses within the last few decades. There has been a revolution in fibers based on new macromolecular chemistry; a revolution in finishes based on new resins and silicones; a revolution in color based on improved dyes and a more sophisticated level of taste; a revolution in wash and wear based on new synthetics and combinations. The revolution in taste is no less important than these because through it the American textiles

industries are bringing more exciting fabrics within the reach of more people leading us to a new epoch of greater culture, sophistication and abundance in the American way of life (29, p. 55).

Paul McCobb says in his article "Designer Paul McCobb Speaks for Contemporary," (64, p. 32-33):

"Taste in the country has improved. There are more people today with good taste than 20 years ago. This is because everybody honestly wants to live better. Everybody tries--even though some don't always make it. This is on the plus side. Contemporary design continues to improve each year and is now better than it ever has been before. It will be, in the years to come, even better design in form and shape."

CHAPTER IV

CONTEMPORARY HOME FURNISHING
FABRIC DESIGNERSDorothy Wright Liebes

Dorothy Wright Liebes was born in Santa Rosa, California, a daughter of a teacher and of a chemistry professor who later turned rancher. She studied art at the University of California where a teacher remarked that everything she painted looked like a textile and advised her to study weaving. Taking her advice she put herself through college by weaving baby blankets and other small woven articles and selling them from door to door. After graduating from the University of California, she attended Columbia University and received her Master of Arts degree. She taught art for four years at the Horace Mann School and Columbia University and then started designing textiles. She studied textile design in Paris, Guatemala, Mexico, and Hawaii. In 1928 she married Leon Liebes, a San Francisco merchant, and moved to San Francisco where she opened a handweaving studio. From the beginning she has developed her influence so widely that there are few fabrics that have been put on a loom which she has not influenced. She has exploited colors so well that when our leading designers are asked to predict colors for the next season, they



Figure 20. Dorothy Liebes, top weaver and designer, shows curtains she designed for the theatre at the United States Pavilion, Brussels World's Fair.



Figure 21. Dorothy Liebes at her looms working on curtain she designed for theatre at the U.S. Pavilion, Brussels World's Fair. Sample of one type of gold Lurex she used in the curtain.

refer the question to Dorothy Liebes. She was the first textile weaver to insist upon the use of combinations of fibers and materials in fabrics, believing that a richness and depth of quality is achieved through this blending process. She set a distinctive style by using clear vibrant colors, elaborately textured surfaces, and added luxuriant effects with bulky yarns. She used combinations of yarn and fiber that had never been thought of before, and created new dimensions in metallics opening a whole new concept of what could be done on handlooms. Her colorful blinds and screens not only combined bamboo and wood strips with brilliant glittering warps, but made use of plastics, aluminum and other previously unused materials. The introduction of these fabrics throughout the country brought both handweavers and designers out of their traditional ways.

Mrs. Liebes moved her entire studio to New York to be closer to her major markets, and it is here in New York that she has achieved even greater success. "Half the inspiration for designing textiles came from architecture," Mrs. Liebes says. Some of her architectural commissions have been a curtain for the theater on the Frank Lloyd Wright estate, Fabresen, in



Figure 22. Hand-woven fabrics designed by Dorothy Liebes for the late Frank Lloyd Wright.

Arizona, as well as other commissions for the late Mr. Wright. She has designed fabrics for numerous hotels, banks and other types of public buildings including the Plaza Hotel in New York. The S. S. United States gave Mrs. Liebes an interesting commission in which she worked with a team of interior designers in furnishing the observation lounge. Taking Frank Lloyd Wright's advice on the color scheme, which is to take your design from your environment, they chose blue-greens of the ocean. Previously blues and greens had not been used together by designers, but they accepted Mrs. Liebes' suggestion for a kelly green carpet. Although at first people rejected it, Mrs. Liebes is told that the lounge sells the boat. The draperies were of royal blues, greenish blues and bristol blues with touches of purple, and turquoise with glints of blue and green Lurex. From this unusual twinning of tones of blue and green came a major decorating trend. She had shaken the conventional concepts of color. Queen Frederika of Greece liked these draperies so well when she sailed on the S. S. United States that she now has similar draperies in the United States Lounge in the palace theater at Athens. Mrs. Liebes was given permission by the United States Lines, to hand loom an identical set for her.

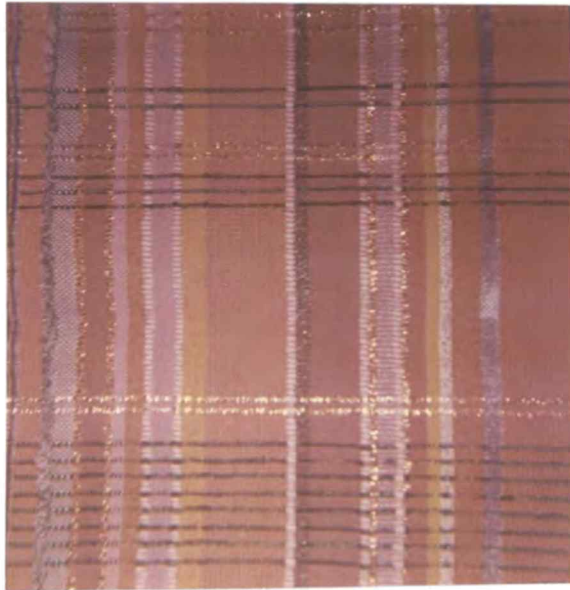


Figure 23. Dorothy Liebes' use of color, texture, and sense of scale.
U.S.A. International Fabric Display.

Goodall Fabrics Company became interested in her fabrics and hired her as a designer and stylist to experiment with some of her characteristic textures on power looms. These fabrics have won her wide acclaim and several awards. She developed the color range for Lurex, which included pastels as well as brilliant colors in addition to true metallic colors. It is believed that the metallic fashions were set for the handweaver and the trade by Mrs. Liebes.

Working for E. I. du Pont she had a hand in the development of orlon when the wool shortages appeared. In addition, she has produced from eight to ten new designs a month since 1955 for their Textile Fiber Division.

One of her most outstanding assignments and accomplishments was the draperies for the United States Pavilion at the Brussels World's Fair. She designed the curtain for the Theatre of the Performing Arts and made it in a basket weave of white cotton warp with five types of gold Lurex in weft. Edward D. Stone, architect of the United States Pavilion at the Brussels World's Fair commissioned Mrs. Liebes to do the job and the Dobeckmum Company of Cleveland, Ohio, manufacturers of non-tarnishing

metallic yarns, cooperated with the U. S. State Department in supplying 140 pounds of Lurex. It took 1,200 man-hours of Mrs. Liebes' weavers' time to produce 22 panels, each 9 yards long, 54 inches wide. They were joined together to form the curtain, which was luxurious and dramatic in its sweep. It went on the 74-foot stage of the 1,100 seat theatre with a color scheme of gold, white, and red.

No handwoven fabrics are now coming from the Liebes looms except when Mrs. Liebes does a design for exhibitions or occasionally for a friend. She is engaged almost entirely as a designer, stylist and color consultant for different manufacturers and institutions. For instance she supplies 12 designs a month to Bigelow-Sanford Carpet Company, which has seven mills in operation, and in addition is in demand as a lecturer at museums, universities and colleges.

Edward Fields, New York, is now producing all the Liebes blinds and screens at his plant in Puerto Rico.

Awards and Contributions

Dorothy Liebes' contributions and awards listed below were provided by her company 1962. Textile designer and color consultant to:

Goodall Fabrics and Palm Beach Company 1940-54

Kenwood Mills (blankets) 1951-55

Dobeckmun Co. 1950-58 and the Dow Chemical Co. 1959 -
Stylist of Lurex metallic yarns

United Wallpaper Co. 1948-55

Galashiels Mills, Scotland (tweeds) 1948

H. J. Herzman, Inc. (woven scarves) 1948-49

Simtex Co. (ticking & tablecloths) 1940-45

Leacock Co. (tablecloths) 1945-56

Columbia Mills (venetian blinds, screens, divider walls)
1950-57

Jantzen Knitting Mills (colorist for sportswear) 1954-58

Collins and Aikman 1955-57

Quaker Lace Company 1955-58

E. I. du Pont De Nemours & Co. Textile Fibers Department
1955 - Fabrics Sales Division 1960.

Bates Fabrics, Incorporated 1957-58

Derry Damask Beadspreads 1958

Forstmann Woolen Company 1957-58

Pomona Tile Company (ceramic tiles) 1957-58

Eagle-Ottawa Leather Company (colored & woven
Leathers) 1957-59

Bigelow-Sanford Carpet Company 1958-

Chas. R. Gracie and Sons (grasscloths) 1961-

Beacon Mfg. Co. (blankets) 1960-

Exhibitions: 25 museum and gallery shows, including: compilation of synthetic fibers fabrics show for Department of State for Izmir Fair, Istanbul. Museum of Modern Art Good Design Shows 1950, 51, 53, 54, 55. American Pavillion, Brussels World's Fair 1958. Golden Gate Exposition, San Francisco 1939-40. Fabrics International 1961.

Awards: Lord and Taylor, 1938. Nieman Marcus, 1938. Paris Exposition, 1937. American Institute of Designers, Golden Gate Exposition 1939. American Institute of Architects Medal for Craftsmanship, 1938 and 1947. American Plastics 1941. American Institute of Designers 1942, 1946. American Institute of Industrial Designers, 1943. L. L. D., Mills College 1948. American Women's Association 1950. National Business and Professional Women's Association 1950. Architectural League 1950

United States Department of State, 1958 (for Brussels Universal and International Exposition).

Director: California School of Fine Arts, San Francisco, Decorative Arts Exhibit, 1939, San Francisco World's Fair. Montavlo Foundation Saratoga, California. San Francisco Museum of Art. Museum of Contemporary Crafts. National Design Center. "California Arts and Architecture" (published). US Finishing Corporation. Century Federal Savings and Loan Association. International Silk Guild. Arts and Skills Division, American Red Cross.

Board: The Fashion Group, Incorporated. National Home Fashions League. Young Women's Christian Association of New York City. Parsons School of Design. Museum of Modern Art. Art Board, Scripps College.

Advisory Committee: Industrial Design Division, Brooklyn Museum. Textile Advisory Commission. Rhode Island School of Design. Visual Arts Commission, United Nations.

Juries: Robineaux Show, Syracuse, New York. Ceramics Show, Syracuse Museum 1950, 1958. Lord and Taylor Design Contest. Textile Show, University of North Carolina. Jury

for industrial and Applied Arts, Institute of International Education
1956 - and Chairman 1960, 1961. Dallas Art Museum, 1961.

Memberships: National Council on the Arts and Government 1957-.
Benjamin Franklin Fellow, Royal Society of Arts, American
Institute of Designers. Honorable member American Institute of
Architects. San Francisco Art Association. Museum Association of
America. American Arbitration Association. Architectural League
of New York. Phi Beta Kappa, Alpha Theta. Century Club of
California. Women's Faculty Club, University of California. The
Cosmopolitan Club.

Boris Kroll

Boris Kroll, one of today's master weavers and top designers, started his career in his family's modern furniture factory where he learned the manufacturing business from brads to braid. This has been an aid to him in knowing what a manufacturer needs in fabrics from the structural view point. When he discovered that his personal leaning was in the fabric end of the business, he made a complete study of available fabrics and their sources. As a result of this study, he discovered that there was very little design suitable for modern furniture. He spent the next six years studying handweaving and the hand-woven fabrics. In 1934 at the age of 21, he left the family furniture business and started out on his own, designing and manufacturing hand-woven fabrics for the upholstery and drapery industry. It wasn't long until his influence on these industries was felt. He really brought about the birth and development of contemporary furniture and furnishings. His fabrics were shown at the 1939 World's Fair, were used on the S. S. America, and have been used in many other notable decorating arrangements. His daylight hours



Figure 24. Boris Kroll, Master Weaver, of Boris Kroll Fabrics, Inc.

were filled to capacity with handloomed fabric design and production. But regardless of this full life, he was so interested in the Jacquard loom for drapery and upholstery fabrics, that he turned his great potential for weaving to the power Jacquard. His background of study and experience with the handloom, plus his knowledge of yarns and dye was valuable in making this change.

He developed coarse weaves, novelty yarns in brilliant colors, all of which brought him fame and gave birth to a new form of textile production.

He was annoyed at the fact that he was constantly being copied. His opinion on this is: "It takes a great deal of courage and finance to go up the creative road. It takes very little of either courage or finance to copy the results of creative doers."

"Nothing stifles creative development, in any field more than the knowledge that in the end the creator's product is going to be copied and general acceptance given, by the trade, to the copyists. This is a disease that must be controlled some way" (21, p. 82).

In 1943 he joined the United States Army Engineers, making it possible for him to circle the entire globe. He was with a

team who made rubber terrain models in India, Burma, the Philippines and Japan. This influenced his designing a great deal and after this experience he went back into his civilian business and during 1946 and 1947 he designed fabrics for eight large ocean liners. His fabrics and designs have won him many awards in Good Design Exhibitions sponsored by the Museum of Modern Art. During this period he also held one-man exhibits throughout the country which educated the general public to an appreciation of better contemporary fabrics in their homes.

In 1953 Boris Kroll presented his Caribbean Series to the trade. He received his inspiration for these from foliage and fruits of the Caribbean Islands. It met with great success among homemakers who were seeking a fresh look in their home furnishings. In 1954 he brought out the Orient Series. These were based on the art and colors of the Far East. In 1955 came the Mediterranean series, which is Boris Kroll's largest and most luxurious collection. It combines the vibrant colors of the Middle East with the design motifs of the Mediterranean area. Each year he brings out a new and exciting collection.



Figure 25. "Chartres" from the Boris Kroll Transitional Collection. Awarded Citation of Merit, 1960, by American Institute of Designers.

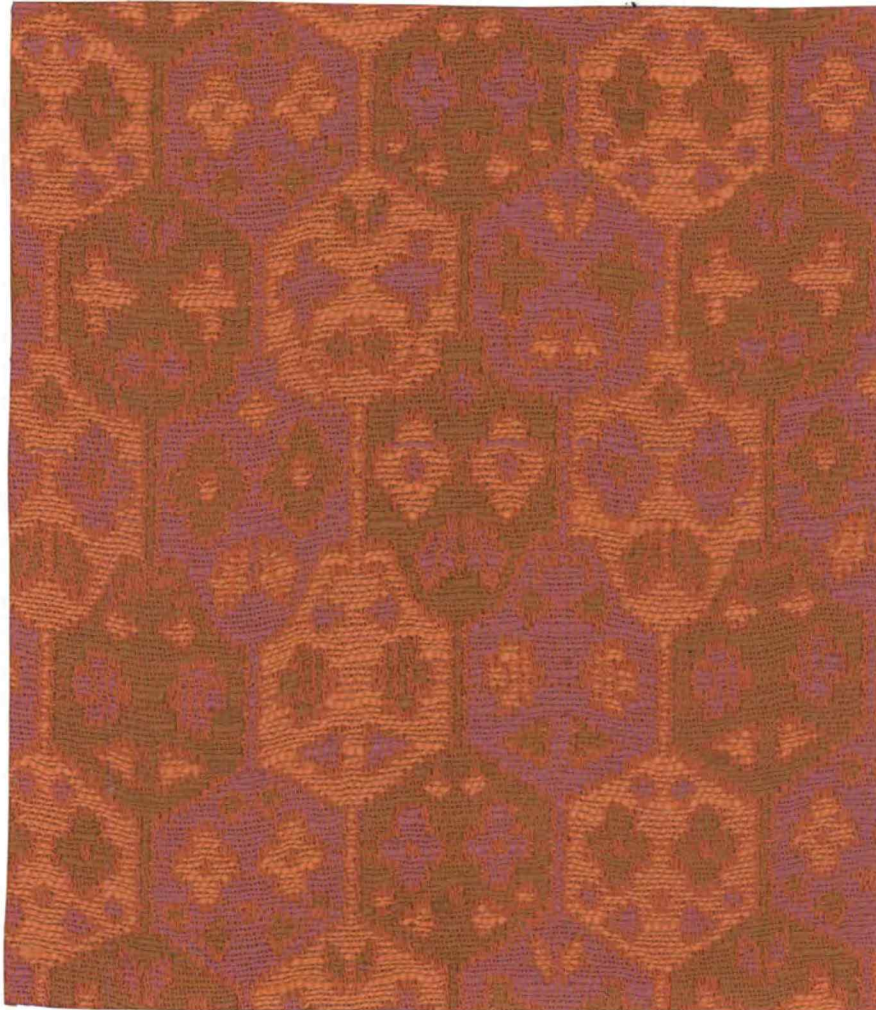


Plate 1. Chartres - from the Boris Kroll Transitional collection, awarded Citation of Merit 1960 by the American Institute of Decorators \$20.00 per yard.

