The Relation of Art and Industry.

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The mention of art generally conveys the idea of something beautiful and perhaps grand, but it is not generally thought that the word conveys anything whatever in the way of usefulness. It is the usefulness of art and its relation to the various industries that we would discuss. The so-called fine arts in all their beauty, glory and usefulness are not to be considered. Kenyon Cox says "The highest aim of art is to make some useful thing beautiful." This is at least the part of the scope of art that comes nearest the common people and that which should be the most interesting to everyone.

The useful things are the humble things of life, and the things with which we come in contact every day. But these things should be beautiful while they are useful. And there...
is always a chance to beautify even the most
honest article. If an article is useful it is
entitled to all the beauty it will naturally
possess. Some decoration is always attempted
and here is where the art comes in, for art
is not a thing to be done but the best way of
doing that which is to be done.

If we should attempt a definition of our
term we must make it broad. Art is the
skill by which the best method is found to
make the useful things pleasing to the sense.

We always comes before beauty, art is the
art come of the useful. Industry is work,
whether in the home the factory the workshop
or the farm. It is the action of the muscular
and moral forces of man applied to production.
We say industry is work and to get the re-
lation between art and industry we would
say art is the best way of doing the work.

There is always a tendency in human
nature toward the beautiful, and in every
line of industry there is an attempt at
ornamentation. If there were nothing to be
made in the world but the mere necessities
of life, there would be little employment found
in manufacturing and trade as we now en-

sider it. It is the appreciation of art of the beautiful that has caused the great increase in our demands.

The primitive man needed only the necessities of life. These he got by hunting and fishing; he spent his time in their pursuit and in the fight, but while the primitive man was thus engaged the primitive woman was beginning what has resulted to the great needs of to-day. She was the home maker, the conservator of industry and thrift. The manufacturer through simple handy processes of the raw products of nature, made useful and sometimes beautiful forms; the inventor of many crafts, the mother of art, the nurse of religion. One of her contributions to civilization is the textile. Handcraft, invented by the aboriginal woman, to meet the needs for shelter, clothing, hats, cradles, fish and snaring nets, mats, and blankets. They so fully mastered the art that but little has been added to the art of weaving.

At this point where the primitive woman
left off, civilized man, at a comparatively recent date was able to take up the work of spinning, weaving, and dyeing. He was able to convert the manufacture of textiles into one of the greatest staples of commerce for the world. The aesthetic nature developed the same in other lines.

The aesthetic nature is developed from the very first. In fact, before the savage began to see the need of clothing he adorned his person with what he thought to be beautiful and ornamental. The aesthetic taste has been shown along the line of development of clothing. From the very first garment was made, with the only thought in view being the useful. The dull or neutral color would keep the savage warm, but his aesthetic of the intrained mind causes him to choose the most brilliant colors.

With the need of clothing came weaving, which is still one of our most important industries. And immediately with this came the ways of ornamentation. "The useful in so far as it is opposed to the beautiful is
enjoyed merely in common with the lower animals. For among all animals man alone is gifted with the perception of the order, beauty and grace. Therefore it is also that the perception of the beautiful in art as well as in manners and morals distinguishes the social development and civilized man from the savage and barbarian. Clothing became necessary but according to the aesthetic nature of man their usefulness is enhanced many fold by the beauty of ornamentation. The artistic development has resulted in embroideries and tapestries.

From need of tools and weapons came iron-work and armours. From this has developed much artistic design. The weapons and tools themselves often present a great deal of artistic design. The work in wrought iron shows some of our very best and most useful designs, and is capable of and likely to receive much further development along that line.

From need of houses came builders and stone-masons, carpenters etc. These trade trade date back to the very earliest historic times and
and have grown just in proportion as the aesthetic tastes, as well as needs, have grown.
The great structures in our houses and public buildings of today are art growths of centuries. Where the primitive man was only his mere knowledge as went by instance altogether. The modern builder must seek instruction of former works because one lifetime is too short to compass it all.
The need of study along the lines of art becomes more and more manifest. Meanwhile the line of work we see the need of art in its connection.

All art education should proceed upon the theory of the unity of art. The opinion that there is a wide difference between the applied arts and the fine arts is erroneous; for the industries employ the highest order of artistic genius and skill.

Drawing is the first step in all art for it is by the sense of sight that man's faculties are developed. The knowledge of drawing enables its possessor to see objects truthfully.
Schools? What good does it do the child? But the drawing done is not the end of the lesson he has developed a power, as in other studies. Besides acquiring the necessary skill to make the drawing, he has developed the powers of observation. While the drawing may not be beautiful, it may be of use in other lines of work. It is interesting to note how much of surroundings were started from a drawing. Looking about us we see the chair, the table or desks at which we write, the design on the paper on the wall, the building itself, in fact nearly every thing made by man originated from a drawing. All this, when we think how many people are employed in making these articles, seems enough reason why drawing should be studied. But this is not the end, it leads to an appreciation of beautiful and a great deal more sincere than if we had no knowledge of the subject. Skill in drawing is unquestionably of advantage to every one, but it also has the advantage of developing the other faculties
observations, mental imagery, mental dexterity, produces ideas that would never originate otherwise, widens the frame of emotional experiences and comprehension. "To most persons art is a small book written in a strange tongue." But not to the one who understands drawing. For it is the language of art. While it may occupy spare time and be a pleasure, it is also one of the necessities of the working man's education. It is as useful to the mason, carpenter, potter, engraver, and other artisans as their respective tools. And it is not only those who produce who should understand and appreciate the artistic. The buyers who include almost the entire population, are in need of education that will teach how to choose wisely, for the manufacturers will study the desires of the people and fit the product to the demand. Since women are almost exclusively the home makers and buyers, conscientious study of the subject by them is necessary in order that they be intelligent buyers. To the artist drawing is the alphabet and grammar of his language.
In the best Japanese art there is little imitation of objects in nature, there is a suggestion of various forms of plant and animal life but not the representation. It is seldom in good taste to use real forms as ornamentation and especially the human form. As the human form is used in so-called decoration it is degrading. For instance when bent so as to serve for the handle of a pitcher it is simply distressing to see it. Yet such things are designed, and the public upholds it by buying and thus keeping up the demand.

