

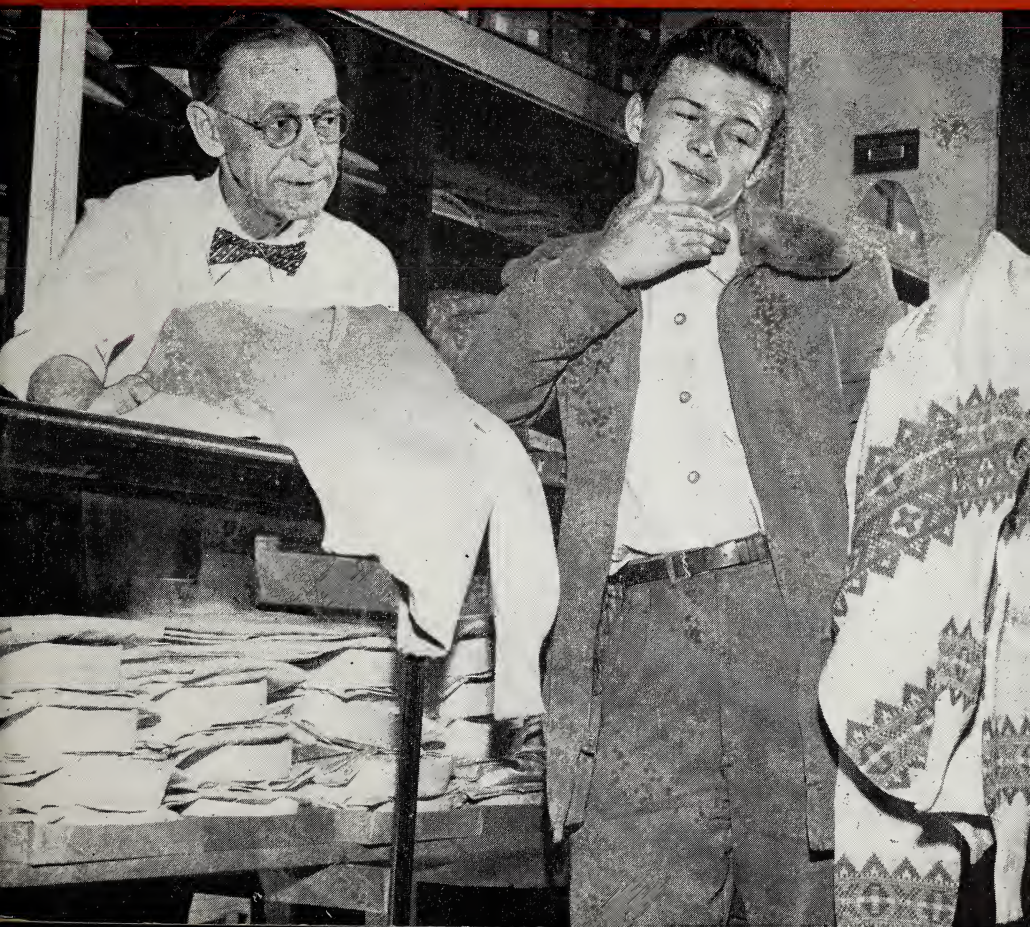


LIFE ADJUSTMENT BOOKLET

Folds, Thomas
ADP1825

Your taste and good design

by
THOMAS FOLDS



... to help young people solve the problems of everyday living

What do you like?

Modern chairs? Bright ties? Plain designs?

Whether you're choosing a tie or a desk, a compact or a stamp album, it's important to be able to rely on your own judgment. A knowledge of good design will help you. It will give you a sense of assurance—whether you're buying a vase for Aunt Hattie or a new lamp for your room.

Knowledge about design will keep you from being fooled. You'll get more for your money, too—better merchandise and greater enjoyment. And when the time comes for you to furnish your own home, a knowledge of good design will help you get items that will go well together and will satisfy you for a long time to come.

Yes, a knowledge of good design is important, but how can you get that knowledge? Where can you get the answers to questions like these?

- Is modern design good design?
- Do pictures belong on neckties?
- How should you go about arranging your room?
- What standards can you use in judging any design?

The purpose of this booklet is to help you find the answers to these questions and many more. It will show you how to choose wisely when you are selecting the many objects you use in everyday life.

Your taste and good design

by

Thomas Folds

Chairman of the Art Department
Northwestern University
Evanston, Illinois

Illustrated by the author

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57 West Grand Avenue, Chicago 10, Illinois

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From—

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Educational and Business Publications

57 W. Grand Ave., Chicago 10, Ill. Whitehall 4-7552



Eleanor Ward
Information Assistant

FOR YOUR REVIEW

TITLE: YOUR TASTE AND GOOD DESIGN (Life Adjustment Booklet Series)
by Thomas Mickey Folds

SUBJECT: No two boys or girls have exactly the same taste in judging design -- nor would uniformity of taste be desirable. Yet there are certain basic requirements in the design of everyday objects which should be looked for when making choices among things we plan to buy and use. These requirements --

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SUBJECT: No two boys or girls have exactly the same taste in judging design -- nor would uniformity of taste be desirable. Yet there are certain basic requirements in the design of everyday objects which should be looked for when making choices among things we plan to buy and use. These requirements -- such as the purpose the object is meant to serve, and the materials of which it is made -- are clearly explained and illustrated in this booklet.

The first of its kind written especially for high school students, it discusses the design of familiar objects used by teen-agers, ranging from neckties and scarves to furniture, automobiles, and houses.

"Your Taste and Good Design" will encourage young people to rely on their own judgment, cultivate their taste as an expression of their own personality, and develop an awareness of quality in design and craftsmanship in objects and clothing.

ABOUT THE AUTHOR: Thomas McKey Folds is Professor of Art and Chairman of the Department of Art at Northwestern University, Evanston, Illinois.

PRICE: 40¢ each; special quantity prices.

PUBLISHERS: Science Research Associates, 57 West Grand Avenue, Chicago 10.

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Your taste is showing

WHEN you go into a store to buy a scarf or some other piece of wearing apparel, do you look for bright colors and striking patterns? Or do you usually choose something quiet and conservative? What kind of design appeals to you?

Perhaps you haven't bothered to ask yourself this question. Yet ever since you first received an allowance, you have been learning to spend it in selecting things for your own use and pleasure. Ever since your parents first encouraged you to help select your own clothes, you have been slowly developing your own taste—by selecting what appeals to you and what expresses the needs of your own personality.

Your personal taste

Why is it some people like sports shirts of solid colors while others prefer large plaids? Why do some people want rhinestone costume jewelry, while others like Mexican silver with turquoise sets? To some extent, your taste is a purely personal matter—the reflections of your habits of thought—an expression of you as an individual. But as experts on human behavior will tell you, your personal habits are strongly affected by your associations with other people. When you were very young, your parents chose all your clothing and all the things you used, and their early choices probably still continue to influence your judgment. Your taste may also have been influenced by what your friends liked or disliked, by experiences you have had in school, or by the catchy sales talk of modern advertising. Without realizing it, you may have grown to like certain designs in automobiles or clothes partly because people you know have liked them, too.

This is perfectly natural. Most of us want to be like other people

and to have the kinds of things that others have. There's nothing wrong with this—providing we've thought the situation through independently and have decided that the car or hat or fountain pen that other people like is the best car or hat or fountain pen in terms of its materials, its usefulness, pleasant appearance, and the way it has been manufactured. And providing we've decided, too, that the car or hat or fountain pen fits our personal needs as well as those of our friends and that it is appropriate to the specific purpose we have in mind. (A Jeep might be better than a Cadillac to use on muddy roads, and some hats are more appropriate than others for dressy wear.)

What is good design?

If an article measures up in *all* these respects, we say it is well designed. You can see that determining whether or not an article is well designed is a pretty complicated process. And it has probably occurred to you that developing the ability to recognize good design must take a great deal of knowledge and practice.