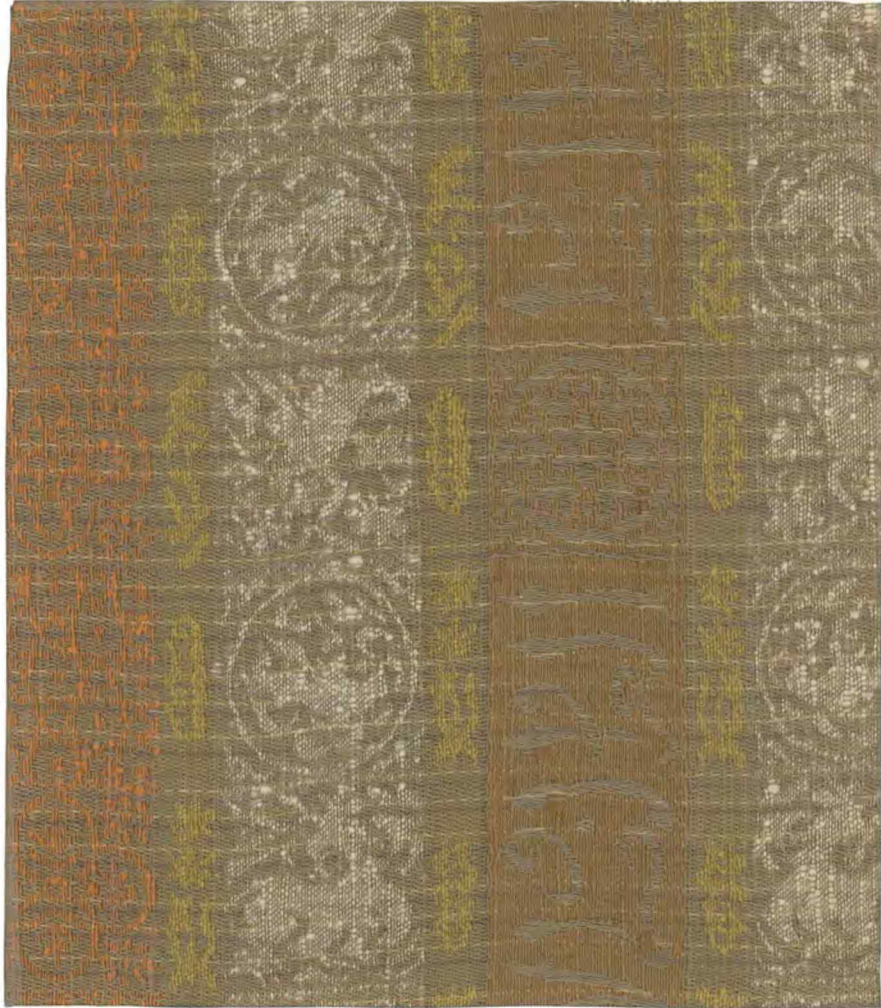


Plate 2. Arabic Stripe - 78% Rayon and 22% silk, designed by Boris Kroll.

This year of 1961 and 1962 his Ariel Jacquard-woven tapestry "Awari" won the International Design Award, presented by the American Institute of Interior Designers for research and development in the interior furnishings field. This collection is on display at the Interiors Pavilion at the Seattle World's Fair. The inspiration for this design was taken from the Sun Dynasty (960-1280 AD) earthenware storage jar lent to him by Warren E. Cox. It is a printed dacron warp drapery fabric woven with a mercerized cotton filler. The fabric has gone through a finishing process which stabilized it. Although manufactured by man, it has a similarity to nature's weathering. The design is not forced, nor does it have a set pattern. It comes and goes. The iridescent colors range from the most subtle and muted to the most brilliant jewel-like tones.

It is his concern with surface design and texture which has brought about these unusual fabrics. They have come as a result of years of work spent in study and practice of handweaving and its possibilities and his hard-earned ability to translate these handloom possibilities to the Jacquard power loom.

Boris Kroll's philosophy on fabrics is that home furnishing fabrics should be created to give beauty as well as durability, and



Figure 26. Ariel Jacquard Woven Tapestry "Awari" warp print, designed by Boris Kroll, received the A.I.D. Award, 1961-1962. On display at Interiors Pavilion, Seattle World's Fair, 1962.

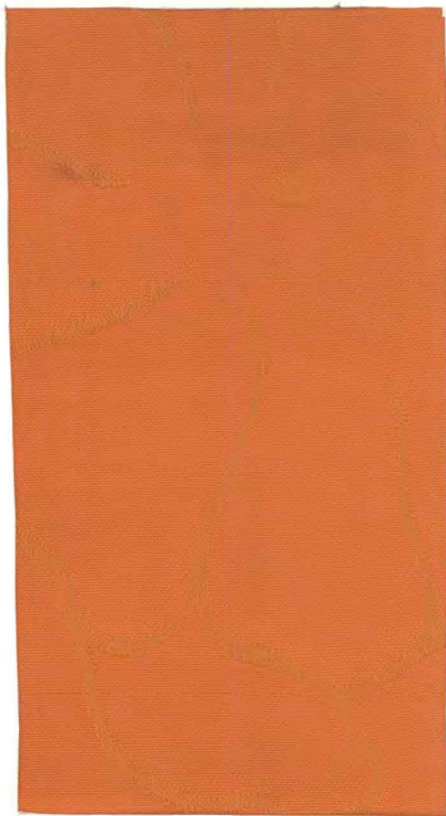


Plate 3.

- (1) Daphne
63% Nylon
37% Silk
Designed by Boris Kroll

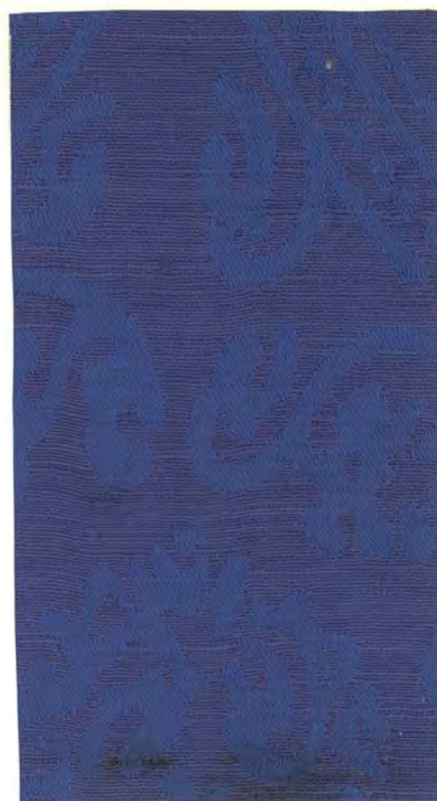


- (2) Sienna
85% Rayon
15 % Cotton
Designed by Boris Kroll



Plate 4.

- (1) Montparnasse
 60% Rayon
 40% Nylon
 Designed by Boris Kroll



- (2) Cobalt-Amethyst
 56% Rayon
 44% Nylon
 Designed by Boris Kroll



Plate 5.

- (1) Magenta
 57% Rayon
 43% Nylon
 Designed by Boris Kroll



- (2) Cobalt-electric
 67% Rayon
 33% Nylon
 Designed by Boris Kroll

that the drama of color in a room can be established at the windows and not limited to the upholstered pieces or accessories. He realizes that our lives are changing, and due to this fact, the American women are demanding not only beauty but durability in home furnishing fabrics. He has met this challenge through use of the sturdy, but easy-care man-made fibers such as nylon and dacron, combining them with natural fibers to get the results needed. All of his fabrics have passed the stringent tests of the Boris Kroll Research and Testing Laboratories for quality control, abrasion resistance, dimensional stability, and color fastness.

Boris Kroll feels that history of design is a rich field for inspiration and that designers should study it more, for creative design does not come from the atmosphere, but from studying, seeing and absorbing. He gains a great deal of his inspiration from historic design. His first consideration in designing a fabric is to select the appropriate fiber for the fabric's use. He must decide as to whether the fiber is rugged, yet supple, whether it is chemically constructed to pass the dye test of various colors and whether the fiber is stable dimensionally under varied climatic conditions.

His next consideration is color, which is the most important characteristic to the consumer, for it sets the mood of the room. The fabric designer should give a great deal of consideration to the science of color because the true evaluation of a color is its reaction to sunlight, crocking, and bleeding.

Boris Kroll, demonstrating his thorough knowledge of the Jacquard loom, has exploited it to its maximum potential through his calculated integration of color, weave and design, producing fabrics that are truly ageless.

Jack Lenor Larsen

Jack Lenor Larsen received his early training in interior design and architecture at the University of Washington where he became greatly interested in fabrics and felt a desire to work in fabric design and weaving. After completing his independent study he worked on the West Coast, then returned to school at Cranbrook Academy of Art, where he received a M.F.A. for textile design in 1951.

His first business venture was a studio in Japan where he turned out hand-woven fabrics with such great success that in 1952 he established his business in New York, as Jack Lenor Larsen, Inc., hand-wovens being his only product at that time. In his first New York year, he received recognition in the form of one man shows and national prizes. He designed casement fabrics for the Leaver House Lobby and designed and executed award-winning collections for Thaibok Company.

In the ten years since Jack Lenor Larsen came to New York to open a studio with a couple of hand looms, he has advanced a fresh viewpoint to virtually every facet of fabric design for the



Figure 27. Jack Lenor Larsen, outstanding weaver and designer,
of Jack Lenor Larsen, Inc.

home, for industry, and for apparel. He is a weaver of hand loomed fabrics, a developer of new textures and of new avenues of power loom production; he is a colorist, a stylist, and most recently a fashion designer. Mr. Larsen has contributed to the basic arts of weaving with the first successful diagonally woven fabric. In the Larsen Tie he has revised shaped weaving, an Inca technique. He has converted to the power loom many costly handweaving procedures such as Leather Cloth, with half-inch leather strips forming the warp, and the famed Remoulade Upholstery with its 27 yarn fibers. Colorful accent rugs designed by Larsen are sold in better stores throughout the country. Alison Seymour Company in Seattle handles his rugs for the West Coast. He has also executed some exciting designs in prints, two in 1961 being Primavera and Pousse Café, the first American prints on velvet for draperies. When asked how it is that a weaver is working in prints, he answered, "We not only print so as to fill the more general need of our clients, but because we like this direct way of working with color. I think it has helped a good deal to broaden and develop our color feeling in the weavers" (52, p. 22).



Figure 28. Primavera, first hand printed velvet in the United States, 1961, 100 percent siliconed. Designed by Jack Lenor Larsen, Inc.



Plate 6. Primavera, velvet cotton 100% siliconed, the first printed velvet in the United States - designed by Jack Lenor Larsen, Inc.

Today his highly successful firm designs, manufactures and distributes fabrics to showrooms in 13 cities, while Larsen hand spinning and hand weaving operations are pursued in 11 countries abroad. Two other Larsen firms reflect his wide-ranging design interests: Larsen Design Corporation, for industrial design, styling and consultation to architects; and J. L. Arbiter, designing and producing apparel for men and women.

Purposeful and active in many areas, Mr. Larsen is on the board of trustees of the American Craftsmen's Council and of the Haystack Mountain School of Crafts where he teaches every summer. He is Director of Fabric Design at the Philadelphia Museum College of Art, and Director of Fabrics International Exhibition, which opened in the fall of 1961.

In woven fabrics the Larsen innovations in random use of color, spacing, and of multiple yarns, introduced in 1952, '53, have become lasting design factors for the fabric industry.

In fabric printing the Larsen Group has enlarged the range of contemporary design by-passing the mechanical, architectonic pattern that had both marked and limited modern prints. They created a style related to post-impressionist painting in its full

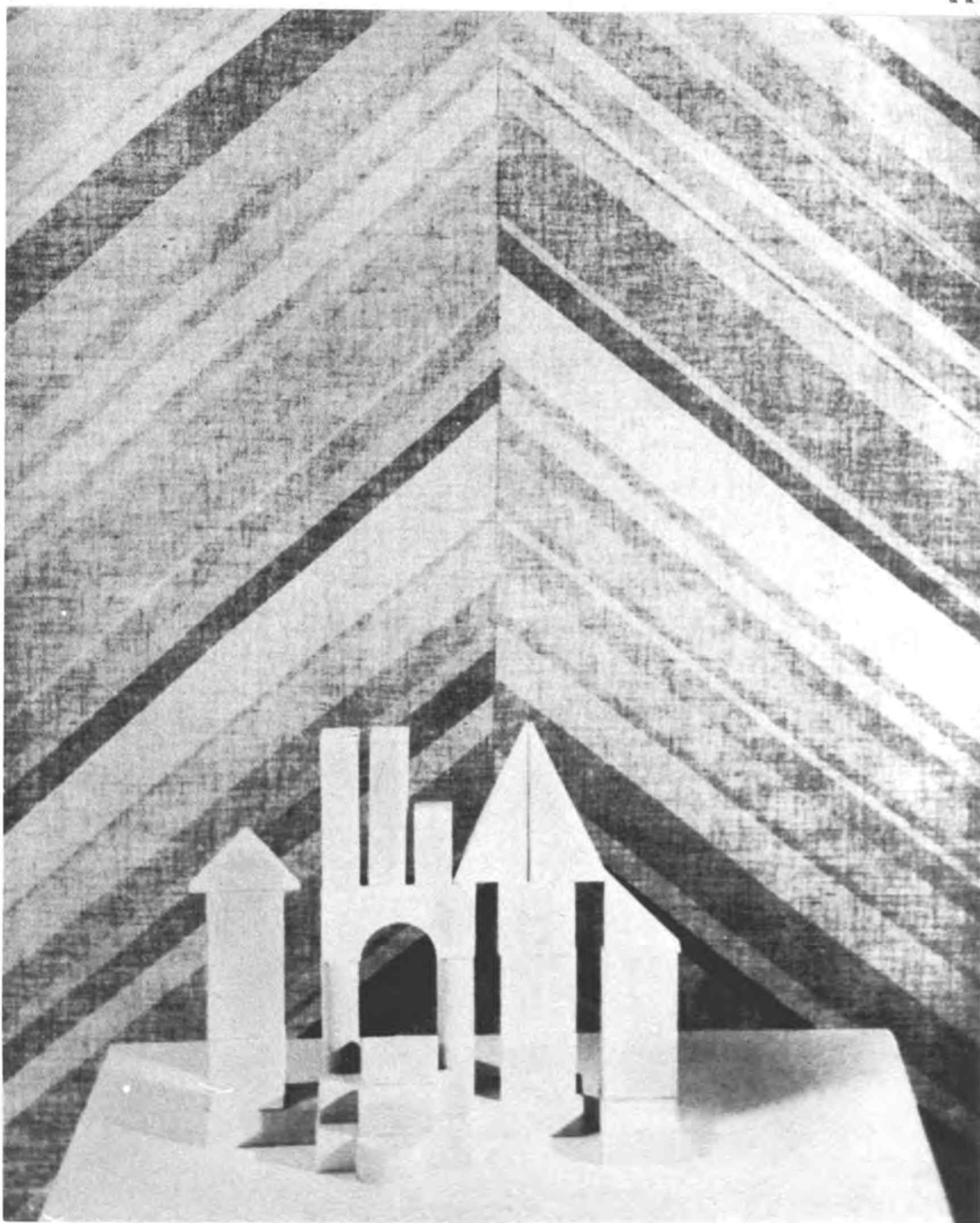


Figure 29. Obelisk, handprint on linen, by Jack Lenor Larsen.



Plate 7. Obelisk - 100% Linen designed by Jack Lenor Larsen, Inc.



Figure 30. "Diagonal Stripe Weave" by Jack Lenor Larsen, Inc.

blown romanticism and biting color. More recently they re-interpreted the decorative Art Nouveau period. They treated upholstery prints as "flat" pattern to enhance furniture lines, and these prints are the most imitated of all contemporary patterns.

In color Larsen has, from the first, made a sharp break from the accepted palette of primaries so closely identified with contemporary fabric design, searching instead to translate expressionistic and Oriental color theories, with their vivid, shimmering qualities. Potentials for iridescence are exploited as is the strong appeal of close-value colors. The colorings stimulate too, a fresh awareness to the discriminating and lively variations of undyed fibers, and related earth tones.

Jack Larsen is currently exploring a range of rare techniques for woven and non-woven cloths. He feels that by breaking through accepted limitations for fabric design, he may help to widen the range of possibilities for industry, and somehow narrow the gulf between design and production.

Exhibitions in which Larsen Fabrics have appeared, his awards and a chronology of his significant designs were provided by his company. 1962.

- 1949 First one man show, Portland, Oregon
- 1951 One man show, City of Paris, San Francisco
- 1952 One man show, Philadelphia Art Alliance
One man show, Henry Gallery Seattle
Good Design Exhibition - one selection
- 1953 Good Design - eight selections
- 1954 Good Design - seventeen selections
- 1955 Five Years of Good Design - seven selections
Creative Skills - U.S.A. (State Department) - seven
selections
One man show, New York Architectural League
- 1956 Textiles, U.S.A., Museum of Modern Art - five
selections
One man show, Seattle Art Museum
One man show, De Young Museum of Art
- 1957 One man show, Akron Art Institute
- 1958 Brussels Fair
- 1959 Moscow Fair
Pozen Fair
Casablanca Fair

Awards

- 1950 International Textile Exhibition, Greensboro, North
Carolina - 1st award
- 1951 International Textile Exhibition - 1st award
Young American Show, award
- 1952 American Institute of Decorators Design Competition -
1st award

- 1953 A.I.D. Design Competition - 1st award
- 1956 Upholstery Leather Group Design Competition -
 1st award
- 1957 Upholstery Leather Group Design Competition -
 1st award
- 1958 Design Derby, Miami - 1st award
- 1960 Design Derby, Miami - 1st award
 A.I.D. Design Competition - two International Design
 awards

A Chronology of Significant Larsen Designs

- 1952 Granite upholstery - its use of multiple yarns and
 random rythm became a trade mark and lasting mass
 market influence

 American Random - power loomed upholstery group for
 Thaibok, Ltd. featuring random use of fibers and color

 Painted Linen - hand-woven sheer of wiry linen warp,
 hand painted before being woven with spaced viscose
 and jute

 Leverlin - large scale, architecural, heavy sheer
 natural Scotch linen, originally designed for
 lobby of Lever House

 Mondrian - first casement cloth with random spacing
- 1953 Malachite - upholstery with first use of random two-
 color stripe warp

 Industrial spun nylon - first used for screen prints

- 1953- Fashion fabrics for B. H. Wragge holiday collections
54
- 1954 Remoulade - hand-woven upholstery of 70 different textures and tones
- Midsummer - first of the romantic prints
- Fiber-Temp - insulating, sound-absorbing drapery/lining
- 1955 Rayon tweed fashion fabric - for Pauline Trigere sponsored by the American Rayon Institute, Inc.
- Discontinuous Brocade - hand-woven casement panels for tapestry look
- 1956 Leather Cloth - hand-woven leather strip upholstery
- 1958 Grass rugs - in tapestry and high pile textures, inexpensively produced in Vietnam for International Cooperation Administration program
- First fabrics for jet aircraft - nylon upholstery and drapery fabrics commissioned for 707 Pan American jet planes
- 1959 Diagonal Stripe Weave - First successful diagonal weave fabric produced
- 1961 Primavera and Pousse Cafe - first American prints on velvet for draperies

Alexander Girard

Alexander Girard was born in New York City, May 24, 1907, the son of Carlo Matteo and Leslie Cutler. He received his early training at the Royal Institute of British Architects from which he was graduated in 1929. He also attended the Royal School of Architecture at Rome and the University of New York.

