wholesome imagination, must produce worthy results. The true craftsman will not be content with mere imitation.

In considering applied designs for industrial work in the Philippines, the first purpose should be to have them always up to the highest standard, and the second to use designs which shall establish a style distinctive of the country.

A high artistic merit in our handicrafts cannot be reached at a bound, but will require much study, experience, and growth, and it may be that in the beginning, economic value will have to be sacrificed to the establishment of a good art value. even so, let us not add to the already overabundance of very commonplace and unbeautiful objects which flood the market, the only excuse for which is that there is always some one who will purchase the article. If we are to compete with European thoroughness in our handicrafts we must ourselves be thorough. After a good design has once been secured, it takes no more time to execute it than to execute a poor one. A poor or ugly thing is not cheap at any price while "a thing of beauty is a joy forever" and will usually bring returns commensurate with the time and thought expended in securing it. The development of household industries, where the spare hours are turned to account, seems a positive solution of the problem of making worthy handicrafts pay.

Complexity in design is not a requisite of good ornament. On the contrary, a simple design, especially in craft work, is most



Plate I. Inverted volute.

often the best and most suitable one. Simplicity of design is a distinctive feature of pure Malayan art and is always preferable to excessive decoration. The tendency to overdecorate is often shown by the savage and his overcivilized brother. Barbaric ornament in its best and

most characteristic form shows a single figure produced in a variety of sizes, proportions, positions, and colors. In his book on decorative design, Mr. P. N. Hasluck says: "The design of the natives of New Zealand perhaps is the most beautiful of all savage ornaments, and some of the best forms are founded upon the one idea of the inverted volute." The natives of the Friendly Islands and the North American Indians have also made many varieties of beautiful designs with a most simple and primitive unit, the zigzag, which also appears in great variety among the antipe designs in the Philippines as well as among those of other peoples of Malayan stock. The illustrations given here are from the arrows and combs of the Negritos. Various meanings are attributed to the different arrangements of the

zigzag form, such as money, hills, water, or teeth, found in the designs of different localities.

Malav design, where it shaws Indonesian influence, is often of a high order. A visit to the museum of the Philippine Bureau of Science will prove that the field upon which we may draw for designs of pure native origin is by no means a poor or meagre one. The decoration upon the clothing, weapons, and utensils of the wild tribes offers much that is worthy of observation and well suited to application in our industrial work. However, it must be remembered



that these designs belong to the broad field of Malayan art and are not peculiar to the Philippines.

Identical units are found among the non-Christians in the most widely separated parts of the Islands, and in style there is a marked similarity to that of other primitive Malayan peoples.

There are two procedures by which distinctive designs may be secured: entire designs may be borrowed from the decorations found among the natives, or they may be constructed of units and motifs taken either from native designs or from natural forms found in the Philippines.

By the former, that of appropriating complete designs, the work will be one of the preservation of old designs rather than the establishment of new ones, and will contribute to the preservation of primitive Malayan art in its original form. This in itself is guite worth while and is the easier way, as little skill in executing design is needed; nevertheless, it will require knowledge and judgment to select the good and to choose that which may be best used for a particular purpose. For example, a bold design suited to wood or metal might not be at all suitable to embroider upon fine cloth; while a delicate design, beautiful in embroidery or lace, would lose value if applied to a less flexible medium or where the technical processes of construction are entirely different. However, textile design is adaptable to all fabrics, as well as baskets.

The selection of designs of Malayan origin may be a puzzling question. Malayan art shows so many Indonesian and Indo-European influences-that its distinctions will not be clear to the casual observer. Even though these distinctions are left to the student of art, there will be no excuse for applying those designs which are plainly of foreign origin. This must also be observed in conventionalizing natural forms, so that we may not be influenced too evidently by some design which belongs plainly to foreign art.

Designs constructed with motifs from Philippine environment will be representative only in so far as the style of the design is distinctive, and as the motifs used become established and recognized, by constant repetition in a variety of designs and applications, as those which belong to Philippine applied art. The borrowed design will sink into the background of Malayan art, so that design will sink into the background of Malayan will generally be from the fora and fauna and the still life of this section of the world, and not that which is unique to the Philippine Islands. Just as the chrysanthemum or iris suggests Japanese fabrication, even though these flowers are common in other countries of parallel latitudes, the ilang-ilang, camia, or other flowers common to the Philippines may become significant of Philippine art.