Maybe it seems simpler to you to depend upon the judgment of others or merely to go into a store and buy whatever happens to strike your fancy at the moment. Actually, people who make such snap judgments miss a great deal in terms of pleasure. What's more, they're not likely to get items that really meet their needs.

Why good design is important

Developing a knowledge of good design will help you to discover what types of clothing look best on you. This kind of knowledge can give you feelings of both comfort and self-confidence. You feel "right." This knowledge is important, too, because others—teachers, employers, and people you might like to know—judge you, in part, on the basis of the way you dress. This doesn't mean you have to conform slavishly to the very latest fashions or to other kinds of narrow standards of design. Your choice of clothes should really be based on common sense—on what is becoming to you and what is reasonably appropriate for each occasion.

A knowledge of good design will help you make your room more convenient and relaxing, more pleasant to be in. It will help you to get more for your money—to buy things that won't wear out quickly—since those chairs, automobiles, book cases, and other items which are well designed, built of appropriate materials, and well constructed, are likely to last longer than those which aren't.

And a knowledge of good design will give you a great deal of



BEST!

It's Smart! It's New!

You can't miss

AMAZING

Unique

Matchless Beauty!

SUPER

HANDSOME

QUAINT
NEW
antique

SO EFFECTIVE!

OLD-FASHIONED

NEW TREND

De luxe

Special

Authentic

personal satisfaction, for it will open your eyes to all kinds of exciting new possibilities in the world of forms and colors around you. You will notice things you never noticed before, and these new experiences will make your life richer. Then, too, you will gain the satisfaction and self-confidence which comes of not having to depend on what others say or on a price tag to tell you something is worth owning. You will be able to make your own choices—wise choices, satisfying to you personally, expressing your own personality, and based on knowledge.

Your taste and outside pressure groups

This reliance on your own judgment is especially important today for several reasons. First of all, every manufacturer wants to sell large quantities of his product. As a result, you are subjected every day to the relentless persuasion of modern advertising—not only in newspapers and magazines, but also in the window displays you pass on the street and in the “commercials” you hear and see over the air.

Almost every advertisement tries to make you believe that its own product is the best one for its price. Words such as “colossal,” “smart,” “in good taste,” or “exclusive” are part of the standard sales line. But you must rely on something besides these catchy words if you are going to make wise purchases.

Then, too, developing critical judgment and a knowledge of good design will keep you from being fooled by fancy packaging which is very important in selling cosmetics and other lines of merchandise. Some packages are designed in such a

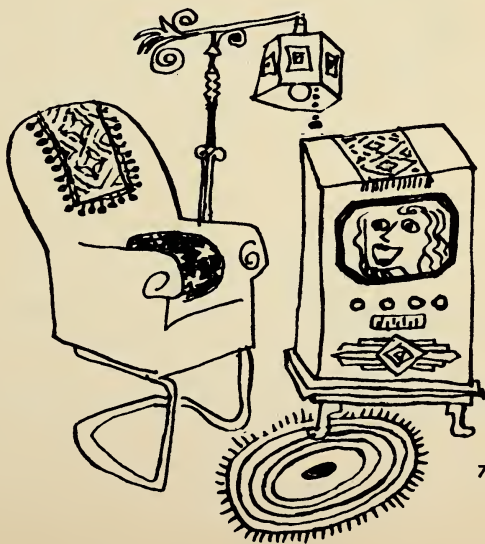
way that they make the product inside look larger and more substantial than it really is. Others are dressed up with bows or other ornamental details in an effort to make you think that the product inside is "smart" or stylish.

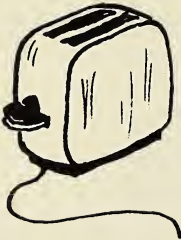
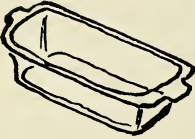
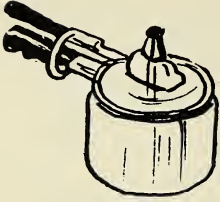
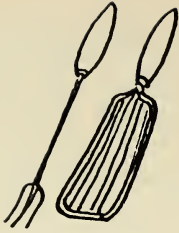
The design of the object itself can fool you if you aren't on your toes and aware of what makes a design really good. In order to attract new consumers, most manufacturers bring out new lines or new models from time to time. These are not always improvements on older models, but they usually reflect popular fashion trends. Obvious examples of such style changes can be found in the length of women's skirts and men's coats and in the use of chromium on automobiles. Thousands of artists earn their living simply by inventing new combinations of shapes, colors, and textures to attract your attention so you will buy *their* company's products rather than those of their competitors. The results are not always the best designed articles, but they fool many people.

The confusion of styles in things you buy today

It's easy to be fooled, too, by all the modern products which are dressed up in various historical styles. Some of these are close copies of styles popular in the days of Louis XIV or Queen Victoria. But others are a strange *mixture* of various styles copied from different periods in history. Hence, most of the so-called "traditional" design you find on the market nowadays isn't really traditional at all. Cigarette lighters, TV sets, and coffee tables based on seventeenth, eighteenth, and nineteenth century designs are actually twentieth century, factory-made objects *masquerading* in historical costumes, and often these costumes are unsuitable to the object and the purpose it is meant to serve. Like everyone else, you have grown up with imitation antiques of this sort and probably still have a good many of them around you which you will go on using. But as you gradually become better acquainted with real antiques and understand why they were originally designed as

In some homes of today, you will find a strange mixture of many styles and designs.





they were, you will begin to see the shortcomings of modern imitations—why, for instance, they aren't satisfactory substitutes for either good traditional or good modern design. You won't be fooled by imitation, and as a result, you will make wiser purchases.

But even genuine antiques can fool you. In judging them, too, you need a knowledge of good design; you need to be able to judge the object in terms of appearance and usefulness. Merely being old or being tagged as belonging to a well-known historical period doesn't guarantee that an object is well designed or worth having. Many people don't realize this; and as a result their homes may be piled high with objects that are very old, but also very ugly and useless.

And you can be fooled by "modern" design. Most of what passes for "modern" today is often merely tricky or cute, rather than really good in design. This is especially true of furniture, lamps, and draperies. Actually, the largest collection of well-designed objects on the market today can be found under the general heading of kitchen appliances. Next time you pay a visit to your local department store, study carefully the aluminum and copper cooking utensils, the knives, serving spoons, and other types of kitchen equipment on display. Most of them make no pretense of trying to mimic the styles of various historical periods, nor do they attempt to be stylish or cute. They are designed purely to serve a useful purpose, and their simplicity makes them attractive.

But the simplicity and straightforwardness in design so characteristic of kitchen appliances isn't so easy to find in other kinds of merchandise. Instead, we are faced with a vast array of antiques, imitation antiques, and modern products, some of them good and some of them bad. We are barraged with advertisements claiming all the articles on sale are the most wonderful products imaginable. All this makes it difficult to buy really good, attractive,

There are probably many well-designed objects right in your own kitchen.

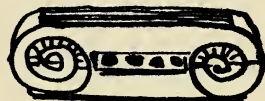
useful clothes, home furnishings, and gifts. Never before have young people been faced with so many difficult decisions in choosing what they should buy as you and your friends are today. Only by knowing about good design and developing good judgment can you make these decisions wisely.

What sort of standards or principles, then, can you use in making such decisions? How can you learn to recognize really good design? Are the most elaborate, costly objects necessarily the best looking?

Purpose of this booklet

These questions, and others like them, we shall try to answer in this booklet. The aim of the next few chapters will be to show you how to think clearly and sensibly about all kinds of objects you plan to use in everyday life so that you will select them wisely both for your own and for other peoples' enjoyment.

Remember, though, as you study this booklet that you are looking only at *pictures* of objects. To put your critical judgment to a real test, you will need to look at the *actual* objects themselves or at others like them.





