
MASTER WEAVER

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COLOUR AND DESIGN

As long as we live in a society, we must judge our work by the standards of the environment. It does not need to be a majority of the people around us - it may be even a small minority, but there must be a group which appreciates and approves our efforts.

Thus the first condition of being creative is to appeal to somebody else besides the author. Although we can always say that only the posterity will appreciate us, but as a rule the posterity appreciates geniuses, and even not all of them.

In weaving we cannot depend on our creativeness finding an outlet in the direction of purely technical progress. We have not the slightest chance to compete with the textile industry, equipped with laboratories, scientists, and money. Therefore we must direct our efforts to the design, colour, and texture. What do these three terms mean?

Colour is the easiest to define: it is the combination of colours used in any particular piece of weaving.

Texture is the three-dimensional structure of the fabric. Its depth, or thickness, the length of floats, the roughness or smoothness of its surface, its firmness or softness.

Design originally meant pattern both in colour and in texture or in one of them. For instance - damask has pattern in texture only, when swivel or inlay has it in colour only. Overshot may have pattern in both. But at the present "design" does not mean "pattern" any more, and is often used to embrace all three terms: pattern, colour, texture.

Creative work in hand-weaving is impossible without some knowledge of all these factors. We take it for granted that a weaver is familiar with yarns and weaves. From purely mechanical point of view yarns and weaves produce texture. But unless the weaver has a certain knowledge of designing, his textures will be either traditional, or accidental.

Is there any alternative? Can purely technical approach to weaving be creative or at least constructive? Can we discover new weaves, or improve old ones? If the weaver is unfamiliar with industrial weaving he can amuse himself by discovering all by himself things which had been discovered centuries ago. Or he can adapt industrial discoveries to hand-weaving. This is done all the time, and undoubtedly there are possibilities in this direction. But nearly in all cases they will be re-discoveries. We should always keep in mind the fact, that industrial hand-weaving preceded the power loom by thousands of years, and what was not invented during this period is hardly worth inventing.

Then there is the possibility of improving the hand-weaving equipment, taking ideas partly from power looms, and partly from forgotten hand-weaving techniques of the 18-th century. This combined with our new materials, such as alloys, plastics, and new tools, may produce interesting results, but they cannot revolutionise hand-weaving. Still here is something to work upon for a mechanically minded weaver. Adaptation is also creativeness.

This is then an extreme case of purely mechanical creativity.

Another extreme case would be a designer familiar with colour, texture, and pattern, but without any knowledge of weaving. It seems at least in theory that such an artist could design textiles and leave to the expert weavers the translation of his projects into fabrics. Even in practice such designers existed. Elaborate tapestries were often copies of paintings, and very faithful copies, too. In this case the "designer" has nothing to do with weaving. But when we look at these masterpieces we do not admire so much their beauty as the patience of weavers. We may even come to the conclusion that there is something incongruous in this particular combination of design and technique, something like building grandfather clocks with matches. We do not feel the same about earlier tapestries where the pattern follows the medium, where certain lines and angles are avoided and other accentuated according to the properties of the yarn and the weave used.

It seems therefore that exactly as our mechanical genius could not really improve a loom unless he were a weaver, the designer cannot succeed unless he is well acquainted with methods and materials used in weaving. What we are trying to prove is, that to be creative in weaving, one must be a weaver first, whether he wants to build looms, or to design rugs.

This principle applies to all crafts. Every medium, whether metal, wood, clay, leather, stone, or fiber responds best to such treatment which takes into account its physical properties. This is true not only from the esthetical point of view but from a practical one as well. A good piece of pottery may be copied in metal, but not only the finished product will be too heavy for practical use, also its making will be too difficult and expensive - simply because it cannot be made on a potter's wheel. The same piece of pottery copied in wood on a lathe will be too brittle - at the best it will be a cheap and useless imitation. Real metal work cannot be copied in anything else, and the same applies to leather, and of course to vegetal or animal fibers.

Metal should be cast or wrought; clay thrown on a wheel, or modelled in fingers, but not in moulds; wood - carved, sawn, chiselled, but not turned on the lathe which does not heed the grain; and fibers should be spun and woven - woven in a most natural way.