He married Susan Needham on March of 1936 and has two children, Sani and Marshall. They live in Santa Fe, New Mexico.

Mr. Girard has worked in architect's offices in Florence, Rome, Italy, London, England, Paris, France and New York City. He is a registered architect in New York, 1936, in Michigan, 1937, and Connecticut, 1937. He opened offices in Florence, in 1930 in New York 1932, in Detroit, 1937 and Santa Fe, New Mexico, in 1953.

He has exhibited his designs in Barcelona, Florence, London New York City, Detroit, Walker Art Center, Rochester Museum, Cranbrook Academy, Museum of Modern Art and the Cooper Union.

At present, architect Alexander Girard is the director of the Fabric Division for Herman Miller Furniture Company. He approaches



Figure 31. Alexander Girard, outstanding architect and fabric designer. Designs fabrics for Herman Miller Company.

textile design with a simplicity which results in patterns and colors which are timeless. The prints, casements, upholstery fabrics vinyls and leathers in his latest collection are designed to be used interchangeably in hundreds of color and texture variations. He combines the playful, the fantastic, the functional in a rare mixture.

Mr. Girard stated his feeling toward fabric design in *American Fabrics*: "Fabric design is not easel painting or illustrating, it is a fabric design. Realism in printed fabrics should be avoided. The hope for good design lies in those designers who believe in what they do, and who will only do what they believe. Contrary to hearsay, it is possible to make a living that way" (2, p. 35).

Alexander Girard in his work for the Herman Miller Furniture Company has shown himself to be one of the outstanding textile designers in the decorative field today. His fabrics were used to decorate the "Century 21 Plywood Home of Living Light" at the Seattle Worlds' Fair 1962.



Plate 8. Quatrefoil - 100% cotton designed by Alexander Girard - used for draperies in Century 21 Plywood Home of Living Light - Seattle World's Fair 1962.



Plate 9. Grid - 55% Linen, 40% Rayon and 5% Goatshair designed by Alexander Girard-used for draperies in Century 21 Plywood Home of Living Light - Seattle World's Fair 1962.



Plate 10. Flores - designed by Alexander Girard- used for a wall divider at Century 21 Plywood Home of Living Light - Seattle World's Fair 1962.



Plate 11. April - designed by Alexander Girard- used for wall divider in Century 21 Plywood Home of Living Light - Seattle World's Fair 1962.

Awards and Contributions

Alexander Girard's awards and contributions were provided by the Herman Miller Company, 1962.

Awards:

Florence Travelling Scholarship, R.I.B.A., England, 1929

Gold Medal, Barcelona Exhibition, 1929

Fabric Competition, Museum of Modern Art, New York, 1946

St. Louis Memorial Competition, Member of Winning Team, 1948

Trail Blazer Award, Home Fashion League of New York for
Herman Miller Fabric Collection, 1952

Member:

Architectural Association, London, England, 1925

American Institute of Architects

Architectural League, New York

DIRECTOR of Fabric Division for Herman Miller Furniture Company.

Contributed Articles to Various Publications, Including:

Interiors, New York Times, Furniture Forum, Everyday Art News, etc.

Compiled catalogue for Detroit Institute of Arts "For Modern
Living" Exhibition

Juror:

Good Design Exhibition, Merchandise Mart, Chicago, Illinois, 1950

International Fabric Competition, Greensboro, N.C., 1952

Recent Travel:

To India for the Museum of Modern Art Exhibition "Textiles and Ornamental Arts of India, " 1954.

Egypt, England, Italy, Spain and Portugal, 1954-1955.

To Central and South America for Restaurant Associates, 1959.

WORK IN ARCHITECTURE AND DESIGN includes the following:

1929 Model room interior, International Exhibition of Barcelona
For Florentine Artisans Guild, Florence, Italy

1929 Own apartment, Florence, Italy

1930 Apartment
For G. Uzielli, Florence, Italy

1935 Interiors exhibition
For Hampton Shops, New York City

1936 Shop
For Junior League, Grosse Pointe, Michigan

1943 Offices and plant interiors
For Detrola Corporation, Detroit, Michigan

1946 Offices
For Ford Motor Company, Dearborn, Michigan

1946 Cafeteria
For Lincoln Motor Company, Detroit, Michigan

- 1947 Residence, Turtle Lake, Michigan
For Richard W. Jackson, Grosse Pointe, Michigan
- 1948 Own Residence, Grosse Pointe, Michigan
- 1949 Residence
In collaboration with M. Yamasaki, Architect
For Daniel W. Goodenough, Grosse Pointe, Michigan
- 1949_ "For Modern Living" Exhibition, designer and director
For Detroit Institute of Arts, Detroit, Michigan
- 1950 Residence
For John N. McLucas, Grosse Pointe, Michigan
- 1950 Motel, Alpena, Michigan
For R. Fletcher, Grosse Pointe, Michigan
- 1950 "Design for Modern Use, Made in U.S.A."
Traveling exhibition for Europe
For Museum of Modern Art, New York City
- 1951 Residence
For Dr. George Rieveschl, Grosse Pointe, Michigan
- 1951 Interior exhibition, Furniture Museum, Grand Rapids,
Michigan
For Herman Miller Furniture Company, Zeeland, Michigan
- 1951- Color consultant, General Motors Research Center, Detroit
1952 For Eero Saarinen, Architect, Bloomfield Hills, Michigan
- 1952 Fabric collection and catalogue
For Herman Miller furniture Company, Zeeland, Michigan
- 1952 Residence, Ontario, Canada
In collaboration with Eero Saarinen, Architect
For Irwin Miller, Columbus, Indiana

- 1952 Wallpaper collection
For Herman Miller Furniture Company, Zeeland, Michigan
- 1953 "Good Design" Home Furnishings Exhibition
Merchandise Mart, Chicago, Illinois
For Museum of Modern Art, New York City
- 1953 Showroom, Grand Rapids, Michigan
For Herman Miller Furniture Company, Zeeland, Michigan
- 1953 Re-design Michigan Bulletin
For American Institute of Architects, Detroit, Michigan
- 1954 Second fabric collection
For Herman Miller Furniture Company, Zeeland, Michigan
- 1954 "Good Design" Home Furnishings Exhibition
For Museum of Modern Art, New York City
- 1955 "Textiles and Ornamental Arts of India" Exhibition
For Museum of Modern Art, New York City
- 1955 Residence, Columbus, Indiana
In collaboration with Eero Saarinen, Architect
- 1955 Interiors
For Irwin Miller residence, Columbus, Indiana
- 1955 Design Program
Including china, glass, leather, linen mats, etc.
For George Jensen, Inc., New York City
- 1955 Third fabric collection
For Herman Miller Furniture Company, Zeeland, Michigan
- 1955 Denver Hotel, Architectural Consultant
With special reference to interiors
In collaboration with I. M. Pei, Architect, New York City

- 1956 Exhibition of Table Settings
For Georg Jensen, Inc. New York City
- 1956 Museum of Modern Art - Contributed numerous fabric
designs to "American Fabrics" Exhibition
- 1956 Ad layout and design for Aluminum Company of America
Including specially designed interior and aluminum
shelving unit
- 1956 Film, "Day of the Dead"
Made in Mexico in collaboration with Charles Eames
- 1956 Interiors, New Hotel, Denver, Colorado
For I. M. Pei, Architect, New York City
- 1956 Interiors, hotel for Vieux Carre, New Orleans, La.
For Arthur Q. Davis, Architect, New Orleans, La.
- 1957 Apartment, Los Angeles, California
For Billy Wilder
- 1958 Office, Columbus, Indiana
For Irwin Miller
- 1958 Showroom San Francisco, California
For the Herman Miller Furniture Company
- 1958 Fourth Fabric collection
For the Herman Miller Furniture Company, Zeeland, Michigan
- 1959 Color Consultant
New apartment buildings, St. Louis, Missouri
For Hellmuth, Obata & Kassabaum, Architects, St. Louis,
Mo.
- 1959 Restaurant
Located in new TIME & LIFE Building, New York, New York
For Restaurant Associates, Inc., New York City

Marianne Strengell

Miss Strengell was born and educated in Helsingfors, Finland. The daughter of Gustaf Strengell, architect and critic, and Anna Strengell, an interior designer, Marianne spent her early and school years in Finland where she graduated from Central School of Industrial Design in 1929. Between winters at design school, she was given permission to travel alone throughout Europe. She learned her English by reading Ring Lardner. Later she became a chief designer at Hemflit Helsingfors for open line textiles and custom work. She also worked for B. O. Aktieselskab, Copenhagen, making semiannual collections of home furnishings designed for power and hand looms in Sweden. Before coming to the United States in 1936, she headed the interior design studio of Koti Hemmet in Helsingfors. After arrival in the United States, Eliel Saarinen, an old family friend, and president of Cranbrook Academy of Art, invited her to join the faculty there. Miss Strengell worked with Mrs. Saarinen for several years at Cranbrook and when Mrs. Saarinen retired, was appointed department head.

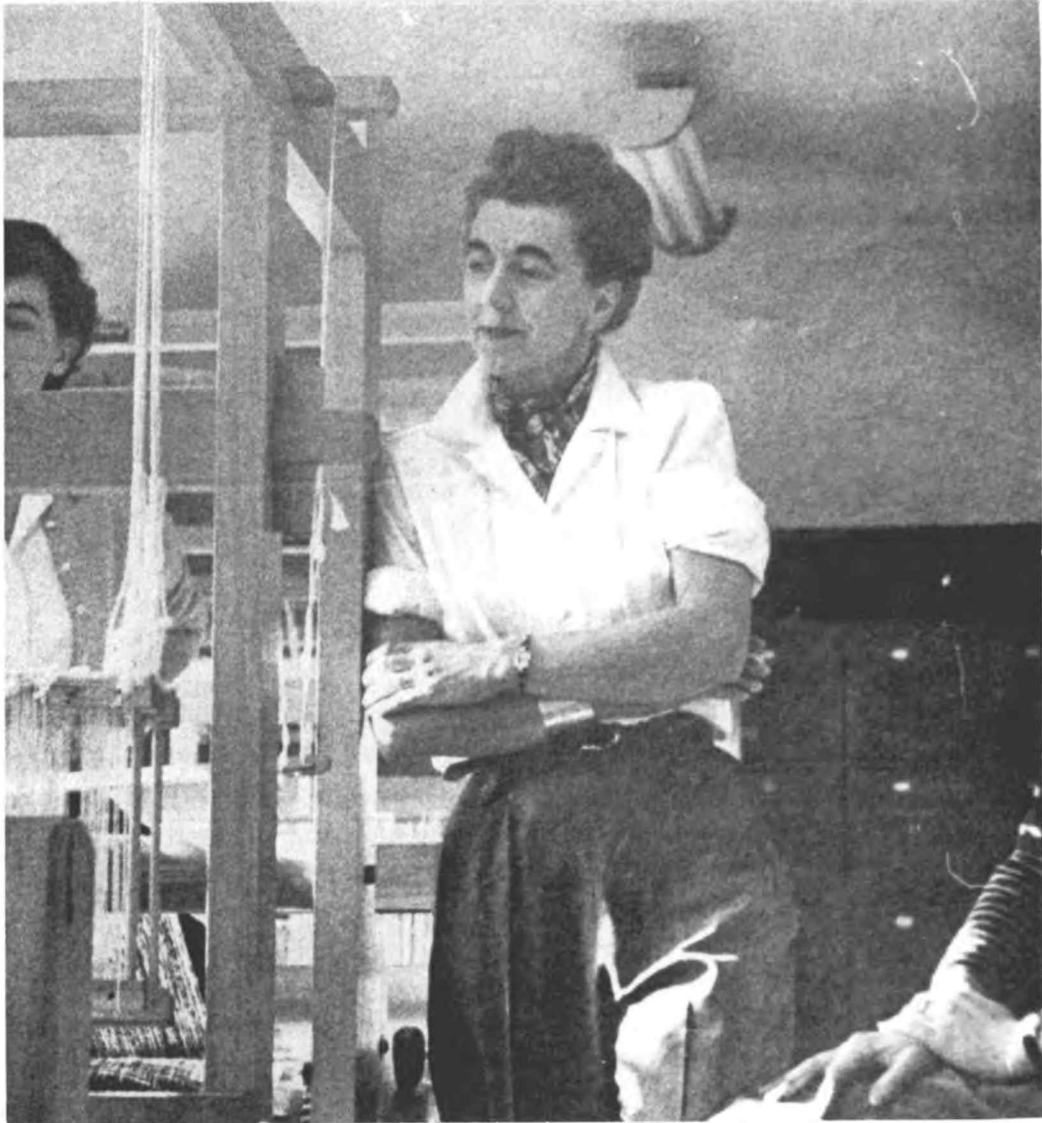


Figure 32. Marianne Strengell, great weaver and industrial designer, former head of Weaving at Cranbrook Academy of Art.

The Cranbrook Academy of Art is in Bloomfield Hills, Michigan. The school from the beginning has been one of great freedom, with the student finding his own way, guided rather than taught by the teacher. It is really a community of artists and craftsmen whose instructors must be creative artists whose students learn from watching them at work as well as from their words. The philosophy of Cranbrook is that the fabric design grows out of the materials. Sometimes the design ends right in the sample folder stage, perhaps it will be tested in a length, or will find its way into a commission. Some fabrics like Joan Patterson's new line of power-woven Oregon linens, or Robert Sailor's Bitely Weaves, or Sonya Leach's casement cloth in the current Good Design exhibition at the Chicago Merchandise Mart, may be put into national distribution (55, p. 25). Many of the leading designers in the country today are former Cranbrook graduates.

Miss Strengell is Mrs. Olav Hammarstrom in private life. Her feeling for architectural fabrics has resulted from the close association with architects throughout her life. Her husband as well as her father is an architect. She has worked as textile consultant to architects for years.



Figure 33. Marianne Strengell hand-woven fabric with use of plastics, U.S.A. International Fabric Display.

In 1951, Miss Strengell was sent by the United States government to the Philippine Islands to set up weaving projects. Since returning to this country she has worked with automobile manufacturers, with the textiles for the new General Motors Technical Center attracting nationwide attention. She has designed fabulous rugs and draperies to furnish this center. Eero Saarinen, architect for the new General Motors Technical Center, asked her to be his textile consultant. She worked with Warren Platner, an associate of Saarinen, decorating this huge General Motors center, including a lobby, library, the executive suite and the office of the department heads in the research building. Along with this job, Miss Strengell designed a stage curtain for Saarinen's new auditorium at Massachusetts Institute of Technology. She also designed all of the fabrics for the new girls' dormitory for Drake University, which was designed by Saarinen.

In explaining her attitude toward designing, Miss Strengell said:

All over the world, designers approach their problems in various and personal ways. There are probably as many approaches as there are weavers. Some designers use forms inspired by tradition; others travel and

transpose into saleable patterns forms they find in foreign cultures. Some get their inspiration from museums or books and there are those who follow trends and names. In my opinion, a trend is much more fun to create than to follow. Rejecting easy translations from and adaptations of old and new cultures, I believe in designing from within but influenced and moved by nature and emotional experiences..... (12, p. 29).

Miss Strengell has also designed fabrics for Skidmore Owings and Merrill's Fiberglass Building in New York. Her work with Fiberglass has been significant. She developed the new Fiberglass with a plastic backing. Chatham Manufacturing Company also hired her to experiment on fabrics for automobile interiors, using 100 percent synthetics. From the beginning she worked directly with the design departments, which has saved the mill thousands of dollars.

Resigning from her position at Cranbrook Academy of Art, she moved to Hamden, Connecticut to continue working with Eero Saarinen. Miss Strengell has recently signed a contract to prepare a new weaving book.

Joan Patterson

Joan Patterson is a graduate of Cranbrook Academy of Art, where she obtained her Master's degree in fine arts. She had the privilege of studying under the inspiration of Marianne Strengell and working with other noted designers such as Robert Sailors. Miss Patterson had previously enjoyed the rich experience also of working with Dorothy Liebes. It was under the instruction of Dorothy Liebes that she became interested in native materials and began weaving with Oregon linen.

When manufacturers claimed that the textures in linen could not be varied enough, and that linen had been perfected and was not subject to improvement, Miss Patterson disagreed: "I think it was my contrary streak that made me most determined. I couldn't see why linen had to be woven the same way generation after generation and I made up my mind to show all our doubting manufacturers" (42, p. 23).

