The Creation of Smart Fabrics

PART ONE

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It is always an exciting thing to write about hand-weaving. Endless are the possibilities inspired by weaving, and endless are the ideas which can be accomplished by it.

Let us talk in the first article of the practical questions with which the hand-weaver is confronted. In the second article we will deal purely with the creative aspects of weaving.

What are the reasons for producing hand-weaving? Do we not overlook the practical and artistic value of the hand-weaving of today?

There are many people who believe that hand-weaving is a kind of old-fashioned hobby or a practical necessity of only our grandmothers.

The machine can do many things, but not the most important things of all, that is, to think for us. That means in our case the invention of the pattern, the invention of the texture of the desired fabric. All machines which mankind has created are merely amplifications of our body's capabilities. The machine-looms are nothing else than mechanized and magnified potentialities of our hand-looms. We come back always and, in spite of all, to the hand, which has to make the model for the multiplied products of the machine. Human hands and brains have to make and to invent the model for caps, hats, dresses, textiles. Then, a machine is built which repeats the model.

The hand-loom has enormous advantages. It is relatively small, easy to handle, and may be placed in any room. It costs comparatively little. You can buy a marvelous 40-inch wide, 4-harness hand-loom for about $80, and out of this initial expense you can produce all kinds of fabrics made by a dignified and interesting process, that of weaving. We all know very well what it means to wear a dress made out of a beautiful and fine material. And we also know that many women among us cannot afford to buy this sort of material because it is simply too expensive. But, if you have your own loom, with a certain skill, taste and patience, your fabrics will become as valuable as those produced by Rodier, Bianchini, Scotland woolens which run from $7 to $15 a yard. Your expense for such a material will be only about $2.00 to $4.50 a yard at the top price.

If you compare your cost with the top prices of Rodier's materials, then you can see that you are working for yourself at a third of the expense, and you wear the material which ordinarily is only for the "Four Hundred." For instance, yarns like Bernat Fiesta, Bouclé de Laine, Chaumée, give you materials which you can buy only in the most expensive shops.

Do not forget that you can also mix the expensive yarns with the cheaper ones, and have a magnificent result.

There is another economical aspect to mention. If you wear a dress made from a good, beautiful fabric, this dress will last for several seasons, especially if the cut is a perfect and classic one.

Cheap material does not last. Precious material always looks astonishingly modern. Have you not observed, for instance, that Mme. Lanvin creates the simplest fashions for the most beautiful and expensive materials? Being a great artist, she knows very well that the modelling of a good dress is conditioned, first of all, by the characteristics of the material itself. The material of the dress makes it "haute couture."

But this is not the final argument which I make in favor of hand-weaving. There is another one.

You know very well that knitting has become the most popular handicraft everywhere. It takes usually from four to six weeks to make a knitted dress. Have you ever thought how fast weaving can be done? If you only take two hours a day, and if you make in these two hours only half a yard of material, then within ten days you will produce five yards of a fabric, which is enough for a dress. Is this not a striking fact?

I like to stress this circumstance because a lot of people think that weaving is an endless undertaking.

Now, I hear you whisper: "It is all right with the quality of my material. But what about Rodier's taste and mine, in producing the pattern?"

Let me answer the following: Rodier's materials are made by human beings like you. There are no mysterious circumstances which make them create such beautiful things. But the only difference between you and them is that they tried out and experimented with these ideas, while you probably did not think or dare to do it. Do you seriously believe that God gave the gifts only to one or two nations, or to one or two people?

We will discuss this problem later in the second article. But until you read this article, do not take anything for granted with respect to your inferiority complex.

I presume that my suggestions will make you anxious to start to weave. The usual question is: What shall I do? How shall I start? How shall I apply my technical knowledge of hand-weaving?