These two distinct sources will produce styles quite different from each other. It is hardly probable that any modern mind will originate motifs or construct designs primitive in character. However, such designs would have the merit of being individual and a plethora of them would eliminate the necessity of copying illustrations or specimens from other contries. Since prehistoric times different peoples have produced ornament distinctive in style; thus to-day the craft work of the different countries bears the stamp of their own individualities. But we must be careful, in seeking for the uncommon and unique, that we do not lose sight of the beautiful, and that the freakish or startling does not mislead us.

Flowers and other natural objects, in their natural forms, should not be used as ornaments, but rather the conventional representations founded upon them. True art consists in idealizing, not in copying the forms of nature. This is not easy, for it is considered that to originate conventional designs from

nature requires the highest skill of the designer. However, it is worth striving for; the history of ornament shows that nations which have had the highest artistic development have used in their crafts idealized natural forms rather than inflexible copies of nature. It is noticeable that many primitive peoples excel in this form of art. One authority states that every primitive design has been copied from some natural form, all trace of whose original may have been lost, only a pleasing geometrical form remaining.

The above method will prove the best way of securing original designs for our modern style of white needlework. The



Plate III. Abaca fiber showing tie-and-dye process.

designs from the non-Christian tribes have been planned for bolder work and call for the use of color to make them effective, while those of late origin found among the Christian people are generally debased by poor drawing and composition. Among the old designs which show Spanish influence, there is much that is so beautiful in effect as to make it deplorable that this style should be lost because it no longer pays to follow it. Here again thế fostering of household industries would make it possible to put such work on a profitable basis.

To excerpt units from designs found among the wild tribes and to construct new designs with them is probably the only method discussed which may give us a unique style of design. The use-of the primitive unit will tend to balance modern ideas



and so lift the resulting design out of Malayan art without having it sink into oblivion among modern designs. To bring worthy results the designer must draw upon the anthropology of the people. A knowledge of their myths, superstitions, habits and customs spirit of their Without full and rational use of their units the results will be mechanical and superficial. Although the securing of designs in this way will call for less technical skill than originating them, it will demand an understanding of the origin and culture of those tribes from whom the units are borrowed. The illustra-

of construction

tions here given are all examples

Plate IV. A Mandayan skirt cloth.

of designs constructed from borrowed units, except the conventionalized kilog design for bags and the design for the nito basket. (See Plate XIII.) The latter is a complete design from the Dyaks of North Borneo. The Mandayan skirt cloth has furnished the motifs for the larger number of these designs without exhausting its possibilities, so prolific a source of suggestion is this one specimen of barbaric ornament. The units are transmitted truly with only such changes as were necessary to comply with the technical requirements of the article in hand; so far the resulting design is a fixed one, only the arrangement, spacing,

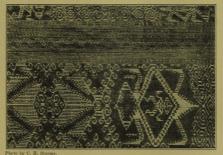


Plate V. Detail of Mandavan skirt cloth,

and other details were left to the judgment of the designer, with but little demand upon the imagination.

The Mandayas, who make most of the cloth, live in the mountains of the southeastern part of Mindanao, cast of the headwaters of the Agusan River. These non-Christians include approximately 20,000 people, about half of whom make the cloth, principally for their own use. Their physical appearance would indicate that they are of a different origin than that of the other non-Christian tribes of the Philippines. They are the fairest people in Mindanao; the men are tall, and the Caucasian type is frequent among them. Their suspicions of the magic power of white people make acquaintance with them difficult, but after their friendship has been gained they are of a frank, open and kindly disposition.

Statements made by themselves to the missionaries, as well as the notes of several historians, would seem to establish the theory that they are of non-Malayan origin, and facts to prove Dutch, Japanese and Indonesian influences are cited by different historians. This theory, however, is ignored by Blumentritt, and Doctor Barrows states that he thinks it rests upon very slim evidence. Father Pastells suggests that they owe their superior refinement to a strain of better blood. In further support of this theory, Kimblanga, a town on the east coast of Mindanao and close to the Mandayas, owes its origin



Plate VI. Detail of a Mandavan skirt cloth,

to Europeans who were shipwrecked on Point Bagoso and settled there. A native trader also tells a story of a mechanical instrument, probably a clock or compass, which is preserved among the people of the interior. This, however, is not substantiated.

The first white man to live among the Mandayas in recent times was Mr. J. M. Garvan, of the Division of Ethnology, Bureau of Science, who spent some time there in 1910 and 1911. In order to see anything of their way of living, it was necessary for him to disguise the fact that he was an American and to further allay their suspicions by taking to pieces his watch and compass to show that no demon was present. But, having arrived among them during the progress of a protracted reli-

gious movement, he found it difficult at that time to obtain any great amount of information in regard to their customs.