11

Designed for use

ONE of the first requirements of any object we use is that it should *serve its purpose*. Its purpose may be merely ornamental, as in the case of a ring for your finger or a handkerchief for display in your upper coat pocket. Or, if it is a certain fabric or wallpaper, it may be used as a decorative background—that is, mainly to serve a visual purpose.

Many objects, however, have purposes other than ornamental ones. A chair is obviously meant to support you comfortably while you sit in it. A desk is used both as a writing surface and for storage. A pitcher is meant to pour liquids as well as to hold them.

In studying the design of any object, then, it is a good idea first of all to analyze its purpose—to find out *what* it is used for and *how* it is used. Another important question to ask is *whether or not the object's design is related to its purpose*. If the design does satisfy this requirement, we call it *functional design*.

All good design is useful

Functional design isn't something new. All good design, whether old or new, was originally functional to some extent. Why do you suppose that the windows in our early New England houses were often so small? Merely to look pretty or quaint? No, the truth is that large sheets of glass in those days were rare and expensive. Also, large windows would have been impractical during the cold New England winters because houses in those days were heated only by fireplaces.

When Early Colonial windows are used indiscriminately on houses today, however, they are no longer functional. For now we are fortunate enough to have such efficient heating systems that we can afford the luxury of huge picture windows.

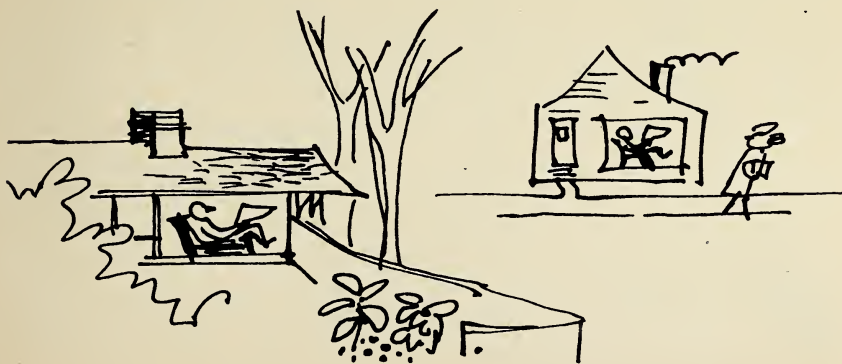
Yet a picture window may be just as impractical as the much smaller Colonial window *if it is used in the wrong place*. A picture window on the street side of a house, for instance, may be very pleasant to look through from the inside of the house, but if it is not properly screened by bushes or trees, it exposes the interior to every passer-by. Large windows in private homes are functional only when they are placed so that they make the most of a view. The view may include a distant landscape or merely an intimate garden in the back yard. The important thing to remember is that windows, like all other objects, are functional only if they are used properly.

So when you judge whether or not the design of an object is practical or functional, don't forget to ask yourself how you plan to use it!

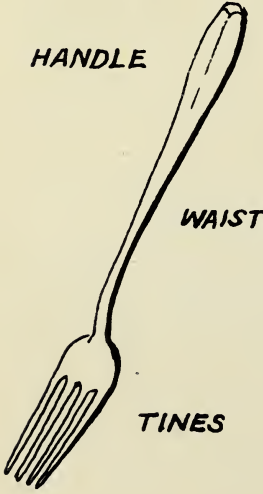
Each part has a special use

Another important point to remember is that good functional design refers not only to the *whole* object but also to each of its parts. Consider, for instance, the legs on a chair. Their function is that of *support*. But the legs are meant to support more than merely the seat and back of the chair: they must also bear the weight of a person sitting on the chair. This means that the legs must be strong enough so that they will actually perform this function. But they should also *look* as if they could do it. For even though the legs of a chair may actually be strong enough to hold up heavy weights, if they are shaped in such a way that their design looks weak, the appearance of such a chair will make you feel a little uneasy. On the other hand, if the legs are considerably thicker than they need be, you will feel that good materials have been wasted.

Sometimes the original function of certain parts of an object's



A picture window is practical only when it is used in the right place.



design is lost sight of because too much emphasis is laid on flashy decorative effects. A good example is the raised chromium "streamlining" found nowadays along the two sides of an automobile. Actually, a strip of chromium along each side is useful in protecting the surrounding painted surfaces from frequent blows from doors suddenly swung open by people getting in or out of other cars parked close by. But *only a simple horizontal strip is needed*. On what cars would you say that the chromium along the sides has been designed mainly with its original function in mind? On what cars have extra and unnecessary patterns of chromium been added mainly for flashy ornamental effects?

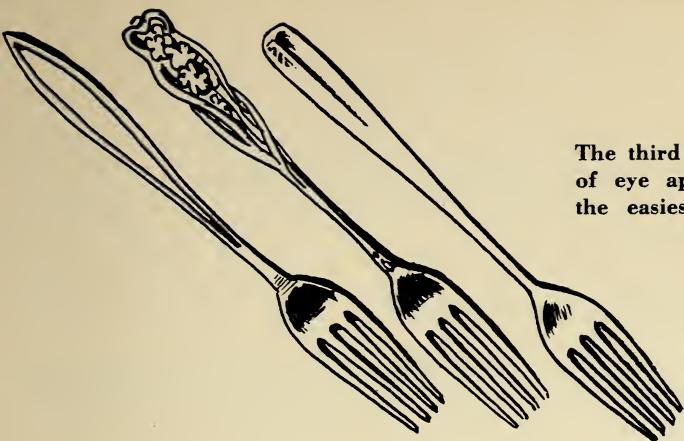
For another example of functional design, suppose we look at something we use every day, such as an eating utensil.

The uses of a fork

The object we are going to consider next is a table fork.

The prongs, or *tines*, of a fork must be sharp enough to *spear* a piece of meat, yet not so sharp that the points of the tines will hurt your tongue. The tines must be close enough together so that you can also use the fork to *hold* food while you *scoop* it up as you would with a spoon. Yet if the tines are too close together, they will be difficult to clean because food often gets stuck between them. Finally, the tines must be thin enough so that the two outside ones can be used to *cut* soft foods. Every fork, no matter how plain or how fancy in design, must satisfy every one of these functional requirements!

A fork is an article which must fulfill several different requirements.



The third fork has plenty of eye appeal, and it is the easiest one to hold.

Now suppose we examine the *handle* of the fork. First of all, the handle must *balance* nicely with the “business” end of the fork. Yet it must not only balance nicely in your hand but also as it appeals to your eye. Otherwise it won’t look as if it served its purpose or function.

Does the first of the three forks shown above answer these requirements? Perhaps so. But how about the pointed end of the handle? Would it feel comfortable in the palm of your hand as you speared a piece of meat while you cut it with a knife?

Now look at the handle of the second fork. Would its bumpy, heavily ornamented surface be pleasant or unpleasant to the touch? Would all that intricate ornamentation with its many little recessed details be easy or difficult to clean and polish? Questions like these are important to ask, because a fork is primarily a *tool*—something designed to be used and to be maintained in good condition—as well as a handsome piece of silverware for display on the dining room table.

The third fork, as you can see, is quite different in design. Because of its broad, plain surfaces it is easy to clean. Of course, scratches will show more clearly on a plain fork handle, but they will show anyway on other parts of the fork which are never ornamented, so why worry about scratches only on the handle?

Besides, the accumulation of scratches on silverware, after a dozen years or so, creates an effect of softness in its texture. If you get an opportunity to look at plain silver of Early American design which has been used by families over and over again for a hundred years or so, you will see this is true. You’ll find that, scratches and all, it has improved with wear and age.