In her experimentations, she first learned the great affinity that Oregon Linen had for dye, which made it especially adaptable to home furnishing fabrics. She immediately began working on the



Figure 34. Joan Patterson, Designer and Head of Clothing, Textiles, and Related Arts, Oregon State University.

yarns to discover how many ways they could be blended in making interesting textures. She experimented with color, size, ply, length of fiber, and type of spinning. Through experimentation, she discovered she could obtain three-dimensional quality of extraordinary depth, by combining several different plies of fibers, and different weights of wet and dry spun yarns; she also used unusual colors in both long and short fibers. In addition, she discovered that Oregon yarns are spun dry and maintain a softer mat surface than the Irish and therefore are especially suited to upholstery and drapery fabrics.

Because of this beginning of industrious research, and as a result of several months of discussion, the Oregon State University experimental station in Corvallis, the Oregon State University school of Home Economics and the Oregon Flax and Linen Board, a group of business men appointed by the governor, agreed to appropriate both federal and state funds in order that Miss Patterson could continue her research, for it would result in an excellent way to promote native flax.

Through a sabbatical leave in 1950 and a recommendation from Dorothy Liebes, Miss Patterson was given the privilege of

attending Cranbrook Academy of Art, the art school which most notable designers have at one time or another attended. Here she was given the freedom necessary to carry on this interesting research project.

The questions that started Miss Patterson's study were:
Why is it there are no linen upholstery materials to be found on the market except in specialty shops and these are priced over ten dollars a yard? Why is it these fabrics are all woven using the plain or tabby weave? Can't linen be woven using a novelty weave the same as other fibers? (73, p. 1).

Miss Patterson worked to answer these questions and as she progressed, the first step had been taken and Oregon linen mills started making finer linen than they had previously done. At the completion of her research, Miss Patterson took to New York her collection of fabrics, which consisted of upholstery, drapery, and table linens. The purpose of the trip was to acquaint manufacturers and distributors of decorative fabrics with her new designs of linen, to get their appraisal and to assure the possibility of production of the materials. The interior designers reacted with enthusiasm and wanted to be informed as to when her fabrics would



Figure 35. Linen draperies, casement cloth, upholstery fabrics and rug. Designed by Joan Patterson.



Plate 12. Translucent Drapery - 100% Linen with cotton nub accent - designed by Joan Patterson.

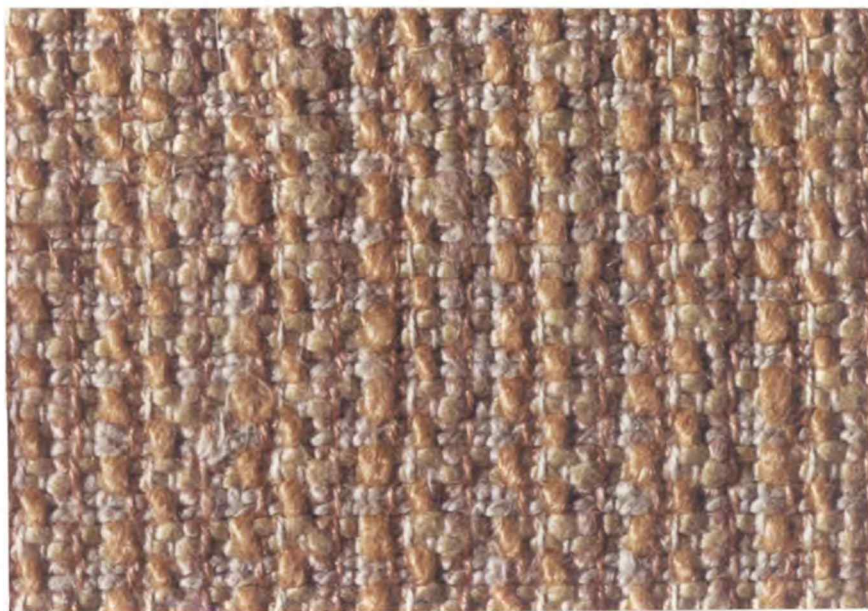


Figure 37.

Linen upholstery fabrics designed and woven by Joan Patterson.



Figure 38. Fabric woven for vertical bamboo blinds on screen.

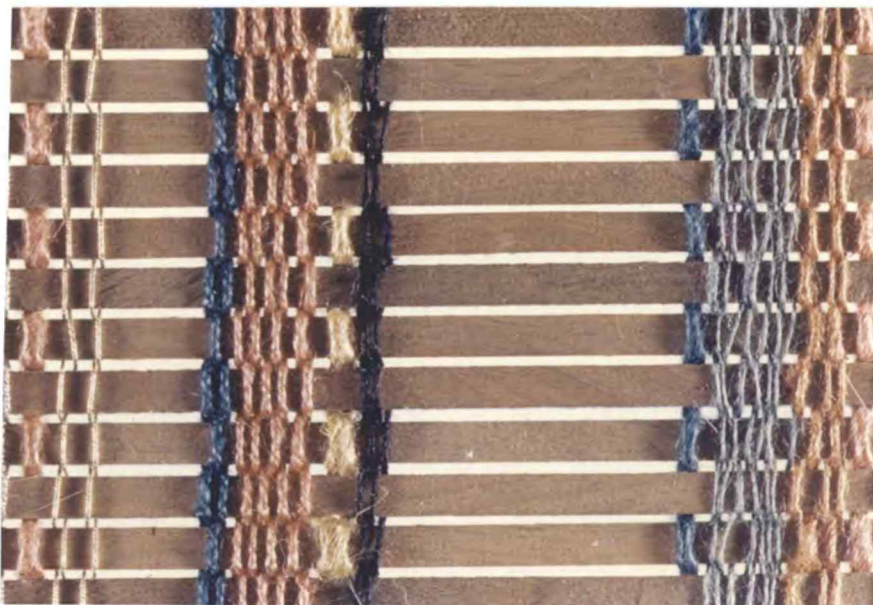


Figure 39. All linen warp and wood strip weft, used for place mats or lamp shades.

Designed and woven by Joan Patterson.

be produced and where they could be obtained. The distributors also felt that her fabrics, when produced, would be much in demand and she wouldn't have any trouble finding a market for them.

The Oregon Worsted Company, which had been producing only tie linings, started weaving upholstery fabrics. There was definitely an upward surge in the native flax industry. When Miss Patterson designed fabrics, she designed them with the thought that they would be woven on power machinery and at the same time she wanted them to keep a hand-woven look. Along with designing the fabric, Miss Patterson had to supervise the men working on the power looms as they were not accustomed to this type of weaving.

As a result she designed a fabulous collection of linen fabrics, using coarse, heavy weaves for hard-wearing upholstery and sheer plaids and stripes for draperies.

A company was formed by the name of Oregon Fabrics which was to produce only linen upholstery fabrics. Miss Patterson was named the firm's designer and her fabrics all bore her name.

With the closing down of the Oregon Flax Mills, the Oregon Fabrics Company also was forced to stop its production.



Figure 40.



Figure 41.

Linen cloth and table mats. Designed and woven by Joan Patterson.

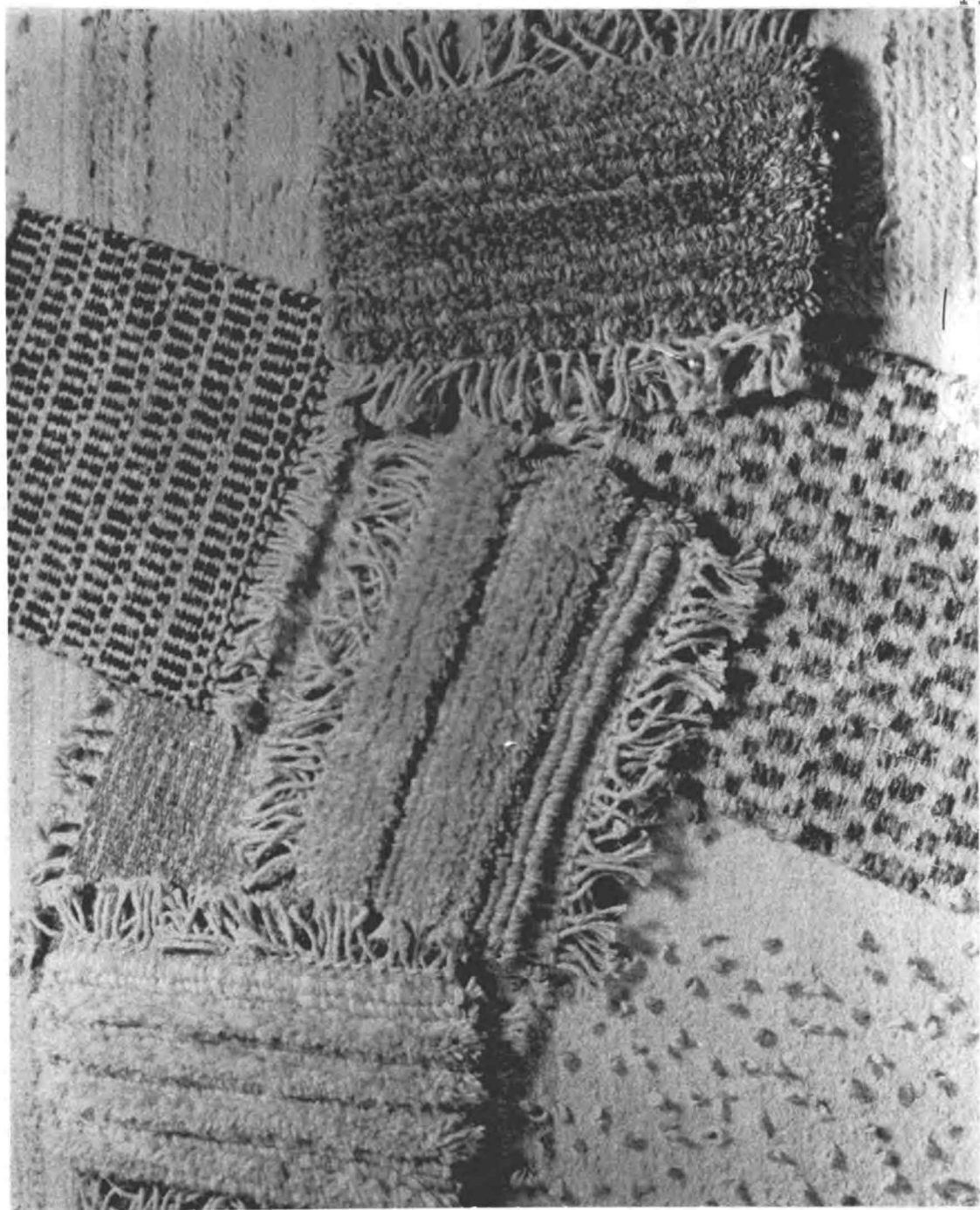


Figure 42. Linen and wool rug techniques - designed by Joan Patterson.

Miss Patterson's research work did contribute to the change in the weaving designs of linen as today they are being produced with a variety of yarns and weaves that with hard work she had to prove were possible.

Even after the close-down of the linen companies, she had about 30 one-man shows all over the United States of her linen fabrics which by this time had included rugs, screens, and other fabrics for interior use. In 1948 she won 1st National prize for the design of a Jacquard upholstery fabric in a competition conducted by the Moss Rose Manufacturing Company.

Miss Patterson, who now is acting head of the Textile and Clothing Department at Oregon State University, has continued to design beautiful fabrics. She has designed fabrics for F. Shumacher & Company, and has done some beautiful design work in fabrics and rugs for furnishings in her apartment.



Figure 43. Bamboo and linen blind with linen draperies, linen and wool pillows on linen upholstery fabric on sofa. All designed by Joan Patterson.



Figure 44. Persian wool rug designed and hand-woven by Joan Patterson.

Bittan Valberg

Bittan Valberg, a Swedish designer, who grew up in Ostergotland, is the daughter of Karl Bergh, a physician and amateur sculptor. Having a great interest in art, he instilled it in his daughter and entered her in the Swedish State School of Arts and Crafts. She studied under the famed Barbro Nilsson who was head of the Mata Mass-Fjetterstrom studio. Mrs. Valberg later studied textiles in Italy, France and Spain. On returning, she set up a small weaving business in Sweden.

She visited in the United States in 1956 to find a market for her weaving. She liked the United States so well she started her own studio in New York. She worked part-time as a weaver in Dorothy Liebe's Studio to get familiar with American ways. Through Mrs. Liebes, E. I. du Pont de Nemours became interested in Bittan Valberg and requested her to develop rug samples using nylon yarn. Nylon, having a higher sheen than wool, makes a brighter rug. It is also lighter in weight, washable and mothproof.

Her usual procedure for rug design is to first draw it out with a pen and paint it with water colors that match the yarn she



Figure 45. Swedish designer, Brittan Valberg, hand-knots swatch to guide weavers who will produce finished rug.

plans to use. "There can be as much life and art in a fine rug as in a great painting" is Bittan Valberg's firm conviction.

By June 1957, Mrs. Valberg was well embarked on a career in Swedish style weaving. The trend in Home Furnishings in American homes was moving in favor of accent rugs, and using a colorful handmade rug as a focal point in a room. During that winter, she held shows in New York and accepted commissions which she executed during the summer months in Sweden where she could obtain peasant girls to do her weaving. In her native Sweden and in the United States, she won a name for custom-made rugs, wall hangings and draperies. Mrs. Valberg's hand-woven rugs do not have to take a back seat to many fine abstract paintings which are currently in vogue. Her hand-woven custom-made rugs sell for \$180 per square yard. She is known as the "Artist in Yarns."

Since going to work for Cabin Crafts, Mrs. Valberg's ideas and designs are being produced by machine at the cost of \$7.50 per square yard. Her beautifully designed rugs make artistic wall decorations as well as floor coverings. One of her rugs called

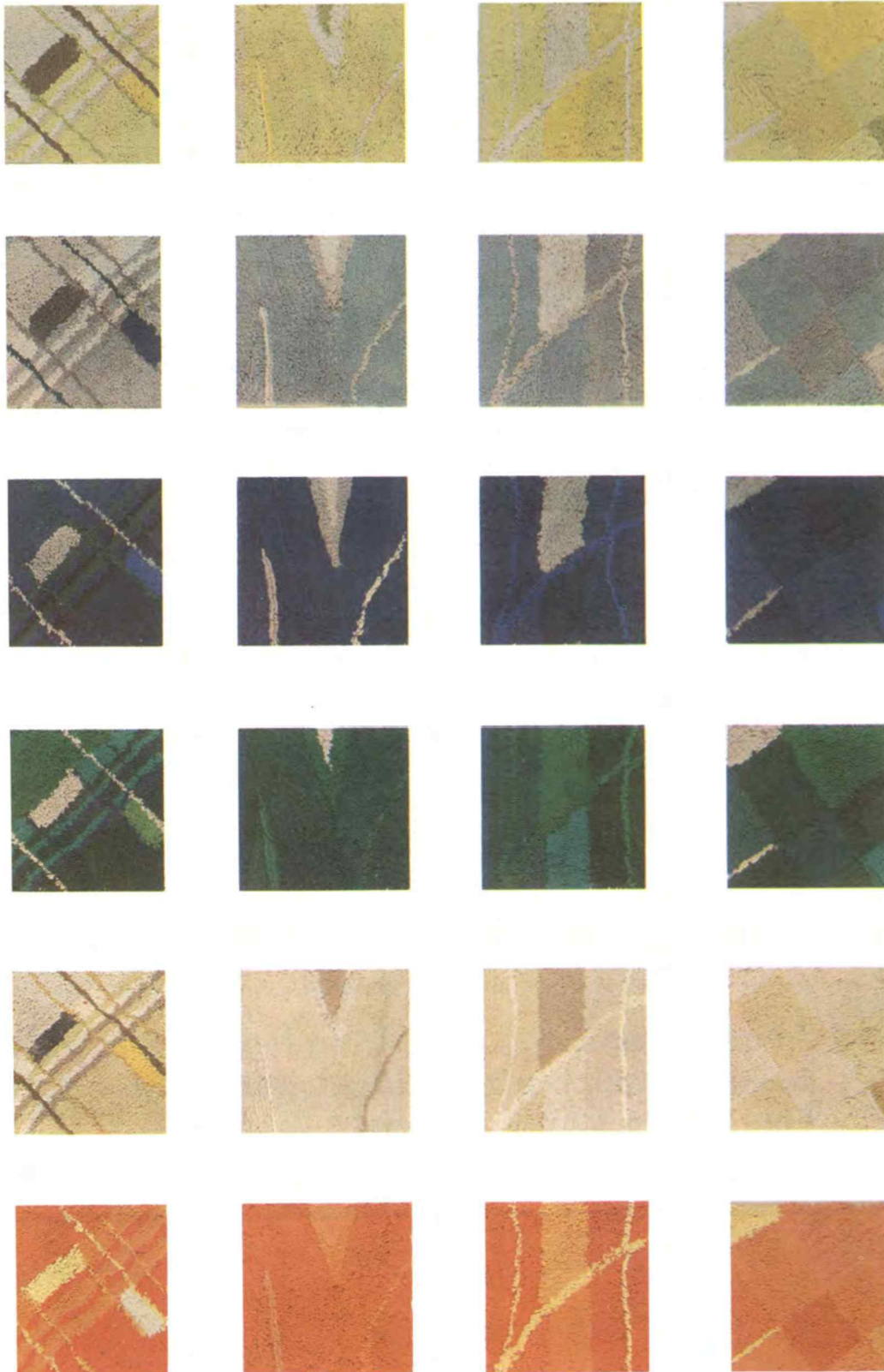


Figure 46. Standard Colorways for Valberg Rugs.

