ANNI ALBERS

THE PLIABLE PLANE; TEXTILES IN ARCHITECTURE

Mrs. Anni Albers is known for her work in the field of textiles as an artist, a designer for industrial production, a lecturer and teacher. Born in Berlin, Germany, she started her art training in Berlin and Hamburg and later became a student at the Bauhaus in Weimar and Dessau where she met her husband Josef Albers. From 1933-49 she was assistant professor of art at Black Mountain College and since then has been doing freelance work as well as lecturing at museums and universities. Her work has been shown and collected by leading museums, among them the Museum of Modern Art in New York.

If the nature of architecture is the grounded, the fixed, the permanent, then textiles are its very antithesis. If, however, we think of the process of building and the process of weaving and compare the work involved, we will find similarities despite the vast difference in scale. Both construct a whole from separate parts that retain their identity, a manner of proceeding, fundamentally different from that of working metal, for instance, or clay, where parts are absorbed into an entity. This basic difference, however, has grown less clearly defined as new methods, affecting both building and weaving, are developing and are adding increasingly to fusion as opposed to linkage.

Both are ancient crafts, older even than pottery or metal work. In early stages they had in common the purpose of providing shelter, one for a settled life, the other for a life of wandering, a nomadic life. To this day they are characterized by the traits that made them suited to these two different tasks, obvious in the case of building, obscured, more or less, in that of textiles. Since the obvious hardly needs to be examined, let us turn to the less evident.

When we move about, we carry with us, above all else, the clothes we wear and these have always been of material, textile in its nature, if not actually a textile. We can recognize in leaves and bark and especially in hides and furs, prototypes of fabric and it is their use as our secondary skin, either in their paleolithic or their transposed form, that has made us independent of place, hour and season, in the remote past as today.

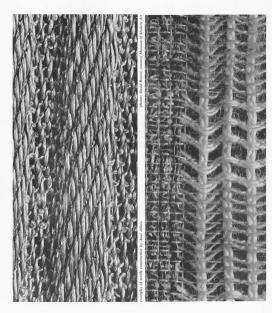
In our early history, such independence surely brought on a further immediate need, that for a transportable shelter. The same type of material which proved so suited for clothing was also appropriate here, a material that was pliable above all other characteristics and therefore easily portable. Hides stretched over poles were an efficient solution for this problem of shelter, for such a material, when expanded, could shed water, hold off the wind and give shade. In transit it could be folded, that is reduced to a fraction of its extended

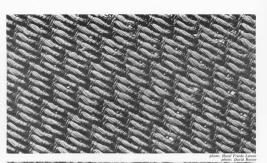
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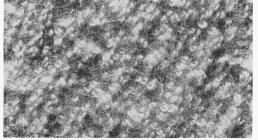
In a life of wandering, not only what is carried has to be portable, but the means for carrying things have to be found and developed. A string that holds a bundle together, or a group of strings forming a net or bag are direct ancestors to our air-luggage today. The textile material, pliable and lightweight, is of utmost efficiency in transit. It is interesting to observe that our carrying cases with a need for decreasing weight in fast travel are becoming again more and more a mere bag of cloth. But from a string or a connected group of strings to a fabric, a long history of inventions passed. In distant history it may well have been the use of hides that challenged the inventive minds to fabricate a counterpart. Through thousands of years of textile experimentation, however, nature's remarkable model still stands unsurpassed in many of its practical aspects. But in the course of development the resulting "fabrics" have taken on characteristics that belong to them alone and which, in turn, perform in various ways better than the original example supplied by nature.

Initial attempts must have been concerned mainly with thread construction. In fact, excavations in the last decade in northern Peru brought to light innumerable small pieces of cloth that seem useless in their limited size unless understood as structural experiments. The earliest specimens show textile techniques other than weaving, but gradually weaving evolved and finally took over. It is interesting in this connection to observe that in ancient myths from many parts of the world it was a goddess, a female deity, who brought the invention of weaving to mankind. When we realize that weaving is primarily a process of structural organization this thought is startling, for today thinking in terms of structure seems closer to the inclination of men than women. A reason may have been that men as hunters supplied the skins of animals and that women as gatherers had pass through their hands along with berries and roots, textile raw material in the form of reeds, vines and grasses. Later, with weaving traditions established, embellishing as one of the weaver's tasks moved to the foreground and thus the feminine role in it has become natural in our eyes. Regardless of speculation as to origin, we know that it has taken generation after generation to perfect a method of interlacing threads that has proved in the course of time so potent in possibilities. What we should bear in mind here is the specific quality of textiles in regard to flexibility. pliability, and their high degree of performance relative to their weight, before taking up the part they play aesthetically.