But the plain surfaces of the third fork shown here are not only easier to clean: they are also more pleasant to touch and hold in the hand. Notice also the rounded tip of the handle and how gracefully it

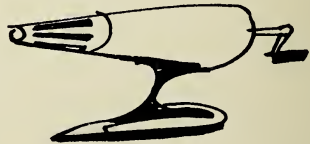
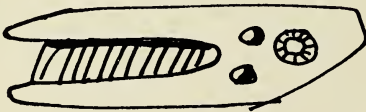
tapers to the slimmer “waist” below. Does this look like a functional handle? Does it seem to be well proportioned in relation to the rest of the fork?

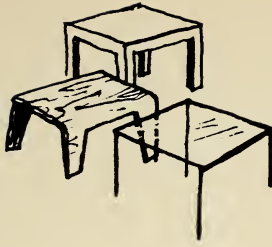
The final test of such an object, of course, is in looking at the object itself rather than at a picture of it. To judge the design of a fork, or any other tool, you should pick it up and hold it in your hand to test its weight and balance.

Simplicity doesn't guarantee useful design

Simple forms and plain surfaces, however, don't always add up to functional design. The pencil sharpener and radio illustrated below, for instance, certainly have simple lines, yet they look a little ridiculous, don't they? Perhaps they look that way partly because they have been made to imitate the highly simplified, streamlined form of an airplane. True streamlining, however, is the result of aeronautical engineering: its purpose is not to look cute or smart, but to reduce wind resistance when the object moves through the air at terrifically high speed. When streamlining is applied to *stationary* objects, it isn't functional and is likely to be tiresome.

The design of any object, then, may be *very simple* or *very complex*, depending to a large extent upon the purpose it is meant to serve. Unless the design is related to the purpose—unless it is, to *some* extent at least, *functional*, it is likely to be artificial and meaningless design.





III

How materials affect design

EVERY object you use is made of some kind of material, such as stone or wood, metal or plastics, cloth, paper, or glass. Some objects are made of *several* materials. A chair, for instance, may have a frame of iron, an armrest of wood, and a seat and back upholstered in a woven fabric. If you were thinking of buying such a chair you would have to make up your mind whether or not this particular combination of materials appealed to your taste and fitted your needs.

Sometimes it is helpful to find out a little about each material's *characteristic qualities* so that you can see how it can best be used in various types of design.

What materials can do

If a craftsman were trying to decide whether to use a certain material to produce an object, he would want to know what he could do with that material and what its limitations were. He might want to know whether it could be used to hold up heavy weights, whether it could be melted or bent, whether it could have holes bored through it. These different qualities of a material are called its *structural properties*.

Each material has its own characteristic structural properties. Metal, for instance, can be heated until it reaches a molten state. This means that it can be poured into a mold and made to assume almost any shape the designer has in mind. Both metal and glass can be stretched, if first softened by heat, into long wires or threads and worked into intricate, interwoven patterns. Some of the new drapery materials now on the market, for instance, are woven with tiny fiber threads of glass and metal.

But can you imagine wood used this way? Can you imagine wires or threads made out of wood stretched to hundreds of feet in length? Obvi-

ously wood can't be transformed in this way, because it doesn't react to heat the way metal does. To make an object out of wood you have to *file* it or *rub* it (with something like sandpaper) or *cut* it out of the original block sawed from a tree. But each kind of wood has its own individual structural characteristics. The grain in a piece of pine, for instance, is entirely different from that in oak or birch. In fact, no two pieces of wood even from the same tree are exactly alike in structure, for a knot may occur in one and not in another.

To a skillful designer and craftsman, however, such differences in the grains of different pieces of wood offer many exciting possibilities. This is especially true in the making of a small and relatively simple object such as a salad bowl or a candlestick. When an expert craftsman plans to create a salad bowl out of wood, he first makes a careful study of the grain so that he can use its pattern as part of the bowl's design. Next time you run across wooden bowls of this sort, in your local stores or at home, compare several of them to see the variations of the grain in each and whether the pattern of the grain has been used well in relation to the shape of the bowl.

A complicated object such as a chair or table, however, isn't merely hollowed out the way a salad bowl is from a single block of wood but is *constructed* out of many small pieces fastened together. When a designer plans to make such an object, he must not only know the best type of *joint* to use in the various parts of the construction, but he must also know how *thick* the joints must be to provide the necessary strength.

Wood vs. metal in two modern chairs

The two chairs shown on the next page offer an interesting contrast between the structural characteristics of wood and metal.

The wooden arms and legs of the first chair are less than two inches thick; yet they can hold a person weighing two hundred pounds. The arms and legs of this chair can do this because the designer made them the right size and fitted them together in such a way that they will do their job efficiently.

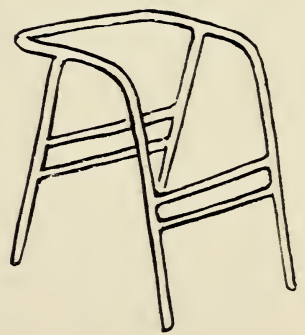
Notice the joints—for instance, where the legs meet the arms. At each of these points, the legs are slightly thicker, so as to provide greater strength. Where thickness isn't needed, the legs are tapered, so as to give the design an appearance of grace and lightness—yet without sacrificing strength. Also to prevent sway and pressure on the joints, the legs are slanted, or “splayed,” outward. In other words, the design

of this chair's frame takes into account the kind of material used (wood) and how this material has been fastened together. But the design goes even further: it emphasizes the very character of the material and its construction. For, as we have just seen, the thickness of the wood at the joints, necessary for strength of construction, hasn't proved to be a handicap at all. *Instead it has become a pleasing part of the design, because of the way the entire chair has been proportioned.*

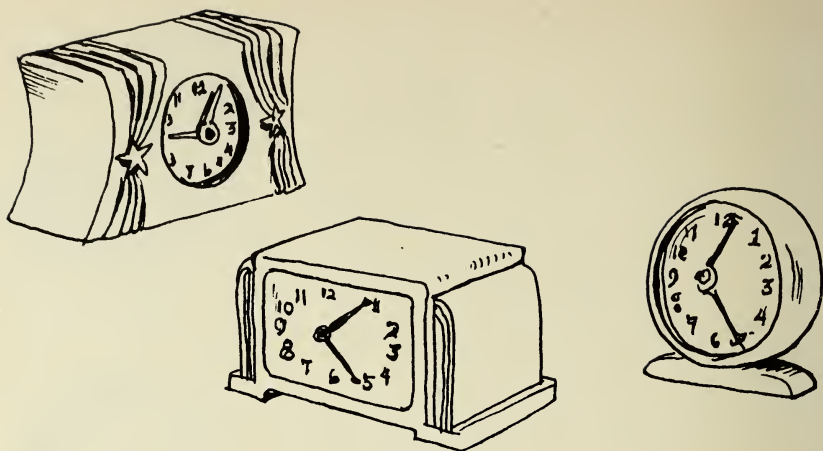
But if the artist who designed the first chair were to prepare a second model for production in another material such as steel tubing, what sort of changes in its design would he be likely to introduce?

After taking into consideration the structural properties of steel in contrast to those of wood, he would find that he could now make the two front legs, the arms, and the bar supporting the back rest out of a *single, continuous piece of metal* rather than out of the *five separate pieces* which had been necessary in the chair of wood construction. In the metal chair, different tubes could be joined together by *welding* them under great heat. Extra thickness at welded joints would be unnecessary, whereas in wood construction it would be essential. The metal tubing, therefore, would not be thickened or tapered but would be *the same throughout.*

As you can see by comparing the illustrations on these two pages, then, the metal version of this chair has an entirely different character from the wooden version because of the differences in the two materials. The wooden version has a solid, angular look to it; whereas in the metal version, the arms and legs seem to flow in a firm yet *continuous* line.



Chairs of wood should be designed differently from those made of metal.



A good craftsman would always emphasize, in this way, the special structural qualities of the materials he is using.