"Circus Tent" hangs as a wall painting in an office designed by Jens-Risom's, leading Danish furniture designer of New York. At Cabin Crafts, her rugs are made entirely of Acrilan yarns and are woven by Cabin Crafts tufting machines. Mrs. Valberg experimented with dozens of fibers, finally choosing Acrilan as the most suitable, since it lent itself so perfectly to the special twists and textures so essential to her designs. All of Mrs. Valberg's rugs are signed with the tufted initials B V and have names such as "Moon Missile," "Sky City," "Cantaloupe," etc. Her shaggy rugs are called "Rya" and the smoother, shorter pile with varied textures "Flossa." The themes and inspirations for Mrs. Valberg's designs are limitless. She takes them from the lightning flashes, and sunrises of nature, from the sweep of a gull's wing and the blaze of a brush fire. They range from the bold and brilliant to the soft and subtle, from random splashes of color and forceful pattern to neat geometric design. Mrs. Valberg hand-weaves the original of each rug design herself, in miniature, and none of her finished designs is released until she has not only named it, but signed it.



Figure 47.

CANTALOUPE designed by Bittan Valberg for Cabin Crafts, Inc.

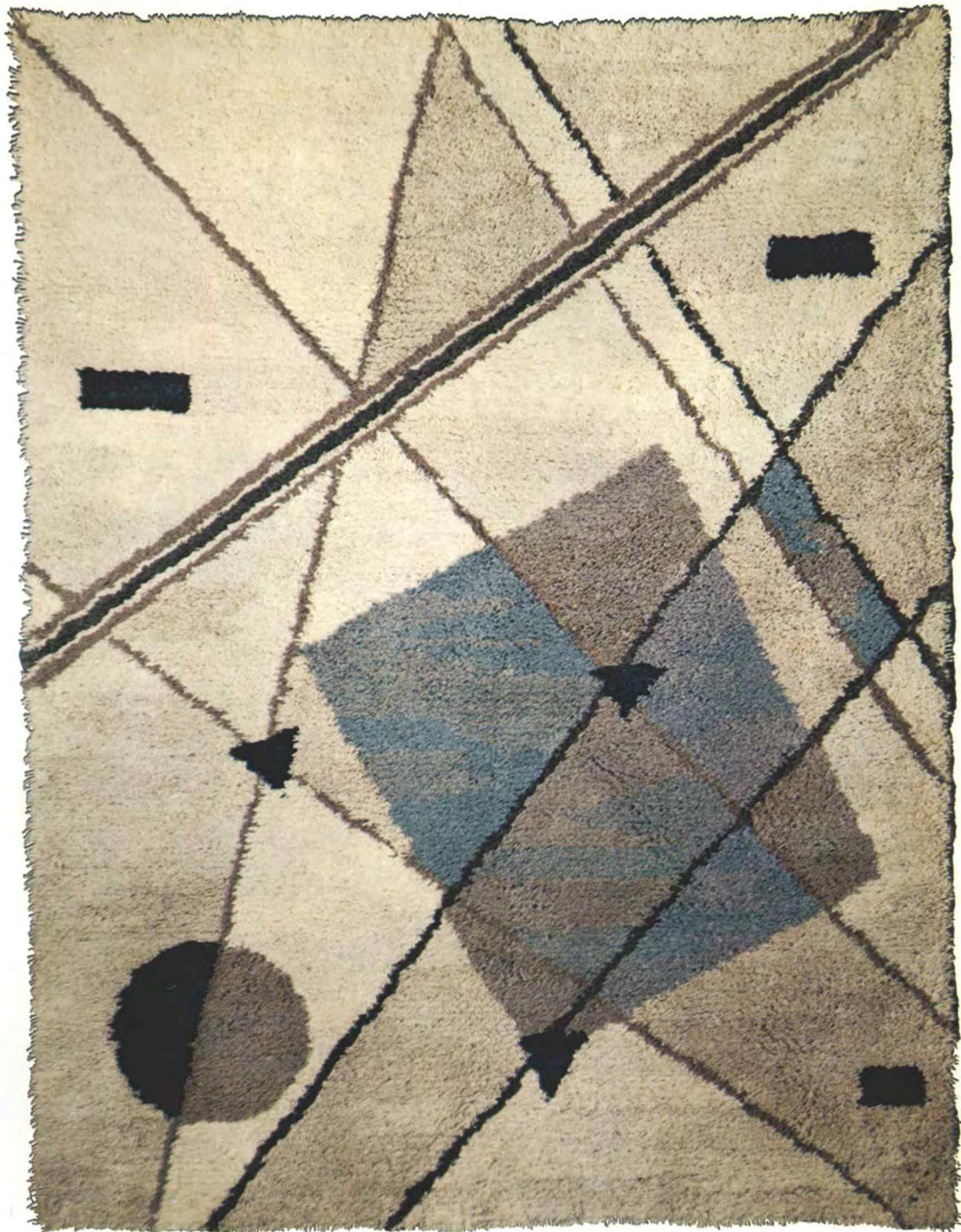
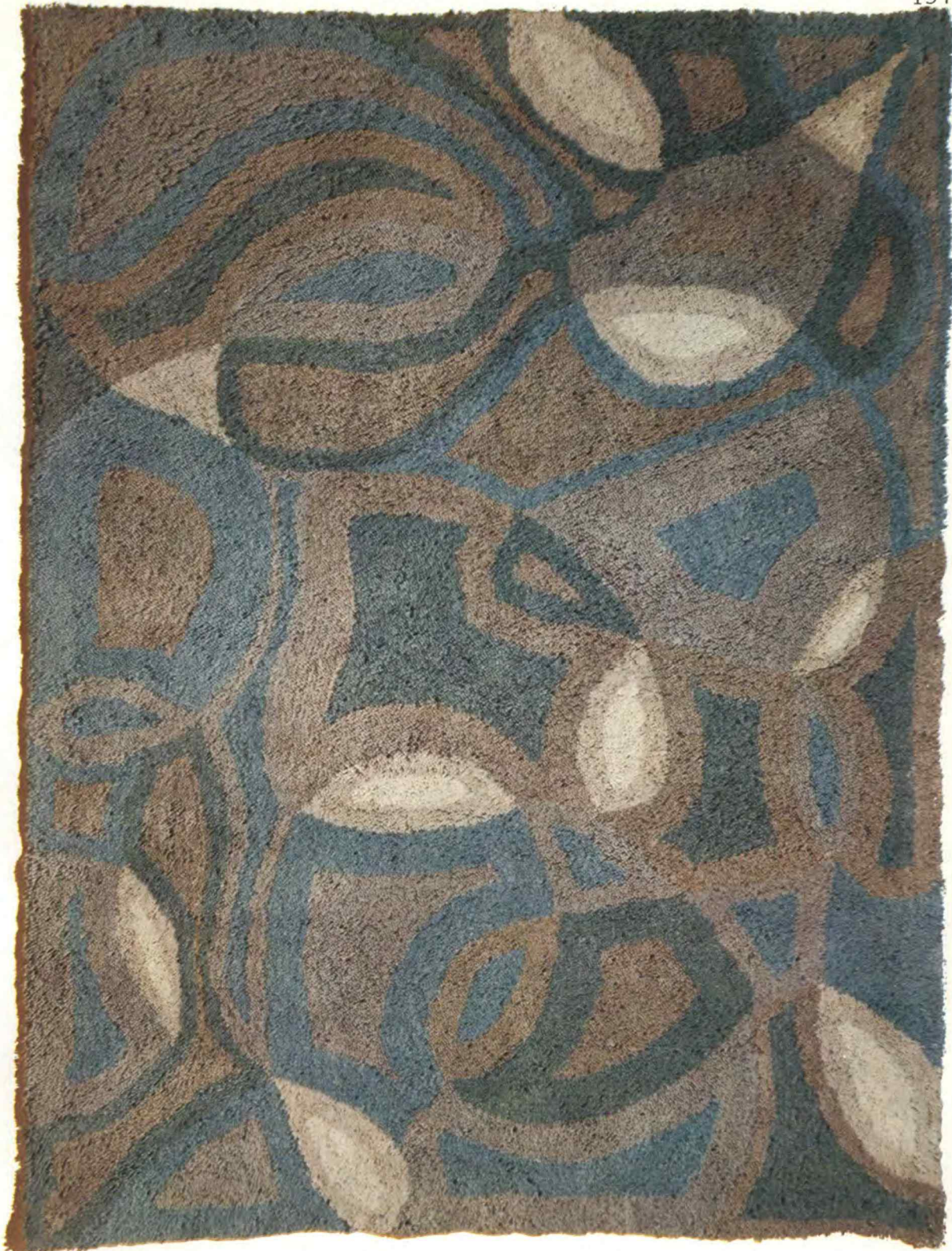


Figure 48.
MOON MISSILE designed by Bittan Valberg for Cabin Crafts, Inc.



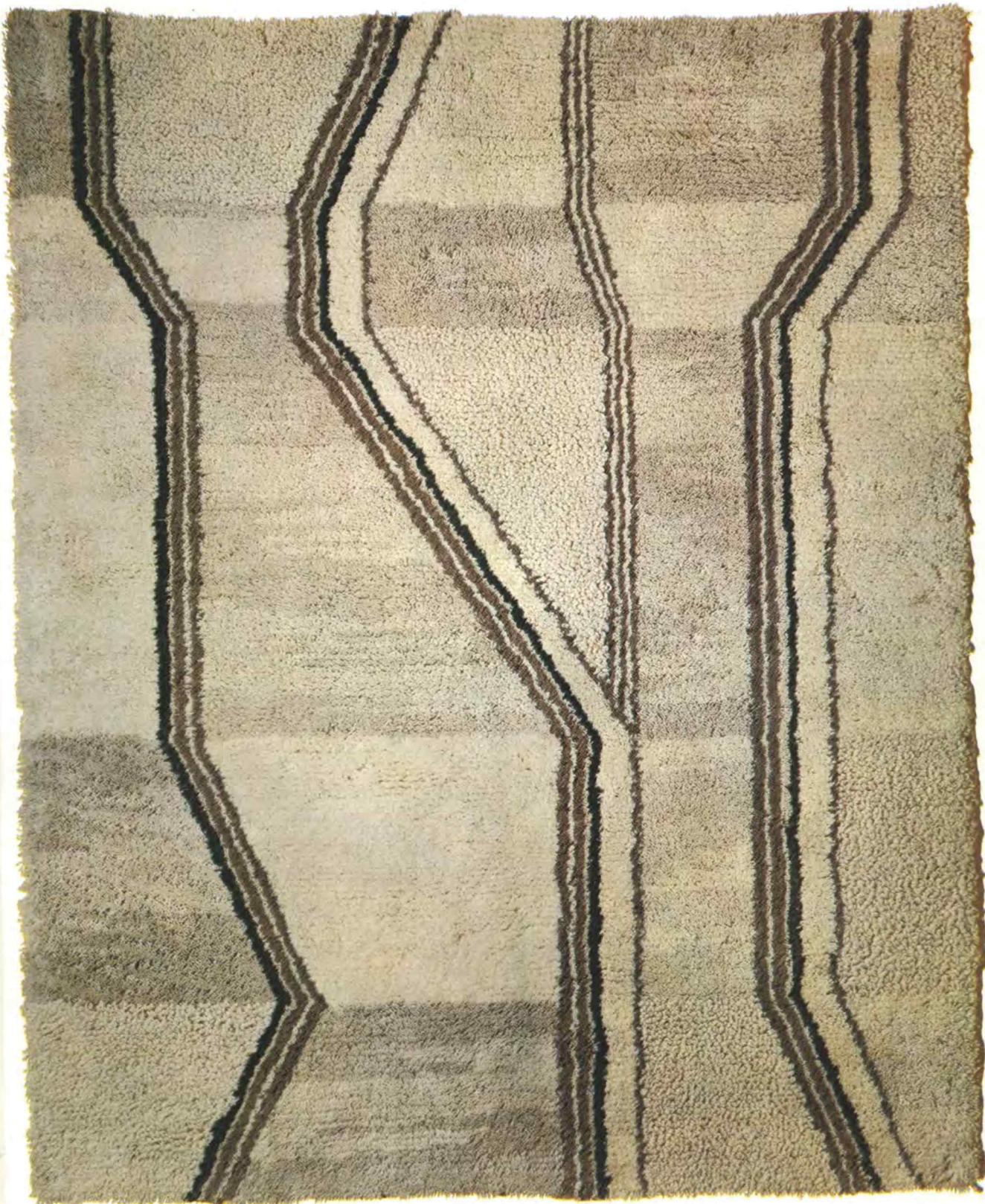
Fig. 49
SKY CITY designed by Bittan Valberg for Cabin Crafts, Inc.



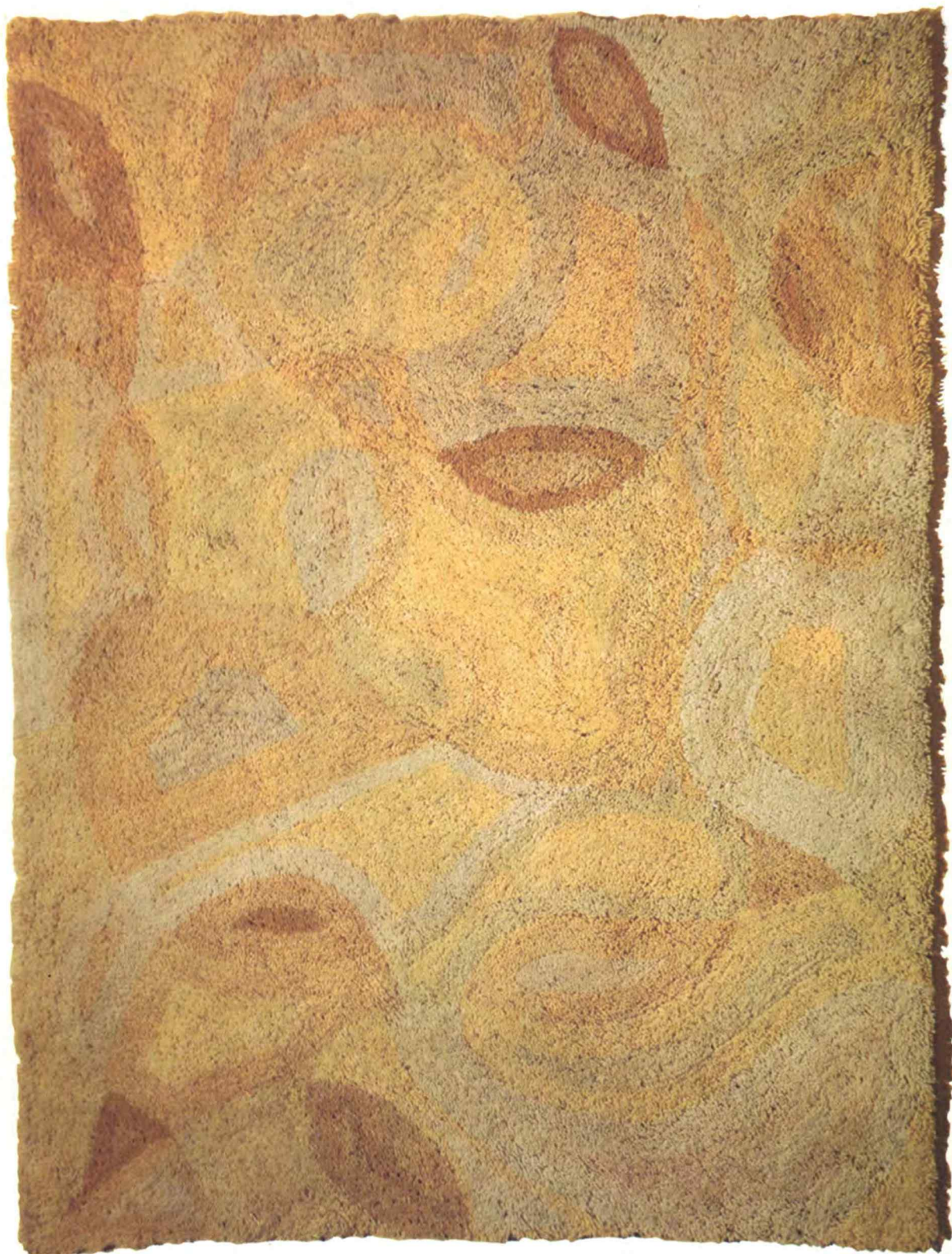
WHIRLPOOL designed by Bittan Valberg for Cabin Crafts, Inc.
Figure 50.



Figure 51.
RED HILLS designed by Bittan Valberg for Cabin Crafts, Inc.



POMPEII designed by Bittan Valberg for Cabin Crafts, Inc.
Figure 53.



WHEATFIELD *designed by Bittan Valberg for Cabin Crafts, Inc.*
Figure 52.

Today, in her New York City studio, Bittan Valberg designs, weaves samples, and masterminds the execution of all her rugs. Valberg rugs are hand-woven in Sweden for architects, designers, galleries and museums, and custom-produced by Cabin Crafts for these and wider markets. In her studio at Ramdala, Sweden, are produced the exquisite handmade rugs which have brought her international acclaim.

In Sweden and America and many other countries, B.V. stands for Bittan Valberg, leading designer-weaver of rugs, wall hangings, and tapestries.

Lucienne Day

After five years of teaching art in England, Lucienne Day concentrated her efforts on printed fabrics and wallpapers, and is largely responsible for the popularization in England of abstract design in textiles. One of her designs received the American Institute of Designers' First Award in 1952 and a gold medal at the Ninth Triennale in Milan. At the Tenth Triennale a group of her designs gained the highest award given by the Triennale Design Jury, the Gran primo. Many of her designs are available in the United States.