Therefore a textile designer must know textiles. But at the same time a weaver should be a designer. If he is not, his craftsman's conscience will limit his activities to copying other craftsmen's designs, and copying may be a hobby, but it is not creativeness.

How then does one become a designer?

We know that there are born designers. Those are found often among more or less primitive cultures, whether peasants of Eastern Europe or American Indians. They do not need to be actually peasants or Indians. If they are brought up in such an environment even when belonging to another social strata, they seem to integrate this cultural background to a point, where they can besides copying the familiar folklore patterns create new ones as well, still remaining within the boundaries of the traditional craft. This is probably what is meant by the American expression: "he has a European background".

Their skill is acquired unconsciously, and although good craftsmen, they are seldom good teachers of designing. Their knowledge cannot be expressed in intellectual terms - a condition necessary for successful teaching.

The opposite class of designers are the "made" ones. Those who acquired the art of designing by study. How good they are, depends very much on how good were their teachers. And here again the teacher must be both good craftsman and good teacher. A good teacher is not one who forces the student to see the form and colour the teacher's way, but one who gives his pupil enough understanding to develop his own individual way of seeing and interpreting what he perceives.

Is there half-way between these opposites? There certainly is - but there is good as well as bad half-way. If somebody has already a cultural background, he will gain enormously by studying - because his unconscious approach to the craft will turn into a conscious one, which will enable him to teach.

But on the other hand, somebody without such a background may find studies too long and too exacting. He will turn therefore to "easy" methods, formulas, 10 lessons of designing for five dollars, and art appreciation courses by correspondence. Needless to say that his chances of success are limited.

Let's then go back to the sense of colour and form acquired by tradition and surroundings. A closer inspection of folklore art

and crafts is very revealing. They flourish in communities which are rather poor and isolated. These two factors force the craftsmen to use the local raw materials only; clay, fibers, pigments. Therefore they are limited in their choice of medium and colour. This limitation is the best challenge for an untrained artist. Although the creative process is slow, often measured in generations, the outcome is near perfection. It does not belong to any period or style, it is ageless and hardly ever out of place.

It is easy to demonstrate that this perfection is due to the limitations. Once an isolated community is "discovered" either by tourists or by industry, once the local craftsmen get hold of cheap materials, dyes, or methods of production - the old creative process is abandoned, and replaced by childish orgy of form and colour. The potential Japanese sculptor makes photo cameras out of old tin cans, the Slovak peasants produce indian totem poles, imitate wrought iron in wood, and leather in plastics. If this were all, we could blame the tourist who would rather buy a dozen articles fifty cents each, than spend five dollars on one honest piece of handicraft. What actually happens is that the "super-craftsman" with ten centuries of tradition behind him starts buying cheap, vulgar, mass-produced articles for his own use, and apparently he likes them. Undoubtedly part of his conversion is due to purely economical factors, but to the lack of discrimination also.

What happens to a poor community discovered by the "civilisation" happens also to a craftsman who left the community. He will be nearly always influenced by his new surroundings, and if he works in his old craft at all, he will adapt it to the new life in a most unhappy way. This happens to all immigrants, unless they settle in the new country in large and again isolated groups.

Therefore: from very deep psychological, cultural, and even geographical reasons one should stick to his own cultural background when creating - that is, unless one is trained in designing.

What is this training? It may be taken up in form of regular studies in a school of designing, or as apprenticeship under the guidance of a well known designer. But few of us can afford to change our whole pattern of life for this sake alone. How else can we do it?

In weaving for instance, since it is an essentially two-dimensional craft, study of painting is most helpful. Particularly where the colour is concerned. Learn the principles governing the distribution of colours on a given area. What is the general scheme, what is the background, and what are accents. Learn the rules of composition. What is rhythm - so important in weaving. These rules may be disregarded later on by a real artist, but to disregard them one must first know them by heart.

The next step is obviously study of the weaving itself. How the limitations of the weaving techniques influence the choice of form in creating a design. Why geometrically perfect curves are undesirable. Why gradual transitions from one colour to another

are out of place. Why in certain tapestries even straight vertical lines are avoided. In short, how and why the medium governs the pattern, and what are the results of going against the grain of a fabric.