Owing to the dearth of historical facts about the Mandayas it is difficult to do more than conjecture as to the identity of the units used in their applied designs. Two of these conventionalized forms, it will be seen, are plainly a crocodile and a woman wearing an exaggerated comb, while the other two are probably a frog and a shell fish, or possibly a turtle; but we have no proof as to what significance they have. if any.

As simple geometrical units such as these are applied universally in design from savage to modern art, they also give little that is definite as to their origin or significance. It is of interest to note, however, the marked similarity between the

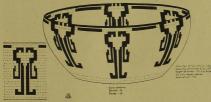


Plate VII. Coiled abaca basket design.

geometrical forms and color in this cloth and in that of the Dyaks of northwestern Borneo.

The representation of the crocodile may be due to a superstition that they must placate the evil spirits, or those of which they are afraid, by giving them prominence. However, to speak the word crocodile or the name of any other creature not found in their environment, is prohibited. Other supersitions prohibit speaking the word salt or fish during the process of cloth making; uncovering the knee; using wood which is not clean; allowing the fire to smoke; sitting on the hearth frame; allowing a man to touch the dyepot; touching the frame of the loom with a weapon; or wearing the necklace otherwise than crossed. It is believed that a violation of these will cause the goddess of the clouds to bring a storm upon them.

Mandayan cloth is made of abaca, which is native to that section of the country, and the fiber is prepared in the usual manner. The separate fibers are knotted into a continuous yarn sufficient for the entire warp, and the threads are taken care of in the meantime by being laid in a flat basket. Contrary to the most common way of modern weaving, the woof threads are of a single color, usually dark brown, while the colors and figures of the design are laid in the warp as it is stretched upon the loom. This is accomplished by a "saving" or "tie and-dye" process which is common among other Malayan peoples, although the details vary in different places. In Java a coating of wax is used instead of the binding of the fiber.

The first step is to separate the yarn for the warp into bunches of from ten to sixteen threads each. These are then bound with fiber at intervals of several inches along their entire length, the bound portions covering spaces of from one-half to three-fourths inch. The bunches of yarn are now ready for dyeing, the natural color being "saved" under the bindings. The colors are dark red, brown or brown-black, and natural; vegetable dyes are used.

The red is the root of a shrub, for which the general Mandayan name is "sikalig," and the black is the root and bark from a mangrove known among the natives as either "kanaiyum" or "kanaum." The yarn is boiled with the root or bark until a fast color is secured and though the tones vary they are always soft and pleasing. The Mandayas are expert judges of good color and value the cloth accordingly. They dispose of the poorly dyed pieces to the native traders, keeping the best colors for their own use.

After the yarn is dyed the bindings are removed and the result shows a series of spots, the colored alternating with the natural.

The warp is now ready to be set upon the loom and the pattern is laid in by so selecting and placing the colored sections as to form the desired motifs of the design. The warp is then stretched and the weaving proceeds as with other primitive looms. This process of laying in the design is an intricate one, the details of which are probably now worked out according to a prescribed rule, but to originate that design required nothing short of genius. No two pieces are exactly alike. This is due to the use of different tones of the colors, the different relative positions of the colors, the different selection and placing of units and to the variations of weave which result from the individual notions and imaginations of the workers; but however varied, the result is good and the whole cloth particularly pleasing.' The designs found in this and similar cloths seem particularly applicable to basketry.

The coiled basket as it is being developed in the Philippines is an expression of a type of basket which has existed for over six thousand years. Specimens of these have been found among many prehistoric peoples. "The handicraft," to quote from O. T. Mason, "never had more genuine lovers than at the present time." The most beautiful ones to-day are probably those found in Hindustan and among the older workers of the American Indians, where the purpose of the craftsman was to create something beautiful as well as useful, with little thought as to the amount of time and labor expended.

With this background so rich in the truly beautiful as a standard of comparison, we have no light task to make the coiled basket of the Philippines a distinctive production, falling short neither in its art nor in its economic value. We have much to encourage the undertaking, for whether made of abaca, buri raffia, nito, or rattan, the possibilities for both good construction and good ornamentation are large. The simple technical requirements admit of great latitude in the use of geometric forms, especially where the coil is small, and where the softness, luster, pliability and affinity of the fibers for dyes, as well as the beautiful soft tone in the natural color, add to these possibilities.

Aside from the sentiment surrounding the art of an aboriginal people who are fast disappearing, there is no apparent reason why the Philippine coiled basket should not reach an art value equal to the basketry of the North American Indians, and a commercial value commensurate with the time and labor expended.