She met her husband, Robin Day, a furniture designer, while both were studying at the Royal College of Art in London. She attributes much of her success to their practice of discussing and criticizing each others' projects at very early stages (61, p.10-11).

Mrs. Day first produced designs for Heal's Fabrics Unlimited London, England, in 1950. Since then her fabrics have always appeared in the Heal collections. She designs wallpapers, carpets, china, linen, plastic and dress fabrics on an international basis, and she has won awards in many countries. Her latest



Figure 54. Lucienne Day, top designer of printed fabrics in Great Britain, designs for Heal's.

award in America, the print, Ducatoon, received the Gold Medal at the California State Fair, 1959.



Plate 13. Ducatoon by Lucienne Day for Heal's, London, England - awarded Gold Medal at California State Fair 1959 - 100% cotton.



Plate 14. "Rock Rose" designed by Lucienne Day - Heal's
London, England.

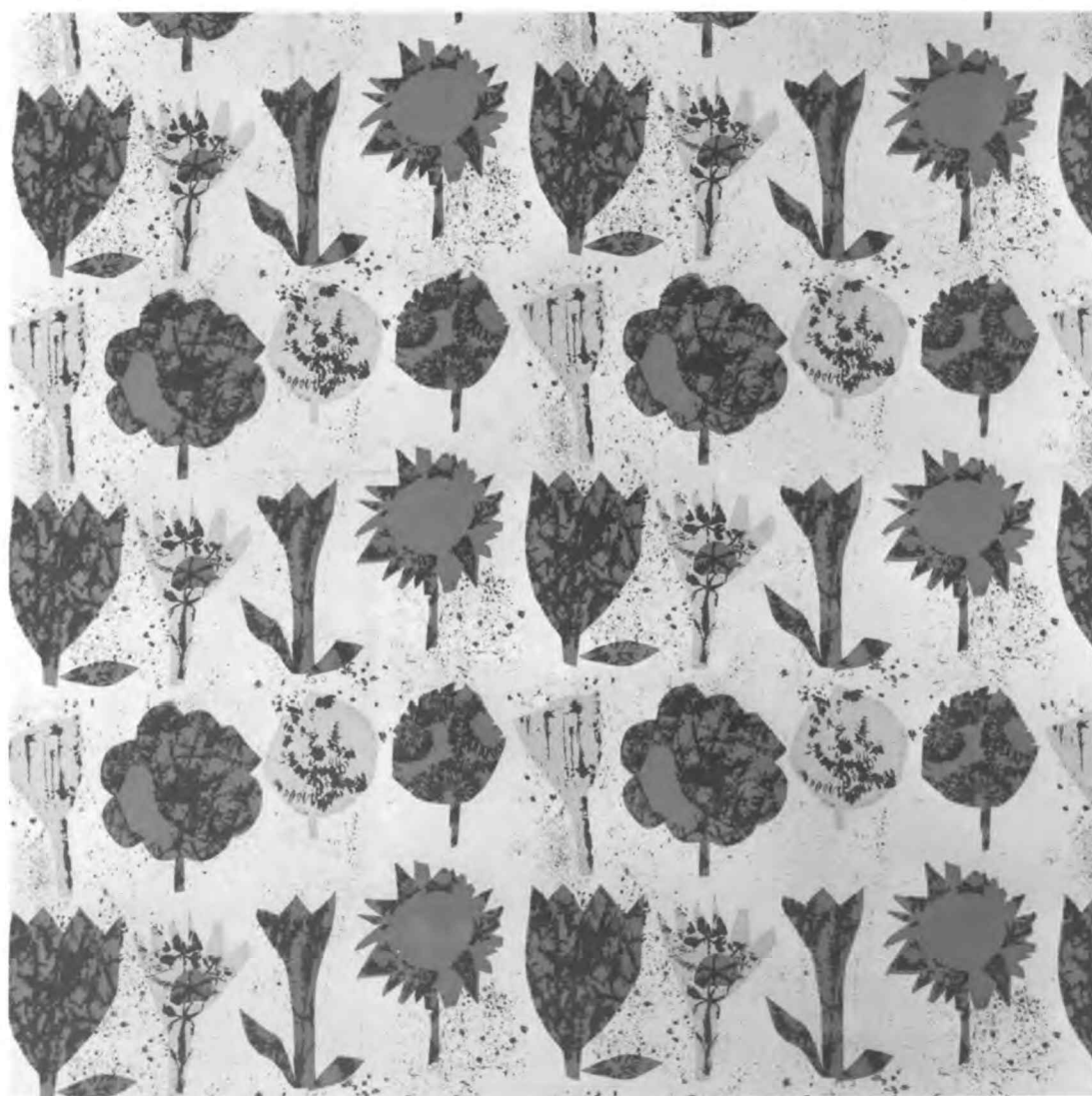


Figure 55. Rock Rose designed by Lucienne Day for Heal's Fabrics, London, England.

Astrid Sampe

From Astrid Sampe's early childhood she had seen the threads go into warp and shuttles in the looms of the factories. Her ancestors owned the Swedish Manchester, Boras, which was concerned mainly with making ready-to-wear clothes. This is a field in which the Swedes excel and contributes to her early training in the importance of tidiness and finish in a well-produced article. Mrs. Sampe is fanatically tidy and neat in her whole approach to life and work. She adores clothes and the whole field of fashion, but regardless of this fact, she realized that it was not the world for her. Her parents recognized early the inherited textile instincts that she possessed and as a result sent her to the very best art schools. She began her studies in 1928 in which she obtained a thorough training, dividing her time between "hand-woven" and "machine-made" techniques, spending alternate terms at the Stockholm School of Arts, Crafts and Design and at the Royal College of Art in London. While she was still at school she had sold her first textile design. Her parents also made it possible for her to go



Figure 56. Astrid Sampe, top designer and interior decorator of Sweden.

away for studies abroad in a time when this was not as usual as it is now. She studied in Germany, France, Italy and Czechoslovakia.

In 1936 the Nordiska Kompaniet or N.K., which is the largest modern department store in Sweden, hired her when she was yet a very young girl. At the beginning she was virtually unobserved but gradually with increased assistance and possibilities of the firm, she worked her way up to the top. She has been working with this company for twenty-five years, producing design forms of strict, pure, architectural beauty. Mrs. Sampe is now Art and Design Director of the Nordiska Kompaniet or N. K. She is a small, neat and very attractive person with blond hair and blue eyes, wears up-to-the-minute clothes and has the latest in nail polish. This is the armour which she has worn for years during which she has virtually moulded Swedish textile design to her own shapes, getting her own way, everytime, by wholly feminine weapons: charm and grace, but above all, backed by real technical knowledge.

Although "belonging" to N. K. she has always been encouraged to be an international and a freelance, and she has made good use

of her freedom. In 1948 she began her designing for Knoll International textile section. London is her second home, for she studied there in her youth and is very proud of her Hon. R.D.I. which stands for Honorary member of Faculty of Royal Designers of Industries. This was awarded to her by the Royal Society of Art in London.

The creative Sampe can be seen in two guises. She is a well known textile designer on the one hand and a creative interior designer on the other. She creates and coordinates interiors for private as well as public rooms, often working with the building's architect. Mrs. Sampe has decorated the private railway-coach of the King and Queen of Sweden, covering the walls with glass-fibre fabric and placing "rya" rugs by the beds. She has also decorated the State Railway's new coaches. They have been decorated within a couple of specially co-ordinated color ranges such as blue-turquoise or olive-lime-yellow. Both of these colors were chosen with a view to harmonizing with the Swedish landscape in summer and winter alike. The curtains are made of 100% glass fibre.

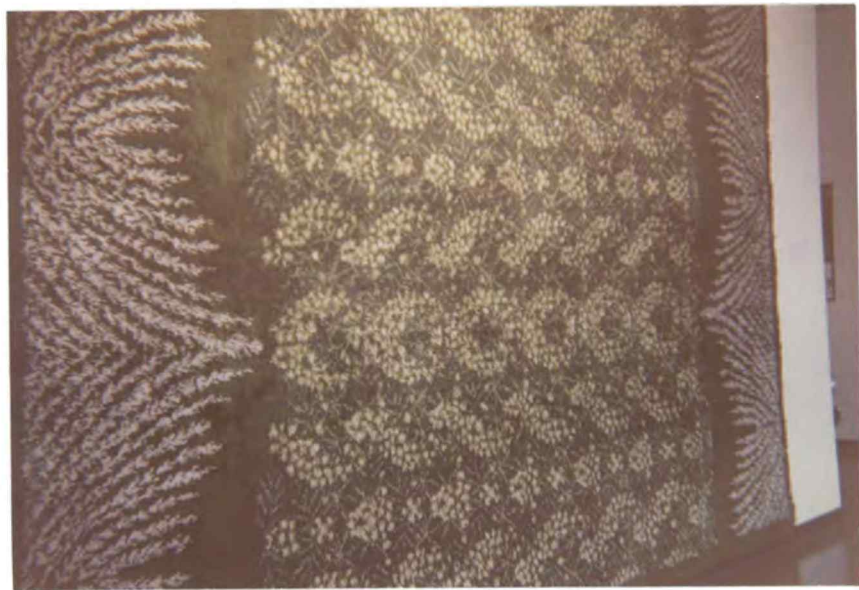


Figure 57. Rya rug designed by Astrid Sampe for the Dag Hammarskjöld Library at the United Nations Building in New York. On display at the Swedish Pavilion, Seattle World's Fair, 1962.

Mrs. Sampe does not believe in floral designs for home decorating fabrics. She believes in the importance of horizontal and vertical lines in textile designs because a room is based on these lines. The floors are horizontal and the walls are vertical; therefore, the textile patterns should coincide and harmonize with these lines. With this principle in mind, one can compliment or camouflage the effects of various rooms and the furniture with this type of design.

It is with gratitude that Mrs. Sampe refers to Mr. Eero Saarinen's influence on her textiles, her interiors and on her creative thinking. Mr. Saarinen provided her with the main rules to follow. Florence and Hans Knoll have also helped her development as a designer. In common with Saarinen and the Knolls, she is completely contemporary, and designs for today, our present mode of living, and is slightly ahead. She doesn't believe that people who exist in one era should live in another, in a setting which should belong to grandfather.

Her position as a designer in Sweden and in Swedish industry is strong and enviable. She has found that quality of form pays in the long run. Mrs. Sampe declares, "my textiles appeal far more

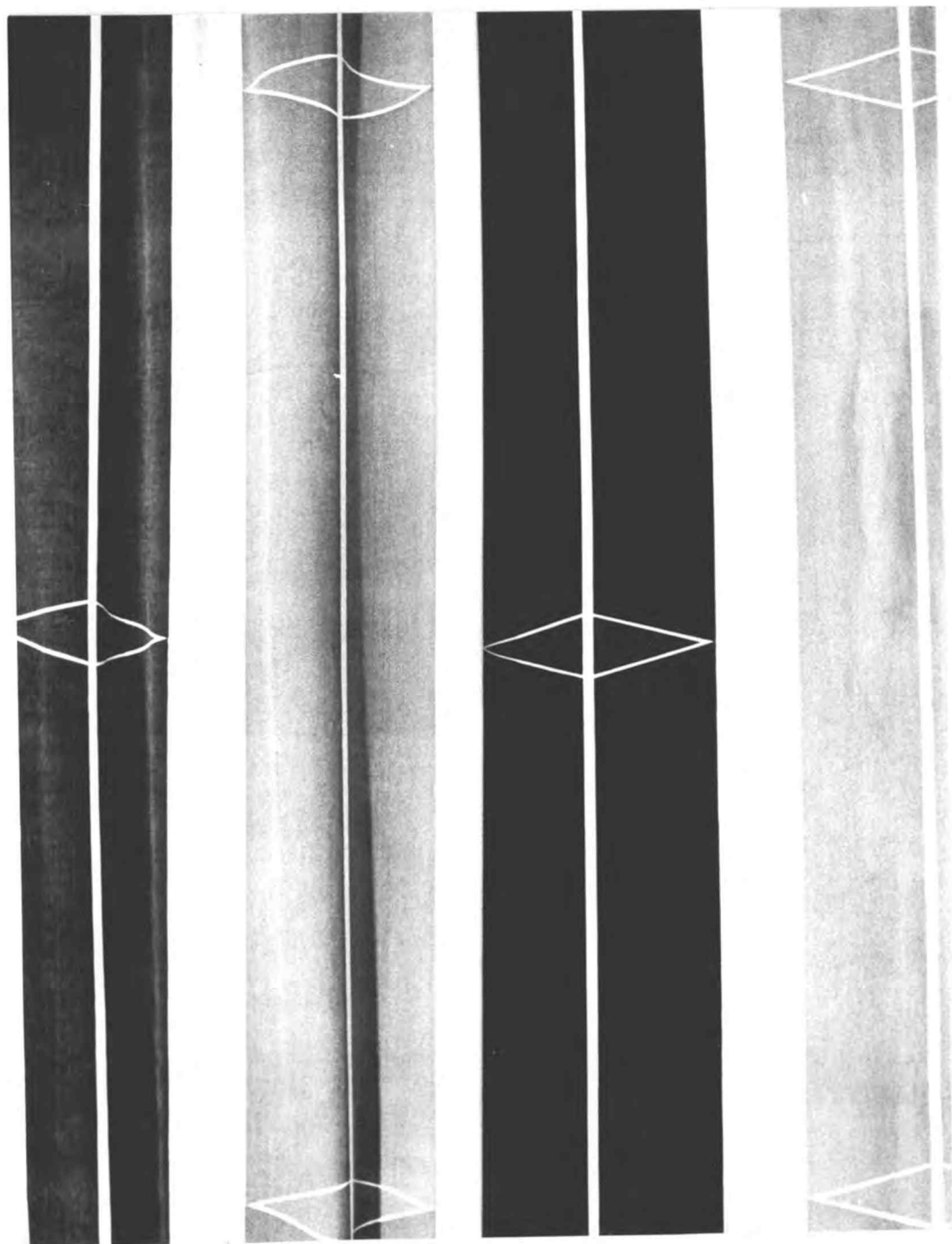


Figure 58. "Thermidor", first printed velvet, awarded gold medal in California State Fair, designed by Astrid Sampe.N.K.

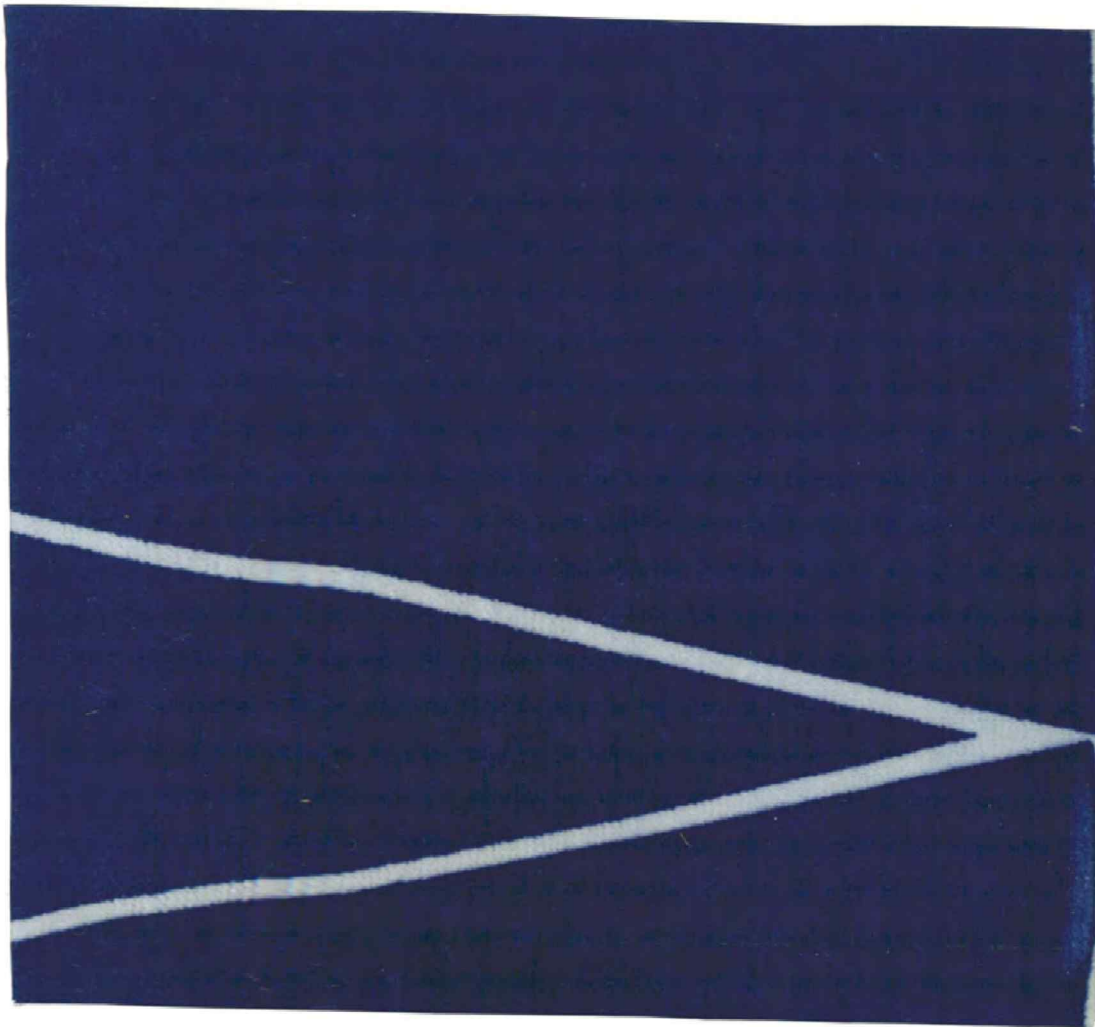


Plate 15. Thermidor - first printed velvet - designed by
Astrid Sampe - awarded Gold Medal in California
State Fair.

to the architects and trade than to the casual shopper trying to decide on curtain material" (1).