The third stage is to observe other designers of the past and present starting with primitive cultures; how did they react to the challenge, and how did they solve the conflict between human nature striving for freedom of expression and the limitations imposed by the warp and weft.

The final result will depend entirely on the psychological make up of the craftsman. Where one will try to impose his will on the reluctant fabric, another will surrender to the charming rules of his craft. The first will be slightly modernistic, the second more traditional, but in both cases there will be plenty of freedom left for the expression of their urge to create.

Since one cannot acquire a cultural background, and since study of designing means a lot of work, there are many people who hope to find an easier way. Many of those honestly believe that everything, even human emotions can be reduced to formulas, rules, graphs, and tables. Therefore all one has to do, is to learn the rules and keep the tables handy. This idea did not emanate from lazy morons - just the contrary: it was shared by many humble geniuses.

Leonardo da Vinci made serious attempts to express the colours in painting in formulas. Not only to classify colours according to their composition or proportion of different pigments in every shade, but also to establish a relationship between his standardised colours and the painted object. He was right in his own opinion because his paintings made according to the rules were quite successful. Unfortunately his students could not get much profit from this mechanised approach to the art.

To mention only one more painter, Van Gogh would often make a charcoal sketch from nature, and indicate the colours only by the commercial name of the paint to be used. He produced masterpieces in this way, but it is needless to say that his method is not universal. Anyone can get a copy of Van Gogh's sketches with the paint clearly marked. Anyone can buy the necessary paints and fill the empty spaces. Still the painting will not be the same as Van Gogh's.

Oswald tried to find general formulas for colour combinations. Formulas are not too involved and they are quite convincing. They could even help to explain why beautiful paintings are beautiful. Still they will not help a physicist who perfectly understood this theory, to paint. What is worse they do not explain why we do appreciate colour schemes, which according to Oswald's rules should be repelling. On the other hand his classification of colours is unique and is widely used.

Why did they fail? Probably there are too many factors to be taken into consideration. Not only form and colour, but the psychology of both the artist and the consumer. Since the latter

change, the rules should change also.

The search for ready formulas may lead to an extreme, which we could call "accidentalism". This happens when we doubt in our own resources, and try to find a solution as far as the pattern is concerned in mathematical equations, music, or words transcribed into weaving drafts. This may be an amusing pastime, particularly when written messages are woven into a fabric. We have published two articles on this subject. But such attempts cannot have any artistic value. From time to time by sheer accident we may find an interesting pattern produced by this method, but this does not mean that we can depend on it as on a source of artistic inspiration.

There is a faint possibility of purely mathematical formulas (not words, or music) producing correct patterns i.e. correct from the point of view of technical requirements. For instance there is a set of rules of drafting "new" colonial patterns. They can be made to order, and they will pass casual inspection. But they will never be as good as the genuine designs, and they will never bring anything new into this branch of weaving.

Both rhythm and its opposite: hit-and-miss can be expressed in mathematical terms, but they are both only secondary accessories of a design. Therefore there is little hope of finding a solution in this direction. Perhaps an electronic brain could give it, but let us hope not. This would be the end of all crafts.

We realise that our approach to the problem of creativeness in designing was rather negative so far. And we made it clear why. Nobody can learn designing from a lecture or an article. However we shall try to illustrate our point of view with practical examples taken from our own and other craftsmen experience in the next issue.

FROM THE CLASSICS.

Clinton G. Gilroy, New York, 1844.

"A thorough knowledge of the Art of Weaving, in all its varieties, is the gradual result of indefatigable exertion, and cannot be acquired, except by a long course of practical application in those parts of the world where it is best understood.

Many of our American weavers already possess sufficient skill and dexterity in several branches of this, the most complex of all arts, to prove dangerous rivals to those similarly engaged in other parts of the globe; but the field for improvement is still very extensive. In every quarter of this vast country men of scientific genius are busy in applying those elementary and speculative principles, which were formerly confined to the closet of the philosopher, to the grand purpose of social improvement. The great chain which connects theory with the useful arts, is rapidly extending, and it is impossible to anticipate what may be the result."