We undoubtedly admire some forms and dislike others without knowing why. This may be innate or the result of education but the final development of form and color is obtained in obedience to the scientific laws. The theory of color in its relation to industry is a subject which deserves more serious attention than has been given to it. It is necessary to know the effects of combination; juxtaposition and contrasts of color upon objects of different textures. Color deserves study.
along with drawing. Children notice color before form, but the ideas of color are left to take care of its self and, and naturally does not develop in harmony with the other faculties. This may account for much of the bad coloring in designs which present considerable skill but which for bad taste in coloring is made hideous and not fit for use in civilized homes.

Classes who Should have a Knowledge of Drawing.

Some of those who must have a knowledge of drawing for the performance of their work are given in the list; Gold and Silversmiths, Engravers, Photographers, Farmers, Boot and Shoe makers, Tailors, Boot-makers, Manufacturers of Silk, Cotton, Linen and Woolen cloths, Machinists, Printers, Molders, Mechanical Engineers, Masons and Carpenters, Tailors, Cabinet makers, Turners, Pattern makers, Millers, Dyers, Basket makers, Glazers, Plasterers, House painters, Gardeners, Cotton Printers, Tannin, Wagon builders, Coppersmiths, Iron and Brass founders.

The fresco painters must have a knowledge of drawing because this is the basis of}
all design. The design must be something that is pleasing, must be fitted to the room for which it is designed. Then also colour is an important factor; it must be in harmony with the design and also with the room in which it is used. The painter should have such a knowledge of his subject that he can fit the designs to the size of the room. A public room will require a different kind of design from that fitted to a private house.

The gold and silver smith requires drawing, for every design in metal must first come from a drawing. He must be able to see things as they will be when finished. This cannot be done without the aid of drawing. The engraver must have a knowledge of drawing before he can make a design.

With the photographer drawing is indispensable even though his chemicals do his work for him. He must be able to see distinctly and minutely. He must be able to distinguish between artistic and in artistic arrangement of subjects for study. He must have a knowledge of the ways in which light effects objects, of the
light and dark values, of what effect each
color has in the scale of light and darks.

For the farmer, drawing should be one
of the chief parts of his education. He must
use machinery and tools the construction of
which he cannot be familiar with; and
he able to recognize defects and perfections
in, with the development received in a course in drawing. His daily life brings
him in contact with nature in the best
way possible but he cannot appreciate fully what he has before him if he has
not trained his eye to see. In all the
planning of fields, the marking out of plots
for work, a drawing is indispensable for
the best arrangement.

Manufacturers of silk, cotton, linen and
woolen goods must have a knowledge of draw-
ing. Machinists must have an understand-
ing of drawing to be able to see each part so
as to understand its relation to the other parts.
The printer must understand design, spacing
for the best effect. To fill the space effectiv-
and attractively in an art in itself. The skillful printer is able to make an article much more attractive and readable simply by placing well and knowing just what type would be most pleasing. The spacing of the title page, letter heads, etc., are all worth in the company of design.

The mason and carpenter should be able to understand the building on which they work, for they cannot work to advantage without the plan definitely before the mind. To the latter drawings are very necessary. But very one of the most fascinating of the common trades can be worked at by the common workman, and at the same time will work into most beautiful shapes in the hands of the genius. House painters must have a knowledge of drawing and also color. Gardeners need drawing for the laying out of grounds, the placing of trees, shrubs and plants.

Those to whom a knowledge of art would make their work more easy and profitable, if the merchant knows how to arrange his
articles in an artistic manner. He draws more trade by this virtue. If his advertisements are attractive it is to his credit. But few people can do all this without some training in the useful arts. The salesman, whether in the shop or on the road will find the use of drawing and artistic design much to his advantage in order to display his goods.

So much is this recognized in stores that clerks are employed as experts whose purpose is that of decorating windows.

The last class to which we would refer is the great mass of people who consume all that is produced by the former classes. And after all they are the ones that control the arts as applied to industry. For every kind of manufactured article is made to suit the public. The public demands articles not only that will serve the purpose but that will serve the purpose, and at the same time be pleasing or ornamental. However the untrained mind is unable to be worshipped in its tastes. The ornament may not be
beautiful because wrongly placed. It may not be ornament at all but only an attempt at ornamentation which resulted in disfigurement. The danger must be trained to see the beautiful and to reject that which is undesirable. When this is done the true artisan’s work will be appreciated and the true artisan will appear to perform his task.

The way in which the prevailing conditions may be remedied are various. Art museums, exhibitions, publications, public lectures, it may be made the subject in clubs where it will reach many people, but the only way by which this condition can be remedied entirely is by constant effort on the part of the educators of the country. This must be begun in the early part of the child’s education. The child naturally takes to drawing and this interest must not be allowed to die out. If the child is encouraged in his efforts and given the proper attention in school along with his other studies the tendency develops normally and the taste for artistic are not
something added, but the natural and growth of the early tendency. This education must be continued throughout the education of all. And those who have some real genius will have the latent tendency developed so that they may pursue further study. But the real purpose for which this education should aim is to aid the whole people to become more wise in the tastes that affect the daily life in the homes, and to fit persons for common craftsmanship.