When you have decided what kind of object you intend to produce, the first problem should be to settle the question of the right application of threads. Here we hit upon a basic rule. This rule can be explained by a simple formula.
Do we have to follow the tradition of not mixing different kinds of threads, or can we mix them? The older generation of weavers still cling to the formula of not mixing different kinds of threads in the same material. In discussing this problem, I cannot do better than quote a fragment of an article from the famous French fashion magazine, *Le Jardin des Modes*, March 16, 1935, page 114:

“The inexhaustible spirit of invention of the weavers makes it more and more difficult to speak separately about certain fabrics. There no longer exists a distinct frontier between one and another material. The marvelous wealth of creative possibilities of weaving permits the application of any procedure whatsoever to a certain fabric which, until now, has been strictly reserved for a definite material. As there is now linen made of wool, so serge (a twilled woolen fabric) is made of linen and also tweeds of cotton. Furthermore, rare are woolens without a few threads of Alben. Also, linen is mostly mixed with wool. Therefore, all mixtures are possible.

What would the old biblical legislator who prescribed: “Thou shall not a garment mingle of linen and woolen” (Leviticus XIX, 19) think about that? He would be speechless.

So you see that the future development of weaving opens perspectives of new possibilities that only a few years ago nobody would have dreamed of.

We have now so many different threads at our disposal that their enumeration would go far beyond the limits of this article.

Now, I should like to discuss a few of my woven patterns which you may find illustrated in the article.

Illustration No. 1 shows two samples. The upper one is a material for a skirt, the lower one is designed for either a jacket or a coat, or both to match with the skirt. There is also the possibility of using the upper pattern for jacket and skirt. The lower pattern is designed for the coat; so we have altogether a smart three-piece suit.

The threads are Bernat French Tweed, for the filler. The warp is Bernat Weaving Special. The general coloring is of a tan shade, in which tiny, brightly vibrating color spots are interwoven. The threading of both samples has been conceived for a new combination which gives a very attractive interplay of rectangular lines with round waves. This disposition gives full sway to the texture.

Illustration No. 2 gives the pattern for a dress material for sport and town wear. Threads: The warp is the same as that of Illustration No. 1. The filler is Bernat Chaumée, Bouclé de Laine, Blue Weaving Special, French Tweed Bouclé.

The pattern belongs to the plaid type. Very fine lines make the squares. Bernat Blue Weaving Special and Tweed Bouclé divide the vertical directions of the pattern, belonging, therefore, to the warp. Chaumée and Bouclé de Laine, French Tweed and Tweed Bouclé make the harmony of the filler. I created the pattern purposely with many different threads so as to show that fine color harmonies in weaving are produced like those of painting, that is by the interception or confrontation of many correlated shades.

Illustration No. 3 gives you a pattern for a suit in electric blue, for jacket the upper one, for skirt the lower one. Threads: The warp is made of Bernat Afghan. The filler is Bernat Fair Isle Tweed and Bernat French Tweed. The knots of sparkling colors within the texture of the threads give a most distinguished vivid accent to the weaving.

By the way, colored knots, imbedded in yarns, have the tendency to make patterns on their own. They start to become cumbersome. You must realize these knots as a virtue but not as a defect. Practically speaking, invent a threading which gives a small pattern which interrupts any cluster of knots.

Illustration No. 4: Cotton mixed with wool, created for light summer dresses. Warp: Bernat Perle Cotton in gold, yellow and white. Filler: Chaumée in Navy Blue, Parchment and Pencilwood. The mixture of the colors gives a nacre shimmering. The dress made of this material is suitable for many occasions, because of its practical coloring and smart pattern.

Illustration No. 5: Splendid fabric for the fall. Colors: Greyish blue with red, orange, and green tiny color spots. Warp: Bernat Weaving Special. Filler: French Tweed. The threading, like in Illustration No. 1, is invented to give a slightly circular motion to the rigid horizontality of the filler.

With respect to the threading mentioned above, I should like to mention that it was always the desire of high standard threading, to overcome the purely geometrical and rectangular direction of weaving.

Here we have overcome this rigidity, innate in purely geometrical weaving and this by circular movements, brought about by refined gradations of the threading.

The Hindu weavers of Lombok and the highly cultured Islands of the Sunda solved this problem by dyeing the transitions on warp plus filler on the place where their fine taste and subtle eyes needed the most minute discriminations.

The color problem applied to weaving will be treated in the second article.