The false use of materials

Yet materials are not always so intelligently used in modern design. Take a look at the first of the three clocks shown above, for example. Like the other two, it has a plastic case. Now plastic, as used here, is a hard, brittle material shaped while hot in a mold under pressure. Yet in the design of this clock case, the plastic has been made to imitate the effect of the *curtains* pulled back from the face of the clock. In other words, the designer has used one material (plastic) to copy the effect of another (cloth). This is tricky, but is it an intelligent use of the material?

Now look at the second clock. It, too, has a hard plastic case. But why should it have those step-like forms on either side of it? Such forms are called *buttresses*. You will often find buttresses used in architectural construction, especially along the sides of churches built of stone or brick. When used in this way, they have a very real structural purpose, for they provide additional support to the walls, which themselves have to hold up a very heavy roof. You will also find step-like buttresses of heavy wood blocks used to support books. But as they are used here, they serve no structural purpose at all. Here again we have an example of one material (plastic) imitating the structural effects of other materials (stone, wood, or brick).

The third clock case, on the other hand, doesn't pretend to be anything other than what it really is. It frankly admits it is made of plastic. The material is used very honestly and economically. The changing reflec-

tions on its glossy surface provide just enough variety so that additional decorative effects aren't really needed.

This brings us, incidentally, to another consideration about the use of materials in the design of objects. So far, we have been talking mostly about the *structural* qualities of materials. But what about their *surface qualities*?

Texture—why it is important in design

When you talk about the surface quality of a material—its softness, hardness, smoothness, or roughness—you are talking about its *texture*. Every material has a texture of some sort. Some textures, however, *look* different to the eye from the way they *feel* when you touch them with your hand. A tweed coat may appear to be very soft, yet it may feel rough—rough enough so that you may want to wear a linen or silk scarf with it to keep it from rubbing the skin on your neck. Other tweeds which are more closely woven may appear to be crisp and hard in texture, yet in contact with your skin they may feel pleasantly soft.

In discussing textures, then, it is important to decide whether you mean the apparent texture of the material as it looks to your eye or the *actual* texture as it feels to your hand.

In judging clothing you probably rely about equally on both seeing and feeling the surface of a fabric. In selecting a drapery material, a wallpaper, or a piece of furniture for your room, on the other hand, you are more likely to respond to its texture as it appears to your eye. This is natural enough, because most of the furniture or furnishings in your room are meant to be seen more often than handled.

When the texture of a material is very pronounced, it may determine to some extent the sort of shape it should have in its final design. Should a rough tweed coat, for instance, be cut in a fairly simple or a complicated pattern? Obviously such a pattern should be simple. A busy surface such as tweed—especially a roughly woven tweed with threads of contrasting colors—should have large, uninterrupted expanses to show itself off to good advantage. An intricate, fussy silhouette in tweed tends to look “cramped” in design. For such intricate, elaborate tailoring, other materials with quieter surfaces, such as cotton, rayon, or silk are more suitable.

Contrasting different textures

Though the eye enjoys complicated textures provided by certain materials, it must also have some relief from them. *Some sort of contrast is necessary.*

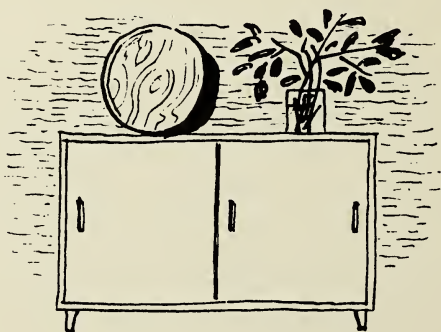
We have already talked about the idea of combining a silk scarf

with a tweed coat. As these materials are very different, they may set each other off nicely. But if the tweed coat is very rough, a linen or cotton scarf may look better, as the silk one may prove too great a contrast. Much depends, however, on whether or not the scarf has a pattern on it. If the pattern is very intricate and small in scale, the scarf may look as if it is another busy texture and for that reason may seem to fight with the busy texture of the coat.

This need for contrast is the reason why a small and intricate piece of jewelry, such as an elaborately ornamented pin, should be worn against a cloth with a fairly quiet texture or pattern.

You can apply this principle, too, when you select wallpaper and drapery fabrics for your own room. If you have many small objects with intricate silhouettes on your table, dresser, or bookcase, the wallpaper pattern behind them should either be a plain color with a slight textural effect or, at most, a pattern with very small figures in it. Otherwise, the shapes in the wallpaper will seem to overpower the delicate silhouettes of objects placed in front of it.

Learning to make judgments of this sort requires a good deal of practice—especially now that plastics, spun aluminum, plywood, foam rubber, and many other new materials have appeared on the market. But once you have studied their characteristic qualities, you can begin to see how and where each of them can best be used.





IV

How the manufacturing process affects design

WHETHER an object is manufactured by power machinery in a factory or produced by hand by a patient craftsman may seem unimportant to you. But actually manufacturing processes are very important in determining the finished design of an article.

Perhaps the simplest way to demonstrate the relation between the manufacturing process and an object's design is to try a simple experiment of your own in the shaping of something you use every day such as an ordinary lead pencil. Under normal circumstances, you probably don't pay much attention to the appearance of the sharpened point of a pencil unless the lead has cracked and is beginning to wobble, or the pencil, for some other reason, doesn't seem to write well. But for the purpose of our discussion, let's look a little more closely at pencil points.

Suppose, for instance, you were planning to sharpen several pencils of identical size and make. You might sharpen some of them with a hand-operated *machine* such as a pencil sharpener. You might sharpen the others with a *hand tool* such as a pocketknife. The results of the two processes would be quite different—at least if we considered the "design" of the sharpened end of each pencil.

Personal touch vs. mechanical finish

First, consider the pencils you are going to sharpen with a pocketknife. The effectiveness of this tool depends upon your own manual skill in using it. But no matter how carefully you work at sharpening a pencil, there will still be irregularities in the wood and slight imperfections in the shape of the conical point. These represent *the imprint of your own personality and handwork*. And because you are a human being rather than a machine, each pencil you sharpen will be *slightly different in shape and finish*

from every other pencil sharpened with the same tool. These slight imperfections are characteristic of all handicraft production.

Machine production leads to quite different results. When you point up the end of a pencil by inserting it into a pencil sharpener, you can transform it very quickly and efficiently into a smooth and almost geometrically perfect cone shape. What's more, the shapes of all the pencils you sharpen in this machine—providing you feed them into it properly—will be more or less *uniform*. Instead of producing a series of unique, handmade objects with noticeable irregularities in each of them, you will have produced a series of objects which are *highly simplified, highly standardized*, and very close to being *mechanically perfect*. *These are the qualities which are characteristic of machine production.*

Nearly all objects manufactured a century ago were made with hand tools rather than by machine. This accounts for the subtle irregularities in shape and finish you may have noticed in old, hand-rubbed furniture, old cups and saucers made on a potter's wheel, hand-woven fabrics, and hand-blown glass. All of these traditional handicraft processes are still in use. Perhaps you know someone who takes great pleasure in making handmade pottery or furniture as a hobby. Designers still use handicraft techniques to make experimental models of products which may later be mass-produced by machines, and some products are still made by hand to be sold commercially, but the total output of handicraft products is relatively small and expensive. Most of the merchandise you buy in the market today has been mass-produced by power machinery.

To see how handicraft and machine processes compare in making useful objects, let's turn to a brief discussion of furniture design.