From the first shelter of hides to the latest tent for camping in peace as in war, the idea of a transportable, and therefore lightweight house has remained essentially the same. The walls are of







non-rigid, non-supporting material, a material of textile character if not a textile itself, a material that can easily be fastened to supports. Wherever provisional quarters have to be built speedily and independent of local material, the textile house, the tent, is the answer because of the inherent characteristic of cloth that one might call it its nomadic nature. (The felt-lined tents, the vurts, used as houses in Outer Mongolia, can be dismantled in fifteen minutes, so The New York Times

of October 21, 1956 reports.) Shelter is perhaps the most vital use, besides clothing, that has been made of this pliable, quasi twodimensional material. This two-dimensionality has played a major part in the making of textiles. Length never created a serious problem, while width on the other hand had to be solved by various inventions. Thinness of fabric, linked with lightness is still a concern of weavers

A further quality of cloth or of its antecedents should be added to our list; its ability to keep us warm, its non-conducting quality. Insulation is one of the performances of fabrics that is clearly anparent in clothing.

If a first need for textiles came with a need for clothing and shelter, their use changed with changing needs, one might say with the development of needs. Though they still protect us today against the weather in the form of clothes in our regular settled form of life, they no longer provide us with shelter except in our spells of nomadism, as tourists or warriors. With the discontinuance of this one major function textiles moved indoors inside our habitations. If we recall the attributes we have given them: insulating, pliable, transportable, relatively light-weight, all of these have been and still are active, as they were outdoors, in the interiors of houses all over the world throughout the centuries. But with their relaxed duties that is no longer having to guard our life, they have accumulated more and more functions that belong to another realm-aesthetic functions. These, in time, have moved so much to the foreground that today "decoration" has become for many the first and sometimes only reason for using fabrics. In "decoration" we have an additive that we may well look at, if not skeptically, at least questioningly,

We can surmise that perhaps a parallel development, however faint, can be found in regard to clothing. We still, in certain climates and at certain seasons need clothes as urgently as did our early ancestors. But with a sedentary life, with permanent, warm shelters, clothing is no longer a 24 hour problem in any weather. We dress indoors for other reasons than solely as protection against the cold or heat. That we dress for aesthetic reasons among others, has been proved with the first pretty figleaf. Perhaps we even can say that part of our protective covering has moved indoors if we look at our bed with its sheets and blankets as a sort of clothing extension.

In general then, except for some of our clothes, textiles have taken on an indoor existence. Their protective duties have changed. Instead of keeping off the wind, they now may keep the sun from inside the house, and important today in a crowded world, protect the privacy of the inhabitants. They still give warmth, on floors for instance, and may give insulation from drafts as curtains-functions losing importance with improved building conditions. On the other hand they are taking on new tasks like sound-absorption, a problem growing with a noisier world. In fact, we ask of our fabrics more diversified carsing than over before Today we may want them to be light-reflecting, even fluorescent, crease-resistant or permanently pleated and have such invisible qualities as being waterrepellent, fast-drying, non-shrinking, dust-shedding, spot-resistant and mildew-proof, to name only a few. We are witnessing today an acceleration of textile progress not even remotely resembling any other in history, Strangely, advances are not due to any improvements in weaving itself, that is to new inventions of thread interlacing. Here we can actually see a regression. The impressive textile development at present is almost entirely due to new chemical processes that bring us new fibers and finishes. In constant succession we find announcements of new textile materials and treatments that " . . . ize" our fabrics, from the already classic "sanforize" to a surprising "sanitize" - self-explanatory - to an occasional absurdity such as "heavenize" riding the wave of the day's "... ize" promises.

But though these new qualities, often not visually apparent, show where the concentration of present textile progress lies, the traditional, visual qualities usually carry greater weight in the mind of the public, at least when concerned with settled life, A fabric is largely chosen because it is red, for instance, and often regardless of whether equipped with other virtues, in preference to one more sensibly endowed for a specific situation but lacking such instantaneous, visual, appeal as that of color.