The laws of line, form, area and color harmonies, which should guide inspiration in the construction of design, cannot be disposed of in a short space, but certain principles are illustrated in the following applications to basketry.

The first thought in any piece of construction should be for shape and relative proportions; when these are so good as to make the piece pleasing without decoration, a design may be chosen which will harmonize with and be a part of the whole. The decoration should grow up with the structure. The aim should be to decorate that which has been well constructed, rather than to superimpose ornament upon construction, thus leaving the feeling that the ornamentation has been accidentally placed and is merely resting upon the surface in a detached

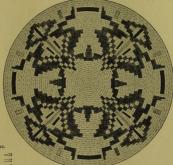


#### COLOR SCHEME.

Basket	=3
White in design	=3
Heavily shaded	design=4
Slightly shaded	design=6
Black design	=0

Diameter of basket at top, 92 inches ; circumference, 30 inches. Diameter of basket at bottom, 9 inches; circumference, 29 inches. Height of basket, 31 coils, à inch each.





COLOR SCHEME.

Basket White in design =12 Shaded in design= 9

Plane of basket.



Diameter of basket at top, 10] inches ; diameter of basket at bottom, 5] inches ; height of basket,

NOTE .- This may be worked in lupis weave with coils as shown or in a coiled basket with 1-inch coils.

Plate X. Coiled abaca basket design.





COLOR SCHEME I.

Black =Red. Shaded=Dark brown. White =Light natural.

COLOR SCHEME II.

Black =Dark brown. Shaded=Light brown. White =Light natural.

Working unit full size.



Plate XII. Coiled nito basket design.

#### COLOR SCHEME ]

Black =Dark brown. Shaded=Red. White =Light natural.

COLOR SCHEME II.

Black =Light natural. White =Light brown. Shaded=Dark.





Full size of basket.





Plate XIII. Coiled nito basket design.

way. This principle of design depends as much upon the placing of the decoration as upon the choice of design.

The following rules illustrated in basketry will serve to guide in applying the above principle:

(1) The heavier part of the design should be placed upon the broader part of the basket.

(2) An upright form belongs to a basket which has in its shape a feeling of rising rather than of remaining flat.

(3) A basket which has greater width than height requires an arrangement of motifs which carry the eye around.

(4) A shallow, plate-like basket calls for a broad, flat unit

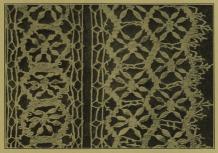


Plate XIV. Lace design from Mandayan cloth.

if more than a border is applied. For illustration of the above, see Plates VII and VIII, which show the different uses of the same unit in accordance with rules 1 and 2; figure 4, frontispiece, for rule 1; Plate IX and figure 1, frontispiece, for rule 3; Plate X for rule 4. Note that in Plate XI the upward direction of the crocodile unit, suited to a taller basket, is counteracted by the horizontal placing of the geometrical units. In figure 2, frontispiece, this same upward tendency is balanced by the allaround feeling given by joining the motifs. In Plate X and figure 3, frontispiece, the greatest width and weight of color of the motifs are placed where the elevation of the side begins, this being the base of support for the lighter top section; the

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broken border helps to keep the feeling of lightness at the top, which a complete circle might have destroyed.

(5) All ornament should be based on geometrical construction. In pursuance of this, the surface to be decorated should be considered as being made up of certain geometric forms

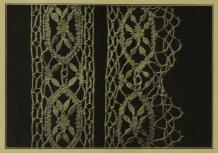


Plate XV. Lace design from Mandayan cloth.

which in themselves conform to the general shape of the surface to be decorated. The leading lines of the design should follow the direction of this form. For example, in Plate X the plane of the basket is cut into four right-angled triangles, a geo-

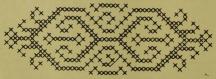


Plate XVI. Cross-stitch design from Mandayan cloth.

metric division of a circle which the leading lines of the unit follow. The decoration of these triangles demands the long rectangles which connect the large units, in order to prevent an incomplete feeling in the wide side of the triangle opposite

the right angle and also to connect the separate motifs, thus giving unity to the whole. In Plate VII the surface of the basket is cut into rectangular spaces and the narrowing of the unit at top and bottom conforms to the narrowing of the rectangles in giving the spherical shape to the basket.