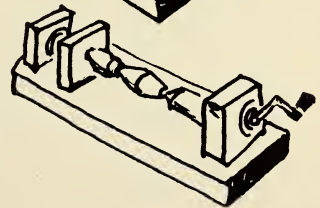
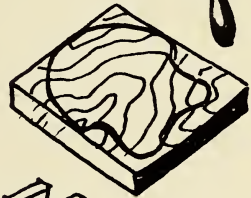
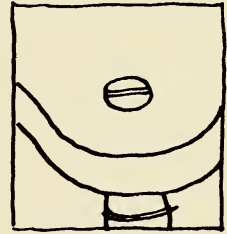
The Windsor chair

One remarkable example of old handicraft design is the early nineteenth century Windsor chair shown on the next page. You've seen this chair, or variations on it, in many places—perhaps in somebody's kitchen or in school, or in a dentist's waiting room. Most of the examples you have seen, however, were probably machine-made imitations of the original handmade chair. If you compared them with the old models, you would find that the new ones looked a little crude in form and finish. The average "Windsor" chair made by machine today is usually missing a couple of braces or spindles after a few months of hard use. The glues in its joints tend to dry out in our modern steam-heated interiors.

When craftsmen made these chairs about 150 years ago, they selected the materials very carefully, choosing a *well-seasoned* wood for the spindles, bow-back, braces, and legs, but a *green* wood for the seat.

After the various parts of the chairs had been put together, the green wood of the seat gradually dried out and shrank, so that it gripped the spindles, legs, and bow-back in a vise-like grip. Naturally this gave the whole chair a very sturdy construction. Another interesting construction detail is the joints formed between the legs and the thick plank seat. The "peg" end of each leg was cut to fit precisely into a hole bored clear through the seat and was held in place by a wedge driven into the peg to spread it, as the illustration on this page shows. Construction details such as these required more time, patience, and skill on the part of the carpenters who built the Windsor chair than can be permitted today in most of our mass production furniture factories. Yet these construction details are essential to the design of the Windsor chair. In fact, *they are a part of its design*, for some of these details, such as the peg ends of the legs where they join the seat, are clearly visible. Well-made joints of this sort are not only ornamental features of the chair but, of course, they are also very practical features. Many of the original Windsor chairs are still intact today after 150 years of hard use!

Among other characteristics of the Windsor chair is the way the thick plank seat has been skillfully tapered at the edges and toward the center to produce a kind of "saddle" shape. This shape is comfortable to sit on; but it has the added virtue of lightness in appearance. Try to imagine, for instance, how clumsy the seat would look if it had not been tapered in this way. Also, notice the moldings on the legs and cross-bars. Wherever a crossbar fits into a leg, the leg is *thicker at that point*, but where



Most traditional furniture was designed to be made only by hand tools.

thickness isn't necessary—at the top and bottom ends of each leg, for example—the leg has been made *thinner*. In other words, the moldings on the legs and crossbars are not entirely ornamental: they also serve a function.

The manufacturing process which produced Windsor chairs 150 years ago depended mainly on highly skilled manual craftsmanship. Most of the tools used were ordinary carpenter's hand tools, with the exception of the lathe, which was a very simple machine operated, at that time, by hand.

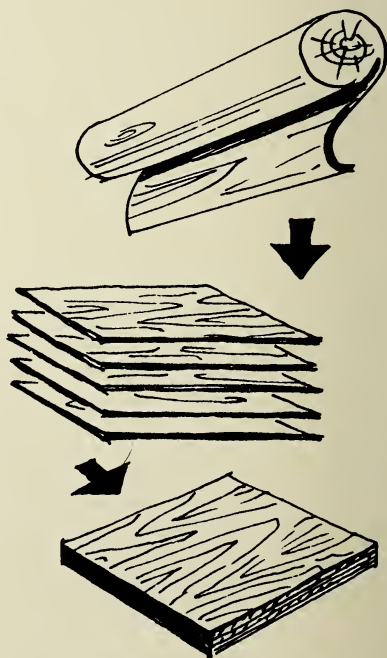
The Windsor chair and mass production

There are still a few small furniture shops today which try to maintain the same high standards of craftsmanship which once produced the Windsor chair and other fine pieces of furniture. But the wonderful design of the original Windsor chair is not suited to the needs of modern high-speed production. Factories, turning out thousands of chairs every week for the low-priced market, cannot afford to make careful selections of seasoned and green woods for different parts of the chair, nor can they afford to pay for the niceties of construction which gave the original Windsor chairs much of their distinction. To meet these new needs, designers today have experimented with revolutionary new types of design and manufacture.

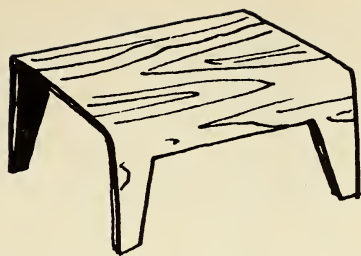
A new process leads to new design

During the past sixty years, the development of new materials and machine processes has stimulated new types of design in furniture. One of the most interesting of the new materials is *plywood*. Actually, it isn't really "new," for plywood was manufactured in the 1880's, and thin wood veneers were used for their beautiful surface effects in late eighteenth century furniture. But not until the 1920's and 1930's did plywood really figure prominently in the construction of furniture which could be mass produced.

Thin sheets of wood veneer are glued together in order to make plywood.



As you may already know, plywood is composed of several thin sheets of wood veneer glued together under great pressure. The thin sheets are usually produced by a method of *rotary cutting* around the *circumference* of a log—in contrast to the usual method of cutting lumber by sawing across the log or sawing lengthwise. You may have noticed, too, that the inside layers of plywood are made of cheaper wood, which is likely to be knotty or cracked. The outside layer, though, usually has an interesting pattern in the grain running across it—an ornamental feature which is ordinarily more pronounced in veneers than in solid woods.



This table was made from a single sheet of molded plywood and has no joints where the legs meet the top.

One of the great advantages of plywood is its *tensile* strength, which means that it can bend without breaking far beyond what can be expected of ordinary wood of the same thickness. Plywood is an astonishingly strong, and yet relatively light, material; it has a hard, durable surface; and it can be manufactured in large sheets, whereas ordinary lumber seldom is cut more than one or two feet wide.

But plywood isn't always manufactured in flat sheets: it can also be glued together in a mold which shapes it into a curving, flowing surface. The little end table shown above, for instance, is really a bent rectangular sheet of plywood. The two legs at either end have been formed by cutting away part of the original rectangle.

What a revolution in furniture construction this is! Instead of building a table out of various pieces of solid lumber carefully cut to size and precisely joined together, it is now possible to make an equally sturdy table out of a single sheet of plywood! The little table you see above has no moldings on its legs, and no joints where the legs meet the top, for both legs and top are made of one continuous piece. Instead of merely imitating traditional design intended for handicraft manufacturing processes, a modern artist has developed this entirely new and revolutionary design which takes advantage of a modern process specially suited to mass production.

Many recent designs in furniture have made good use of plywood or of other new materials (such as plastics, for instance) produced by modern industrial processes. But the one piece of furniture which has been



most widely accepted during the past ten years as a symbol of modern industrial design is a small but very sturdy chair of chromium-plated steel and molded plywood.

The Eames chair

The piece of furniture we are now talking about was designed after the close of World War II by a young architect named Charles Eames for assembly line production by modern factory machines. In fact, some of the construction features in the new chair were developed by Eames as a result of his work in airplane plants during the war.

In general appearance, the Eames chair has a light, graceful design which makes good expressive use of its two materials, that is, of the plywood and the chromium-plated steel. Actually the Eames chair *is* lighter than a Windsor chair of the same general size; yet it is also very sturdy in construction.

Notice that the joints which hold together the back rest and the metal frame are exposed frankly, and in fact, become important accents in the total design. The type of joint used here is a special one developed by Charles Eames to suit the needs of mass production. It can be made very quickly by an electronic process; yet it is surprisingly strong, holding under great pressure. Notice, too, the gracefully molded "saddle" seat and the curved back. These parts are curved not only to give the chair a light, buoyant character but also to make it more comfortable.

Yet, perhaps the most significant fact to remember is that *the Eames chair has been*

The Eames chair was especially designed for modern machine production.

produced entirely by machine, using modern assembly line methods. The various metal parts are bent and welded by machine methods, the subtle curvature of the seat and back rest are created mechanically in a mold under great pressure; and the electronic joints are made by still another mechanical instrument. Each of these operations is performed quickly and efficiently without relying on the time-consuming handwork of highly skilled craftsmen.