When we revert to nomadism, however, as travellers, we are open to textile behavior as were our distant forebearers, with this difference, that the dominant, mobile quality of fabrics through usage in thousands of years is lost in general to our awareness, while we seek eagerly newly acquired features, suited to our speed of travel. One dacroncotton shirt, fast-drying, absorbent and shaperetaining, may take us around the world, In our settled existence the character of mobility

in our fabrics is nevertheless manifest: as curtains they are drawn open or closed, letting in light or shutting it out, thereby changing dramatically the

appearance of a room. As table mats or table cloths they are put on and taken off again; as bedspreads they are removed at night. They can be lifted. folded, carried, stored away and exchanged easily: thus they bring a refreshing element of change into the now immobile house. The very fact of mobility makes them the carrier of extra aesthetic values. A red wall may become threatening in the constancy of a high pitch, while red curtains of equal color intensity and able to cover an equal area can be of great vitality and yet not overpowering because the red area can be varied by drawing the curtain. The perishable nature of fabrics, though in many respects a severe disadvantage, turns into an advantage when a red fabric can be replaced by a blue one for instance, more easily than is possible with most other materials. Their perishability is often a welcome reason for change. That color, texture, draping quality, gloss or dullness, etc. have become dominant as aesthetic components is a logical development. That we also overdo our textile furnishings today in many instances is a residue, it seems, from temps perdus, from periods in architecture less efficient than ours in providing controlled temperature.

Let us look closer. Let us assume someone is moving into quarters that today have those wires, pipes, buttons, etc. that serve to light and heat, supply with water or drain, cool and ventilate a place. Let us suppose that blinds at the windows regulate the light by day and guard the privacy by night. In short, let us visualize it as ready to live in, once heds, chairs and tables essentials to our western mind, have been moved in; a place that obviously can function virtually without textiles. Nevertheless, without them there will be a feeling of barrenness, even coldness, that can be justified in part and partly perhaps is no more than a matter of convention. What is missing through the lack of fabrics is presumably something that is warm to the touch, quite possibly color, the soft play of folds and the lustre of fuzz of fibers in contrast to flat, hard, and cool surfaces. On the floor, or on sections of it, we may miss a soft, sound-subduing and warming covering, a carpet or rug, and at the windows a light veil to keep out any glare and add

to further privacy. If I dody, we would go about the task of choosing fabries guided by a clear head before we become generous in the separations pleasures that color, surface, and the "hand" of cloth give us, our rooms would look uncluttered, specious and servent. They would look animated by those qualities of materials have become sometimently from wearing them: from their us next to our skin. And if we think of this we know so influently from wearing them: from their us next to our skin. And if we think of this we know so influently from wearing them in the section of the section o

It is not abundance or sparsity of fabrics though. that may date our interiors. It is as much the way our fabries are used. Today we have no time for frills: we have our curtains from criling to floor in straight folds. Instead of decorative additaments they thus become an integral architectural element. a counterpart to solid walls. Mies van der Rohe was one of the first to use them in this architectural form. Le Corbusier in a different way, incorporates textiles into an architectural scheme, using them as enormous flat wall-panels banners, that carry color and form and serve perhaps also as sound-absorbing flats. Above all they become a focal point, as in the halls of his Indian High Court of Justice at Chandigarh. This is not an altorether new use. Large tapestries

have for centuries been used as pictorial walls small years as pictorial flows, swarning, but principal centralizing our attention. A beautiful view, the flowering of a first, the play of water, flowers, all serves as such a focal point. If measured, it is only a real to a list a list of how the interest any freight of art is the all the hole our interest any freight of art. for embellishment and for examentation: art. for embellishment and for examentations of our manner of vestirm living that has to be achieved by a planned simplicity, a strong unbcedimation of details to the overall conception of achieved to a planned simplicity, a strong unbcedimation of details to the overall conception of the contract of the contra

Textiles themselves have responded to a large degree to this keynote of calm by showing, instead of mainly patterns, overall textural designs and solid colors. By introducing materials suited to partitioning sections of interiors, they have contributed specifically to impressions of spaciousness and lightness in our living areas, that is, to tranquility. Fabrics, however, could be incorporated into the interior planning far beyond an occasional partition. A museum, to give a large scale example, could set up textile panels instead of rigid ones, to provide for the many subdivisions and backgrounds it needs. Such fabric walls could have varying degrees of transparency or be opaque, even light-reflecting. They could be interchanged easily with changing needs and would bring an intensified note of airiness to a place. In ancient Japanese houses veil-like fabric panels were used to form rooms and to allow the breeze to pass through. (The Jananese movie "Gate of Hell" shows such use in early times.)

The essentially structural principles that relate the work of building and weaving could form the basis of a new understanding between the architect and the inventive weaver. New uses of fabrics and new fabrics could result from a collaboration; and textiles, so often no more than an after-thought in planning might take place again as a contributing thought.