Her textile "Modulor" was used by Saarinen in 1953 for the Assembly Hall of Massachusetts Institute of Technology and her "mit and Thermidor" with its heavy vertical effect in 1959 in the Assembly Hall of his building for the American Embassy in Oslo.

Mrs. Sampe is international and she likes it for it widens her circle of friends and contacts as well as her horizon.

She lives as she preaches in a flat which conforms rigidly to her principles of interior design. It acts as a laboratory for testing, which has just taken form or is about to be created. Her home has been on display in four color prints in architectural and design journals all over the world (48). If the textile studio is something like a research laboratory, Mrs. Astrid Sampe's own home is the private little base for her experiments. Here she tries out all the new things.

"I want to live as I am:, she said, "I don't want to create something for other people to use which is not reality for myself. I keep the whole linen line in my cupboard, I have Kasthall's Wilton carpets in our modern designs and colour combinations. If we have a new material print, I do the trial washing myself. All this means, that I am continuously changing textiles and colours. I want



Figure 59. "Soldis", 100 percent unbleached linen drapery fabric designed by Astrid Sampe. N.K.

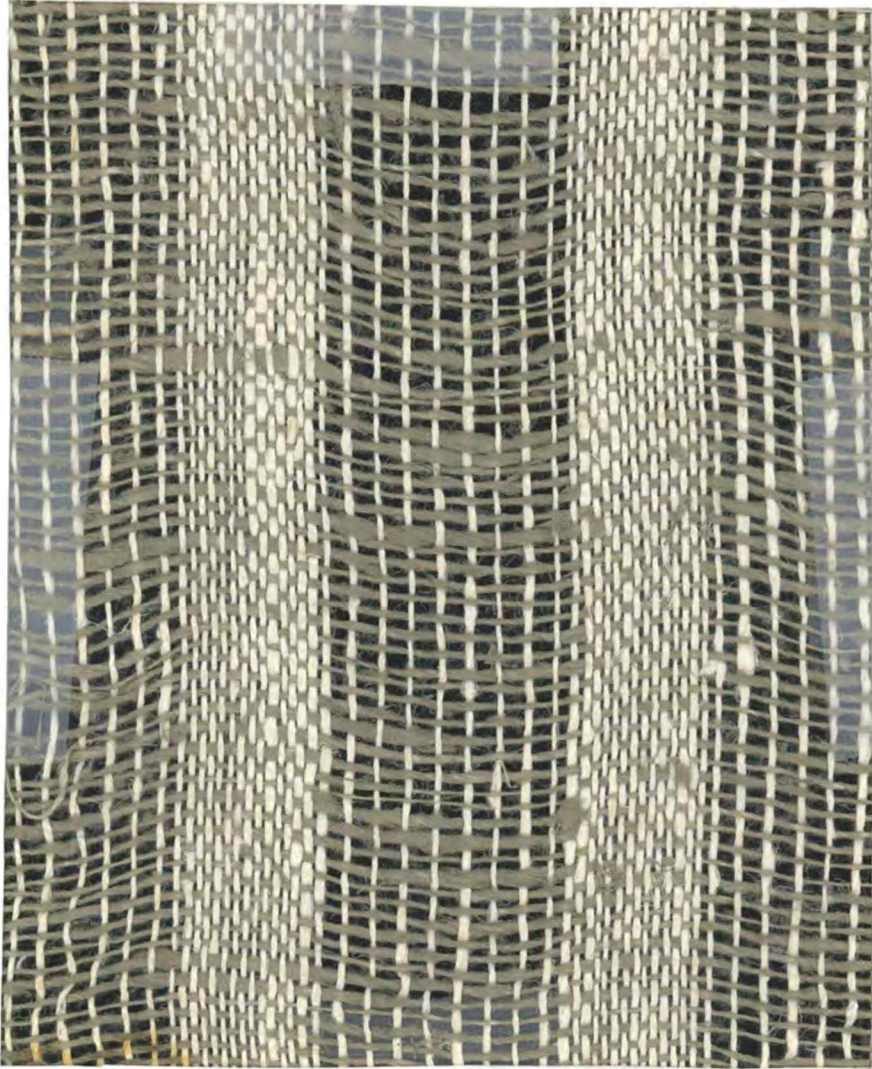


Plate 16. "Soldis" unbleached 100% linen - designed by Astrid Sampe.



Plate 17. Prisma - 100% linen - designed by Astrid Sampe.

to see what the new things look like in a home, since people are the most important element in the milieu, and the milieu should suit them, make them feel at home. Therefore, I become so inspired when workman at the factories where our designs are made, confides to me that he intends to buy this or that carpet or tablecloth for his own home. Then we feel very proud" (1).

Her latest accomplishments were recognized in September of 1961 when she was awarded two gold medals in the California State Fair for her curtain fabric "Thermidor" and her gripper rya rug "Roxen." In October of the same year she made five rugs specially ordered for the United Nations Library Building in New York.

At present she has left the handloom behind and become an industrial designer. The machine interprets her designs equally well, because she understands its technical demands (48).

Awards and Contributions

Astrid Sampe's contributions and awards were provided by

A. B. Nordiska Kompaniet, Stockholm, 1961.

1928- Hogre Konstindustriella Skolan, Stockholm and Royal
1932 College of Art, London.

1934 Study trip to Germany, France, Italy, and Czechoslovakia

- 1936 Employed by Nordiska Kompaniet, the most modern department store of Scandinavia.
- 1938 Temporary employment as textile designer, Donald Bros. Ltd., Dundee, England.
- 1948 Since 1948 designer, Knoll International textile section
- 1949 Made Honorary member of Faculty of Royal Designers of Industries (Hon. R.D.I.) by Royal Society of Art, London
- 1954 Grand Prix, Triennial, Milano
- 1956 Svenska Slöjdföreningens Award, Gregor Paulsson-Statueette handed over by His Majesty King Gustav VI Adolf at the yearly meeting of SSP

Showings:

- 1937 World Fair, Paris
- 1939 World Fair, New York
- 1946 London Building Centre, "Modern Swedish Home"
- 1948 One-man show Knoll Associates, New York
- 1952 Contemporary designs Wilton Carpets "Wilton of the Fifties" for Kasthalls, Kinna, Sweden
- 1954 One-man show Finnar Ltd., London
- 1955 Now collection "Wilton Exklusiv" carpets for Kasthalls, Kinna, Sweden.
- 1955 "Linnelinjen" collection of modern household linen for Almedahl and Textilkammaren, Sweden.

- 1956 One-man show "Linnelinjen, " Lord and Taylor,
New York
- 1957 Interior textile collection "Shuttleway" for Almedahls
fabriker, Goteborg
- 1957 Interior decoration of apartment for Svenska Slojdforeningen
with Bruno Mathsson's furniture and own textiles at
Interbau in Berlin.
- 1953 Arranged first showing in Sweden of Fiberglass Textiles
- 1954 Arranged first showing in Sweden of "Photoprint"
textiles

Represented in the following museums:

National Museum, Stockholm

Robsska Konstslojdmuseet, Goteborg

Nordenfjelske Konstindustrimuseum, Trondeim

Victoria and Albert Museum, London

Museum of Modern Art, New York

Walker Art Center Museum, Minneapolis

Decorated or assisted at interior decorations for the Royal Foreign

Office, in the following Swedish Embassies abroad:

1946 Pretoria

1946 Addis Abeba

1948 London

- 1949 Ankara
- 1950 Camberra
- 1958 Washington
- 1959 Tokyo
- 1961 Belgrad
- 1959 Made the interior decorations in the women's jail,
Rinseberg, for the Kungl. Fangvardsstyrelsen.
- 1959 Laid the Swedish table in Oslo for the Foreign Office at
the exhibition "Hela varlden till bords." Sweden was
awarded the first prize.
- 1958 September 29, arranged the textile exhibition "Swedish
Textiles Today" in the Carnegie International Center,
New York. The exhibition was under the auspices of the
Swedish Institute and the Swedish Embassy in Washington
- 1959 Triennial prize. DECIMA TRIENNALE DI MILANO: DIPLOMA
DI MEDAGLIA D'ORO
- 1960 12th Triennial in Milan: DIPLOMA DI MEDAGLIA D'ARGENTO
- 1960 On February 1, 1960, appointed Coordinating Stylist
- 1960 Appointed to co-operate in arranging the "Tribute to
Sweden" in New York. Responsible for the artistic design.
- 1958 Member of Sveriges Industri Designer SID
- 1960 April 4, arranged the textile exhibition "Swedish Textiles
for Modern Living" in the Centre, London. The
exhibition was under the auspices of the Swedish
Institute and the Swedish Embassy, London.

- 1961 Dame of the Order of Vasa
- 1961 September, awarded 2 gold medals in California State Fair, Sacramento, partly for the curtain fabric, Thermidor, partly for the gripper rya rug ROXEN (Wahlbecks)
- March. Made the designs for gripper carpets similar to rya rugs from Wahlbecks Fabriker in Linkoping, Sweden.
- 1961 August 30. Responsible for the presentation and the collection of Almedahl's household linen "Leva med Linnelinjen" and made own designs to the same collection
- 1961 October. Made 5 rugs specially ordered for the United Nations Library Building in New York in co-operation with Messrs. Harrison & Abramowitz.

CHAPTER V

LIST OF CONTEMPORARY HOME FURNISHING
FABRIC DESIGNERS CONTRIBUTING TO THE FIELD

EMILY S. BELDING	Wovens. Stylist for William Whitaker and Sons, Philadelphia, Pennsylvania. Address: Selkirk, New York.
HENRY CASSEN	Specialist in the curtain and drapery field. Introduced sheers with the emphasis on practical, easy-to-care materials. Address: 507 Madison Avenue, New York, New York.
SERGE CHERMAYEFF	Designs for Anton Maix, Inc.
ROBERT CROWDER	Hand Woven.
JACK DENST	Award winning designer for Denst and Soderland. He uses a great deal of printed fabrics for wall coverings.
FREDA DIAMOND	Prints. Designs for Schiffer Prints.
DOROTHY DRAPER	Prints and wovens. Interior decorator but also designs fabrics.
HUGO DREYFUSS	Wovens. Own firm - Kagan Dreyfuss Inc., 125 East 57th Street, New York 22, New York.
PAULINE DUTTERER	Prints. Director and designer of Myron Paul Originals. Myron Paul Originals, 415 South Sharp Street, Baltimore, Maryland.
ALEXANDER H. GIRARD	Prints and wovens. Herman Miller Inc., Zeeland, Michigan or Herman Miller Textiles - Zeeland, Michigan (a division of Herman Miller Inc.)

- CONZA HOWELL Designer for Burlington House, The Division of Burlington Industries which specializes in Home Furnishing Fabrics.
- MARISKA KARASZ Embroidery. Brought new media into Home Furnishing Fabrics.
- FRED KERN Fred J. Kern Textiles (The New Art of Blending - American Fabrics, page 8, No. 50, Summer 1960)
- MARIA KIPP Hand wovens. Own firm in Los Angeles. Address: 3425 West 1st Street, Los Angeles 4, California.
- ELEN and HANK KLUCK Prints. Own firm. Elenhank Designers, Inc., 347 E. Burlington Street, Riverside, Illinois.
- FLORENCE SCHUST KNOLL Prints and wovens. Knoll Associates Inc., 732 Montgomery Street, San Francisco 11, California or Knoll Textiles, 320 Park Avenue, New York 22, New York.

Designers Working for Knoll Textiles

- ANNI ALBERS (Has been doing freelance work as well as lecturing at museums and universities).
- RUBEN ESHKANIAN
- ESZTER HARASZTY
- EVELYN HILL
- SUZANNE HUGUENIN
- ROSS or RUSS LITTELL (Has designed for Laverne and also Anton Maix Fabrics).
- SVEN MARKELIUS (Designs also in Sweden).
- TONI PRESTINI
- ASTRID SAMPE (Designs also in Sweden for A. B. Nordiska Kompaniet).

PETER SIMPSON

ANGELO TESTO (Has own firm)

BORIS KROLL

Wovens. Own firm. Boris Kroll Inc.,
220 East 51st Street, New York 22,
New York.

JACK LENOR LARSEN

Hand wovens and prints. Own firm.
Jack Lenor Larsen Inc., 37 West 19th
Street, New York, New York.

Designers Working under Him

SELMA BRODY

ROBERT DEUBLE

EUGENE FELDMAN

JUNE GROFF

WARREN FLATNER

SHIRLEY ST. JOHN

LOUISE SHIFFER

DON WIGHT

ESTELLE and ERWIN LAVERNE Frints. Own firm. Laverne,
160 East 57th Street, New York 22,
New York.

DOROTHY LIEBES

Hand wovens. Consultant for many firms.
767 Lexington Avenue, New York 21, New
York.

FETER LOCKE

President and head designer of Lehman-
Connor, H.B. Co., Inc., 509 Madison
Ave., New York, New York.

MATIAS LOZANO

Designer weaver. Designs for Lozano
Fisher Studios. He and Arthur Fisher
opened up a showroom at 64 East 55th
Street, New York, New York.

MARTHA POLLOCK

Hand woven.

RUTH REEVES

Frints.

BEN ROSE

Prints and wovens. Own firm. 1129
West Sheridan Road, Chicago 40,
Illinois.

ROWEN DESIGNERS

Rowen Incorporated, 1 East 53rd Street,
New York 22, New York.

Prints

BRITAN DREWSON

LILY ELKAN

ALBERT HERBERT (A. I. D. Designed for
Anton Maix Fabrics, also rugs for
V'Soske Inc.)

ARTHUR W. HOFKINS

MARIE HOWELL

HARVEY JASON (JASON HARVEY)

ROGER JENSEN

TOVE KINDT-LARSEN

SARA PROVAN

FRED TITZ

LYDA WEYL (Also designs for Konwiser
Inc.)

Wovens

FELIX AUGENFELD

JULIO DE DIEGO

JACQUES DE STAERKE

MARY DU BOIS

TRUDY FEISS

JACK LARSEN (Has own firm)

MATT KAHN (Designs also for Konwiser
Inc.)

ANDREW KARSKY

ROBERT A. MC COMBRE

M. M. NYSTROM

JESSICA PRICE

RUTH ROBINSON

HERBERT SHALAT

HELLA SKOWRONSKI

LENART SVEFORS

- KARIN TACHINSKI
 ZELDA THOMAS
 AZALEA S. THORPE (Also designs for
 Kenwiser, Inc.)
- ROBERT SAILORS Hand Wovens. Maintains own studio at
 Bitely, Michigan.
- FRANCO, GINO, FLORA and ADRIAN SCALAMANDRE Historic and
 modern wovens and prints. Own firm. The
 Scalamandre Museum of Textiles, 57
 East 57th Street, New York 22, New
 York.
- SAUL STEINBERG Prints. Better known as a cartoonist.
- POLA STOUT Hand wovens. Own firm. Pola Stout
 Designs, 30 Park Avenue, New York
 16, New York.
- MARIANNE STRENGELL Handwoven fabrics and rugs. Designs for
 Edward Fields and many other companies.
 Works as a consultant. Address:
 Hamden, Connecticut.
- WINSTON H, SUTTER Weaver and designer joined Jens Risom
 Design, Inc., to establish a textile
 department for the leading furniture
 company. He is designer, stylist and
 coordinator of textiles for Jens Risom.
- ANGELO TESTA Prints. Own firm. Angelo Testa and
 Co., Textile Division, 49 East Ontario
 Street, Chicago 11, Illinois.
- PAUL THIRY Designs for Anton Maix, Inc.
- DORIS and LESLIE TILLET Prints. Own firm.
- JACK VALENTINE Own firm. Jack Valentine, Inc.,
 Decorative Fabrics, 32 East 57th Street,
 New York 22, New York.

- MARION VAN DORN Handwoven fabrics, rugs, prints. Has recently designed a collection for Edward Fields.
- VERA (MRS. GEORGE NEUMANN) Prints. Designs for F. Schumacher and Co., 60 West 40th Street, New York 18, New York; also for Printex Corporation Florence Brobeck, 444 East 52nd Street, New York 22, New York.
- HENNING WATTERSON Wovens. West Coast designer. Designed for Menlo Textiles.
- ROBERT WEBB Wovens. Own firm. William Webb no longer working in the field of textiles and not associated with this company any longer. Robert Webb is now head designer and president of company. Webb Textiles, Inc., 2010 Lincoln Avenue, Pasadena, California.
- RUSSELL WRIGHT Versatile designer in many fields, adapted callanet, an all nylon industrial fabric to decorative use.
Reuben Eshkanian, with Jack Lenor Larsen, went to Taiwan as textile designers for the Russell Wright I.C.S. program.
- KAMMA ZETHRAUS Hand wovens. She came to the United States from Denmark. She has been associated with Dorothy Liebes Studio in San Francisco ever since it was organized and went to New York with the Liebes Studio.