Yet the Eames chair, in spite of its mechanical origin, has its own kind of beauty which, in the opinion of many artists and critics, rivals that of the old Windsor chair. Of course, if you haven't seen many examples of good modern design in your own home or community, it may take you a little while to get accustomed to the shape of the Eames chair. Look particularly for the subtle curving surface of the seat and back, at the beautiful grain of the plywood veneer, and at the harmonious relationship between the slender legs and the light, almost floating, seat.

It isn't likely that many of you will find Eames chairs or other pieces of furniture especially designed for machine production in your own homes. For although we have been using machines for over 100 years in this country, during most of that time we have used them mainly to copy older furniture which was originally designed to be made by skilled craftsmen using *hand* tools. Only very recently have we experimented with new designs more suitable for machine processes. Your family probably purchased their furniture before these new designs in chairs, tables, and other furnishings became generally accepted; and furniture is too expensive for most of us to be able to buy more than once or twice a lifetime. Besides, your parents may like the way their home is furnished and feel comfortable in it. However, if you get an opportunity to redecorate your room now or if you begin planning for your own home in the future, you may want to consider buying furniture which is specifically designed to make the most of modern methods of manufacturing.



v

Other requirements of good design

SO FAR we have discussed three basic requirements of good design. We have found that the appearance—and sometimes the “feel”—of an object should express its function, its materials, and the process by which it has been made.

But very few of us would be satisfied with a design which answered merely these requirements. A good design must appeal to us in other ways, too. All of us, for instance, feel the need at one time or another for *soothing* shapes and colors—especially in places where we want to relax, such as in a bedroom or study. At other times, we feel the need for *action* and excitement—perhaps in the lively patterns we wear on a festive occasion or in the colors we choose for the walls and draperies of a new recreation room.

Harmony and contrast

The first of these two important needs can be satisfied by *harmony* in design—by combinations of shapes, textures, or colors which are *similar* to one another in certain respects. An example of harmonious combinations of shapes can be found in almost any good design—in the similarity between the curved parts of a comfortable armchair, in the similarity between such colors as rust-red and orange-yellow in clothing or home furnishings.

The second of these two needs—*action*—calls for *contrast* in design, for shapes, textures, and colors which are *unlike* each other, such as red and green, black and white, vertical and horizontal, and so on. Contrasts are necessary to provide emphasis and to give a design *variety*. Actually, of course, every design has some contrast and some sort of harmony in the relationships between its various parts, but *one of these elements usually*

predominates over the other. Choosing which one you prefer may depend on the occasion, on your mood, on your general habits, or on various other factors.

For of course these needs vary from one individual to another, as you can easily see by comparing your own likes and dislikes with those of your friends. Bill, for instance, feels the urge to wear shirts with large, bold patterns and “noisy” color combinations; whereas Ed goes in for patterns made up of tiny shapes and soft colors. Mary feels the need for bright red accents against gray sweaters and skirts, but Jo prefers combinations of yellows and browns. Just as we differ in our personalities, so we differ in our likes and dislikes when we choose our clothing and most of the other things we use. Fortunately, there is plenty of room in the world of color and design for preferences of this sort.

But our own individual preferences, unless we look at them critically once in a while, can easily lead us into narrow habits of judgment *which severely limit the range of our choice.* We need to look beyond our own immediate preferences occasionally to see whether or not we aren’t missing something which would give us much more satisfaction than the kind of thing we ordinarily accept.

Harry Smith’s neckties

Look at the case of Harry Smith, for example. Harry seems to have the most unaccountable tastes in neckties and shirts! Once in a while, he picks out a design that looks very well on him—rather lively, perhaps, for some people’s tastes, yet really not bad when Harry wears it. Yet *some* of his choices are not at all becoming to him.

The illustration at the beginning of this chapter shows Harry trying on one of his ties. He seems to like this one, but no one else does. If we analyze its design, we can easily see why.

First of all, there are too many *kinds* of shapes in it. There are wiggly irregular shapes with holes in them, star shapes, zig-zag shapes, circular shapes, rectangular



Necktie patterns look confusing when they have too many kinds of shapes.



Which of these neckties do you think provides the best accent for a coat or shirt?

shapes, and long, sweeping, curved lines. Perhaps some of these could be used well together, but as they are combined here, they look restless and crowded. Also, notice that the shapes are different, too, in their *sizes* and even in the *directions* in which they seem to move. Contrasts are good to have in a design—in fact they give it pep and action, but *when too many contrasts are introduced, the pattern tends to get cluttered and confused.*

Suppose we look at two more of Harry's ties. The design of the first one shown on this page is based on the use of fewer kinds of shapes than the one we have just been discussing, yet it still isn't very becoming on Harry. The long, sweeping curves make the wiggly-shaped rings appear rather fussy by comparison. Also, the long curves seem to be swooping right off the surface of the necktie! This gives us the illusion of shapes moving backward and forward in real three-dimensional space. This sometimes looks all right in a framed picture, but it doesn't fit comfortably on the flat and *narrow* shape of a necktie.

The pattern of the next tie, however, is much simpler and more appropriate for the purpose a tie is supposed to serve. Its purpose, of course, is to provide a pleasant design as an *accent* in the middle of one's coat or shirt. It isn't meant to be a picture gallery or a collection of fussy little patterns you have to look at up close to enjoy. In fact, a necktie pattern is usually most effective *when it is composed of only one or two shapes of the same general kind* repeated over and over again at interesting intervals from one another.

How well a design on a necktie will satisfy us seems to depend a

good deal on the shapes it includes and how these are related to each other and to the purpose a necktie is meant to serve. Shapes and their relationships are important in other objects, too.

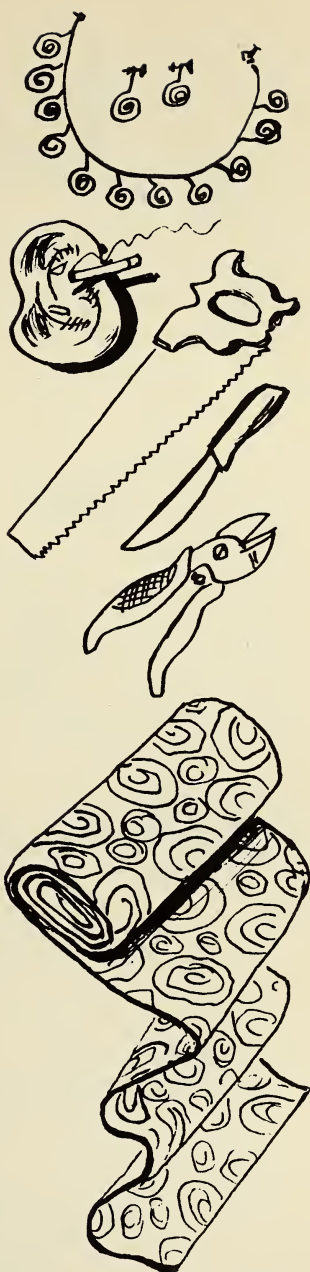
Organic shapes

There are two main families of shapes used in all designs—organic and geometric shapes. Usually it's best to combine shapes from just one of these families in any single design.

Organic shapes aren't easy to list by name: about all we can say about them is that they suggest the irregular, free-flowing outlines of the organic life you see through a microscope.

Well, then, how do we decide whether an organic shape is well designed or not? And how do we judge whether or not it goes well with other organic shapes? Perhaps the best way to begin is to take a critical look at your own handwriting. Notice that none of the characters are regular geometric shapes, for even when you write the letter "O," it isn't a perfect circle. Sometimes when you write out your signature, you feel that some of the letters look a little pinched—that they don't harmonize with the more flowing letters to which they are joined. At other times when you sign your name, each letter seems to be formed just right and to flow easily into the next one, so that the whole signature has a unified design. On such days your signature is an example of a good design which uses organic shapes.