(6) Those proportions will be most beautiful which will be

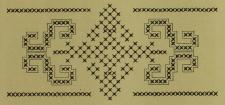
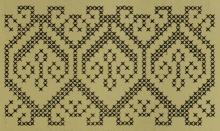


Plate XVII. Cross-stitch design from Mandayan cloth.





most difficult for the eye to detect. Example: a rectangle in which the short sides are contained equally in the long ones (2by 4 or 2 by 6) is uninteresting, as the eye estimates the relation easily and the attention is not held, as it would be in a more subtle proportion. This holds good in the proportions within a single form and also in its relative proportion to other forms, and is especially applicable to the lines and spaces of borders. In order to avoid monotonous spacing it may be necessary at times to split a coil. (See Plate XI and figure 2, frontispiece.)

(7) There must be a unity in the whole design which grows more difficult to secure as the variety of units is increased. The orderly recurrence of the same geometric shape adds to the enjoyment of the whole. Where different units are used in the same design, their relative proportions should be such that there is one major, predominating unit to which the others are subordinate, and never two of equal value.

(8) As much thought must be given to the spaces of the background as to the motifs themselves. This is a third reason for the use of the broken border of rectangles in Plate X, without which the space between the units would appear to run out and ever the edge, thus destroying a feeling of repose. In

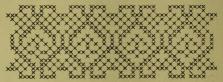


Plate XIX. Cross-stitch design from Mandayan cloth.

addition, the space so broken is a more interesting one, as the planes are of greater complexity. A comparatively simple way of breaking up the background into pleasing spaces is to echo the space itself. (See Plate XXIII.)

In design, the juxtaposition, harmony, and relative quantities of color are of equally great value with form; but that is a study of itself and only one important law as to its effect upon form will be given here; namely, a dark background serves to unite the units of the design, while a light background causes them to stand apart. This must be considered when spacing units. For example, if the colors in Plate VII were reversed (a light unit upon a dark ground) fewer units might give a better effect, the space between not appearing so large. But with the light ground, fewer units would probably leave a feeling of barrenness.

Good designs have rhythm, balance, and harmony; they are sane, regular, orderly, and consistent throughout. But this

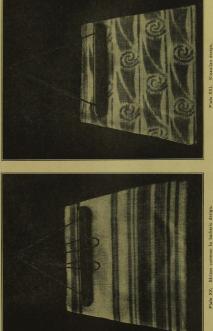
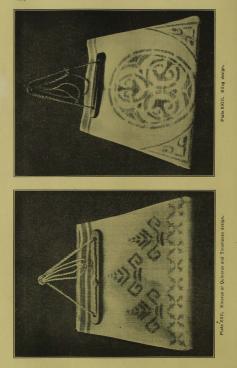


Plate XX. Stripes common to barbario design.



result cannot be secured merely by slavish application of the laws referred to above.

To quote from Ruskin: "The man who has eye and intellect will invent beautiful proportions and cannot help it. There are one or two general laws that can be told. They are of no use indeed, except as preventatives of gross mistakes."

It must be remembered then that not rules alone, but also observation, knowledge, and experience, combined with a cultivated taste, sound judgment, and a light fancy, will be needed for good designs.

The designs used on the handbags are from those frequently found on the clothing and in the tattoos of the Manobos in Mindanao.

Kinauilan (Plate XXI) means made like a hook; tinamposo (Plate XXII) is the particular form of tamposo meaning heartshaped; and kinorus or quinorus (Plate XXII) are from korus, meaning made like a cross. Such associations as these add to the interest of a design, as it then appeals to the mind as well as to the eye.

Kilog is a fern (*qleichenia linearis*) found in several localities in the Philippines. The anchor-like unit inclosed in a circle is a drawing of a cross section of the stem. The circular form of the natural unit suggests the circular form for the complete motif; the spaces which occur are echoed with similar forms, both within the circle of the motif and again at the corners of the bag, to fill the rectangular space of the bag itself. The lines and bar at the top again carry out the rectangular shape and through this simple process the resulting design is evolved.

The bags are woven of abaca fiber, the design being stenciled on the warp before the woof is filled in. This gives the soft outline which would not be the result if the stenciling were done on the cloth after weaving. The whole process is a simple one, requiring only patience and precision. As a utility bag it has the advantage of being very strong and light. The clasps are of camagon, narra, or lanete, according to the demands of the color scheme.

All of the designs presented in black and white lose value through the absence of color, which is an important quality of beauty. However, the frontispiece will serve to illustrate that the use of low tones is desirable.

This article attempts to set forth only a few of the ideas relative to securing worthy and distinctive designs for our craft work. Others will follow with the hope that they may prove helpful to those who are carrying on the work.