Rug and Tapestry Designers

- SIRKKA AHLKOG She came to United States from Sweden.
She has her own studio at 414 East 83rd
Street, New York, New York.
- WILLIAM WARD BEECHER Designs rugs for manufacturer
Alexander Smith.
- JOSEPH BLUMFIELD Rugs. Own firm.
- JOHN and EARLINE BRICE Designs rugs for Cabin Crafts, Inc.,
Dalton, Georgia.
- NANNA and JORGEN DITZEL Designs rugs for George Tanier,
Inc.
- MARISKA KARASZ Rugs and tapestries, embroidery.
- LEO MAHSOUD Hand woven rugs. Designed for Gump's
in San Francisco.
- LENORE TAWNEY Tapestry.
- BITTAN VALBERG Designs rugs for Cabin Crafts, Inc.,
Dalton, Georgia.
- V'SOSKE COLLECTION OF ACCENT RUGS Showroom at 4 East
53rd Street, New York, New York.

Designers

JOS'E CLEON
AL HERBERT
WILLIAM HINZ
MIRIAM KEEFE
ABBOT PATTISON
KATHERINE PATTON
STANISLAV V'SOSKE (Very talented
designer of rugs.)

Architects and Furniture Designers Who Also
Design Fabrics

DAN COOPER	Own firm. Dan Cooper Design Corp.
RAYMOND LOEWY	Industrial designer. Designs automobiles, sewing machines, streamliner, coca cola signs, etc. He has designed fabrics for F. Schumacher and Company.
PAUL MC COBB	Designed for Schiffer Prints Division of Mil-Art Company.
GEORGE NELSON	Designed for Schiffer Prints Division of Mil-Art Company.
JENS RISOM	Designed for L. Anton Maix, Inc.
EDWARD DURRELL STONE	Designed for S. M. Hexter Company.
EDWARD J. WORMLEY	Designed for Schiffer Prints.
FRANK LLOYD WRIGHT	Designed for F. Schumacher and Company.

Designers and Educators

ANNI ALBERS	Once taught at Black Mountain College (15 years). She now does free-lance work as well as lecturing at museums and universities.
LILI BLUMENAU	Columbia University.
MARLI EHRMAN	Once headed the Textile Department at the Institute of Design in Chicago.
TRUDE GERMONPREZ	California College of Arts and Crafts in Oakland, California.
DOROTHY HULSE	Teaches and weaves professionally.

MARIE HOWELL	Rhode Island School of Design.
JOAN PATTERSON	Acting Head of Textiles and Clothing, Oregon State University.
HESTER A. ROBINSON	University of Hawaii.
ED ROSSBACH	University of California.

Foreign Designers

LIS AHLMANN and BORGE MOGENSEN	Denmark	Fabrics. Designs for Aktieselskabet C. Olesen, Hojbroplads 4 Kobenhaven K Denmark.
SIGVARD BERNODATTE	Sweden	Rugs.
LUCIENNE DAY	Great Britain	Fabrics, prints. De- signs for Heal's Fabric Company.
INGRID DESSAU	Sweden	Hand-woven fabrics. Designs for Kasthalls Mattfabrick, Kinna, Sweden.
VIOLA GASTEN	Sweden	Hand-knotted rya rugs, also fabrics.
ARNE JACOBSEN	Denmark	Fabrics. Strandveg 413, Kilampenborg, Denmark.
VIBEKE KLINT	Denmark	Fabrics, rugs, Stranvej 622 Klampen- borg, Denmark.
ANNELISE KNUDTZEN	Norway	Rugs.

STIG LINDBERG	Sweden	Fabrics, hand prints.
SVEN MARKELIOUS	Sweden	Designs for Molnlycke Vafveri, Goetborg, Sweden.
WENDELL RIGGS	Mexico	Rugs and fabrics, own Studio Riggs-Sargent, Amberes #41 Mexico, D.F.
BRUNO ROMEDA	Italy	Hand wovens.
ASTRID SAMPE	Sweden	Fabrics, rugs. A.B. Nordiska Kompaniet.
JOHANNA SCHIDLO	Germany	Hand wovens.
PAULA TROCK	Denmark	Fabrics, rugs. Spinde- gaarden A/S Askov pr. Vejen, Denmark.
HILKA VUORINEN	Finland	Rugs.
JAN YOORS		Tapestries (hand-woven).
DORA YUNG	Finland	Rugs, fabrics.

CHAPTER VI

CONCLUSION

The great change in the design of contemporary home furnishing fabrics has been brought about through numerous influences in our present day mode of living.

In the last hundred years the condition of civilized man has changed more radically than at any previous time. The great change started with the Industrial Revolution and continued on from the steam engine to the internal combustion engine; from electricity to atomic power; from the handloom to automation of modern industry. All of these changes have, each in its own time, affected the social, economic, and political structure of our society.

Design being sensitive to change in the social order, to changes in the ideas, beliefs and activities of man, it too was forced to change. This change started with architecture, with design changing from the ornate to the simplified form. Since home furnishing fabrics are an architectural element, in that they are used to insure privacy, deaden sound, partition one space from another, and control light and heat, their design also had to change to correlate with architecture and the new way of life.

Frank Lloyd Wright's ideas on architecture and the labor-saving and comfort-making devices which American factories were turning out, opened a new way of life, especially for women. The design of home furnishing fabrics was geared to the needs of modern architecture and to the interior design of contemporary homes.

A society of the masses has arisen and is being molded by such media of mass communication as the press and the movies, radio and television. The modern industrial order has brought the ordinary man a standard of living undreamed of in all the previous ages. The regularly employed worker of today enjoys privileges denied to the aristocracy of but half a century ago. This development has brought about a mass consumer with a great purchasing power, part of which is earmarked for home furnishing fabrics and has opened up a large market for designers to sell their products. What could be more encouraging to a designer or manufacturer than the opportunity to exploit the possibilities of fabrics and their designs, a large market where rewards are both monetary and aesthetic with the designer being recognized for excellence of design.

Atomic power, for manufacture on an inexhaustible scale and macromolecular chemistry have brought about new fibers and finishes, making it possible for designers to produce fabrics of great beauty and durability. Cybernetics, which gives the power of machines to think like men, is producing the original intricate designs that otherwise could have only been hand-woven. For instance beautiful hand-woven rya rugs that resemble a modern painting in their design and color, have sold for \$180 per square yard. These same rugs can now be duplicated on these machines for \$7.50 per square yard. Because of our complex way of life, the homemaker is demanding beauty as well as durability in home furnishing fabrics and designers and manufacturers are doing their best to place them on the market at reasonable prices.

The taste of the American public is changing. Higher standards of living, and greater numbers of educated people, more lesiure time to develop taste, and extensive travel have helped to bring about this improvement.

Never before in history has our range of choice been so exciting or so wide. But it is the wise exercise of our ability

to choose that will bring to full bloom all the beauty and wonder of the way we live today, for we, the consumers, in the end are the ones that can really dictate the type of design that we want to live with.

BIBLIOGRAPHY

1. AB Nordiska Kompaniet. NK I Ord Och Bild 1961. Stockholm, Sweden, Fridmans Boktryckeri, 1962. n.p.
2. Alexander Girard. *American Fabrics* 38:35. Fall 1956.
3. The Ambassador reports on Scotchgard. *The Ambassador* (London) 12:13, 26, 42. 1961.
4. Auerbach, Alfred. Modern design. *Arts and architecture* 79: 16-17, 29-30. March 1962.
5. Ball, Victoria Kloss. *The art of interior design*. New York, Macmillan, 1960. 321 p.
6. Bayer, Herbert. Gropius Walter. Gropius Ise. *Bauhaus*. Boston, Charles T. Brandford, 1952. 216 p.
7. Bemis, Marion Holden. Marianne Strengell, textile consultant to architects. *Handweaver and Craftsman* 8(1):6-9. Winter 1956-1957.
8. Beradotte, Sampe and Lindberg. Three names at the top in design. *The Scandinavian Times* (Stockholm, Sweden) p. 12-13, n.d. (Clipping).
9. Bittan Valberg adapts the handloomed look to less costly machine-tufted rugs. *Industrial Design*, April 1960, p. 76-77.
10. Boris Kroll: Technocraftsmanship of fabric maker. *Interiors*, October 1960, p. 156-169.
11. Brandt, Mary L. *Book of home decoration*. New York, McGraw-Hill, 1957. 305 p.
12. Bryan, Dorothy. Marianne Strengell's approach to design. *Handweaver and Craftsman* 11(4):29. Fall 1960.

13. Burck, Gilbert. How American taste is changing. *Fortune*, July 1959, p. 114-196.
14. Canaday, John. American taste: How goes it? *New York Times* (New York), p. 48, col 1-5. March 20, 1960.
15. Cristopherson, Anita. She doesn't believe in floral designs for the home. *The Scotsman* (n.p.), April 16, 1960. (Clipping).
16. Clark, Jane. She stands on the side of the future. *Globe-Democrat* (St. Louis, Mo.) p. 5, col 1-4, May 25, 1961.
17. Cook, J. Gordon. Handbook of textile fibers. Waterford, Herts, England, Merrow Publishing Co. Ltd, 1960. 423 p.
18. Crane, Burton. The practical economist. New York, Simon and Schuster, 1960. 229 p.
19. Creative force in the world of weaving. *American Fabrics* 48:82-87. Winter 1960.
20. Designs rich in tradition at Boris Kroll. *Interiors*, May 1960, p. 134 and 160.
21. Directions in the decorative fabrics field. *American Fabrics* 48:9. Winter 1960.
22. Dorothy Liebes. *Handweaver and Craftsman* 11(2):18-21, 56-57. Spring 1960.
23. Dorothy Liebes designs fabrics for U.S. theatre at the Brussels world's fair. *Handweaver and Craftsman* 9(2):26-27. Spring 1958.
24. Dorothy Liebes. Textile designer. *National design center newsletter*. New York. October 1960. p. 3, col. 2.
25. Dorothy Wright Liebes, first lady of the loom. *Interiors*, July 1947, p. 34.

26. Duirson, Vera. Textile review. Form (Stockholm, Sweden) (Typescript translation) 1957. n.p.
27. Dyeing and finishing newsbriefs. Modern Textiles, January 1962, p. 24.
28. Exploiting the rich possibilities in materials. House Beautiful, October 1959, p. 234-239.
29. Fabrics International. American Fabrics 55:48-51. Winter 1961-62.
30. Farr, Finis. A biography of Frank Lloyd Wright. New York, Charles Scribners Sons, 1961. 280 p.
31. Fitch, James Marston. Architecture and the esthetics of plenty. New York, Columbia University Press, 1961. 284 p.
32. Ford, James and Katherine Morrow Ford. The modern house in America. New York, Architectural Book Publishing Co., 1942, 132 p.
33. Frank Lloyd Wright and 1,000,000 houses a year. House and Home, March 1953, p. 105-113.
34. Frank Lloyd Wright and "The natural house." House and Home, January 1955, p. 166-168.
35. Galaxy of new curtains and draperies await shoppers. Home Furnishing Ideas for 1962. Des Moines, Iowa, Meredith Publishing Co., Better Homes and Gardens, 1962. 184 p.
36. Gibbings, Robsjohn T.H. Good-bye, Mr. Chippendale. New York, Knopf, 1944. 106 p.
37. Girard's doll-heaven, "Textiles and Objects" shop. Interiors, July 1961, p. 2-9.
38. Goldstein, Harriet and Vetta Goldstein. Art in everyday life. New York, Macmillan, 1958. 508 p.

39. Gordon, Elizabeth. Exploding the box to gain spaciousness.
House Beautiful, October 1959, p. 256-258.
40. Gropius, Walter. The new architecture and the Bauhaus.
New York, Museum of Modern Art, 1936. 80 p.
41. Gump, Richard. Good taste costs no more. Garden City,
New York, Doubleday, 1951. 185 p.
42. Hall, Guin. Weaving with Oregon flax. Craft Horizons 12(1):
22-23-24, 25. Jan. 1952.
43. Heard, Frances. Five new style trends in fabrics. House
Beautiful, October 1957, p. 192-197.
44. Henle, Guy. The open plan - a way to gain spaciousness.
House Beautiful, October 1959, p. 244-298-299.
45. Hennessey, William J. Modern furnishings for the home.
New York, Reinhold, 1952. 291 p.
46. Holtzman, Harry. Mondrian problem. Art News 56:34-35,
63. April 1957.
47. Holtzman, Harry. The ultimate cubist. Saturday Review
40:30-31. February 16, 1957.
48. Hook, Marianne. Astrid Sampe: A profile. Svenska Dagbladet,
n.p., (Hoken, Sweden) June 10, 1961. (Clipping and
English translation)
49. A house by Frank Lloyd Wright. House and Home, December
1952, p. 66-73.
50. Interview with Dorothy Liebes. American Fabrics 23:59-65.
Fall 1952.
51. I want to live as I am, says an artist designer. Stockholm,
Sweden, NK's Textilkammare AB Nordiska Kompaniet,
1956. 4 numb. leaves.

52. Jack Lenor Larsen. Handweaver and Craftsman 11(2):22-24, 42. Spring 1960.
53. Joedicke, Jergen. A history of modern architecture. New York, Frederick A. Praeger, 1958. 237 p.
54. Keen interest in carpet design competition. Handweaver and Craftsman 3(3):36. Summer 1952.
55. Larsen, Jack Lenor. At the Cranbrook Academy of Art. Handweaver and Craftsman 3:24-25. Spring 1952.
56. Larsen, Jack Lenor. Fashion with the stress on fabrics. American Fabrics 58:53-55. Summer 1961.
57. Larsen, Jack Lenor. The weaver as artist. Craft Horizons 15:30-34. November/December 1955.
58. Larsen, Jack Lenor. Weaving for name designers. Craft Horizons 12:13-15. August 1952.
59. Lewis, Ethel. The romance of textiles. New York, Macmillan, 1953. 358 p.
60. The life of the family centers around the living-dining room. House and Garden, June 1959, p. 82-89.
61. Lucienne Day arca fsia. Design Quarterly 36:10-11. 1956.
62. Lynes, Russell. The tastemakers. New York, Grosset and Dunlap, 1954. 341 p.
63. Manners, David. A true home with all its comfort and convenience. House Beautiful, July 1962, p. 48-57.
64. McCobb, Paul. Designer Paul McCobb speaks for contemporary. American Home 45(7):32-33, 67. July-August 1962.
65. Meet Dorothy Liebes. House Beautiful 87(4):74-75. April 1945.
66. Midtown maverick in the home fabrics field. American Fabrics 50:62-67. Summer 1960.

67. Mondrian and the square. Time Magazine, June 24, 1957, p. 68-70.
68. Munby, Denys L. One world of plenty and change. Christian Century 76:1015-1016. Spetember 9, 1959.
69. A new direction for British home fabrics. American Fabrics 52:88-91. Spring 1961.
70. New views on fabric. Cotton Board, Royal Exchange, Manchester, England. Press sheet. 1962.
71. One-step glass dyeing now possible. Textile World, February 1960, p. 77.
72. Our rooms reflect a new freedom. House and Garden, July 1961, p. 46-55.
73. Patterson, Joan. Oregon flax to fibers. Masters thesis. Bloomfield, Ill., Cranbrook Academy of Art, July 1950, 37 numb. leaves.
74. Peter, John. Masters of modern architecture. New York, George Braziller, 1958. 200 p.
75. Pevsner, Nikolaus. Pioneers of modern design. New York, The Museum of Modern Art, 1949. 135 p.
76. Report on casement fibers. Interiors, January 1962, p. 111-113.
77. Rogers, Kate Ellen. The modern house, U.S.A. New York, Harper, 1962. 279 p.
78. Scandinavia's young dissenters. Craft Horizon 18:28-33 March/April 1958.
79. Scully, Vincent Jr. Frank Lloyd Wright. New York, George Braziller, 1960. 112 p.
80. A significant direction in textile taste. American Fabrics 55:53-56. Winter 1961-1962.

81. Smith, T. V. When men discriminate wealth is a maturing influence. *House Beautiful*, November 1958, p. 196-280.
82. Statistical abstract of the United States. Washington, D.C., U.S. Government Printing Office, 1959. 951 p.
83. Stavender, Ake and A. H. Hultdt. Design in Sweden. Stockholm, Sweden, Ahlen and Akerlunds, 1961. 268 p.
84. Stout, Evelyn E. Introduction to textiles. New York, Wiley, 1960. 185 p.
85. Synthetics Finishing Corporation. What the new synthetic finishes mean to the decorator. Philadelphia, Pa., n.d. 13 p.
86. They added a contemporary wing. *House and Garden*, April 1962, p. 132-135.
87. Top Weaver. Dorothy Liebes uses metal, plastic, wood. *Life* 23(21):92-94. November 24, 1947.
88. Valberg. *Craft Horizons* 17:28-31. June 1957.
89. Valberg artist in yarns. *American Fabrics* 46:70-71. Spring 1959.
90. Weeks, Edward. In friendly candor. Boston, Little-Brown, 1959. 291 p.
91. What's new in home furnishing fabrics. *Modern Textiles*, January 1960, p. 26-28+.
92. A wondrous world in the making. *House and Garden*, January 1962, p. 110-113.
93. A work of art to live in. *House and Garden*, May 1962, p. 124-135.
94. Working walls liberate living space and rout clutter. *House and Garden*, March 1962, p. 188-191.

95. Wright, Frank Lloyd. *An American architecture*. New York, Horizon Press, 1955. 263 p.
96. Wright, Frank Lloyd. *An autobiography*. New York, Longmans, Green, 1933. 371 p.
97. Wright, Frank Lloyd. *The future of architecture*. New York, Horizon Press, 1953. 325 p.
98. Wright, Frank Lloyd. *The natural house*. New York, Horizon Press, 1954. 221 p.
99. Wright, Frank Lloyd. *A treatment*. New York, Horizon Press, 1957. 250 p.