When you study a design made up of organic shapes, look first to see whether there is some sort of relationship between the various shapes—somewhat like the relationship you find in good handwriting. For instance,



Some designs suggest the free-flowing, irregular shapes of organic life.



Designs for most machine-made objects are based on geometric forms like circles or squares.

do the shapes seem to work together toward a general unified effect? Or are some of the details too elaborate and fussy? Are the *individual shapes themselves interesting*? Judge them as you would the characters of your signature.

You can use this method to judge some of the designs printed in textile patterns on sports shirts, dresses, draperies, and so forth. You can use it, too, to judge certain handmade objects such as glassware, ceramics, and jewelry. And even some machine-made objects have organic design in some of their parts which you can judge in this way. One example is the handle of a carving knife or of a pair of pruning shears designed to fit the shape of the human hand.

Geometric shapes

You are probably already acquainted with the names of a few geometric shapes from your study of geometry in school. Circles, spheres, rectangles, cubes, triangles, cones, and cylinders, are the most common ones, but there are many more if you want to make a really long list. For our purposes here, however, it is more important to learn how such shapes are used in design and how they can be related well to one another.

The designs of many objects you use every day are based on only one or two geometric shapes with little or no ornamentation added. Some of the earthenware or plastic bowls in the kitchen, for instance, may be sections of spheres: a deep bowl may be a half sphere, and a shallow bowl may be a fourth of a sphere. The designs of most objects man-

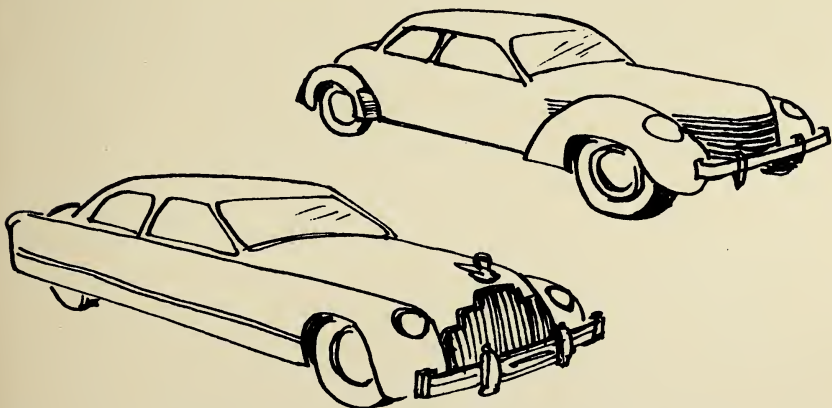
ufactured by mass production methods are based on geometric shapes—especially objects which are *assembled* out of many *standardized* parts, such as automatic pencils, fountain pens, typewriters, certain pieces of furniture, automobiles, and so forth.

Not so many years ago, most people thought that machine-made objects composed of simple geometric parts needed some sort of fancy ornaments on their surfaces to make them beautiful. But the increasing number of good looking geometric designs now appearing on the market—especially in tools and kitchen utensils—has begun to convince the buying public that good design can be achieved *without resorting to elaborate surface ornaments*.

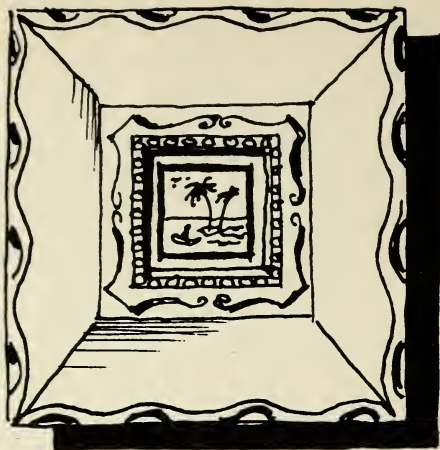
Of course, a design made up from simple geometric shapes may be either beautiful or ugly. Much depends on what *kinds* of geometric shapes are combined and *how they are put together*.

A good way to test your skill in judging such relationships is to examine the various chromium parts on the fronts of automobiles. The latest models aren't necessarily the best designed. Two examples are shown below for you to compare, neither of them a very recent model. Which do you think has the better designed radiator grill? Compare the shape of the grill with the forms around it to see whether the various parts seem to go together.

Notice that the grill on the left car consists of a step-like triangular design which builds up to the radiator cap. Is there any reason why it should emphasize this one point so much? Then, too, does this kind of step-like shape fit in with the sweeping curves of the fenders? Notice how pinched it makes the front of the hood look—how this step-like pattern *calls attention to itself* at the expense of the rest of the car's design. The grill on the right car, however, *emphasizes the form* of the entire hood and also sweeps our attention back into the long horizontal lines of the car's



Which of these radiator grills is better suited to the rest of the car?



Picture frames or ornaments that are too large can look very heavy and out of scale.

body. Actually, this design is a modern variation of one which dates back to the 1930's; yet it somehow doesn't look dated.

Size, scale, proportions

Another important relationship to look for in a design is the relationship between the *sizes* of shapes. Architects and industrial designers often talk about whether the various parts of an object are "in scale" with one another or with the other objects with which this particular object is to be used. If you were choosing a lounge chair to go in your room, for instance, it would be important to try to visualize whether or not it would seem too bulky in relation to your other pieces of furniture or perhaps in relation to the size of the room itself. This same problem arises, too, when a person selects jewelry, neckties, or other pieces of wearing apparel. Earrings and necklaces, for instance, should be chosen in relation to the sizes and shapes of the wearer's features—also in relation to the sizes of important details in his clothing. Many of us often become so fascinated with the design of a tie clip, an earring, or some other decorative object on display in a store that we fail to visualize how it will look on us when we wear it. Perhaps it looks too large and heavy, or perhaps too small and fussy in detail, which is merely another way of saying it is "out of scale"

with its surroundings. This question of *scale* always arises when we judge the relation of one part of a design to another.

And while we are talking about scale, it might be a good idea to discuss picture frames. Which is more important—the frame or the picture? If the picture isn't important enough to hold its own with the frame, why hang it in the first place? Yet tiny pictures overwhelmed by large frames of the sort shown on the opposite page are on sale in most department stores and framing shops today. Frames of this sort are *out of scale* with the picture. Actually, a frame should be chosen only after very careful inspection of the picture itself. Are its shapes large and simple or are they small and elaborate? The frame—and the widths of its moldings, if it has any—should be carefully chosen both in relation to the size of the picture *as a whole* and *to the sizes of the main shapes within the picture*.

Another word often used in discussing the relationships between sizes of shapes or even between the *various parts of one shape* is the word *proportions*. When we say that a certain shape—say, a rectangle—is well proportioned we mean that its width in relation to its height is appealing to us. If it is a three-dimensional object, like a bookcase, its thickness would also be part of its proportions. If you are building a small cabinet, for example, you will naturally be concerned with how wide it should be in relation to its height and depth. You may even be concerned with the thickness of the wood itself, for in a small object, such as a letter holder or a magazine rack, the thirteen-sixteenths inch thickness of ordinary lumber would look a little heavy and coarse, whereas the same thickness might be all right for a good-sized bookcase or table.

Proportions in clothes change from year to year—even from season to season. An important change in the proportions of men's clothing, for instance, is in the length of the coat as compared to the width of the shoulders. In women's clothing, the position of the waistline, the length of the skirt, the width of the skirt, and the length of the sleeves change several inches every five or ten years. As you know from your own experience, such changes in fashion alter the apparent proportions of the human figure. Have you ever seen pictures of the clothes women used to wear in the "roaring 'twenties"—just a few years after the first World War? In those days the skirt was shortened to the knee and the waistline dropped so low that the general proportions of the female figure were top heavy. The new style didn't look so badly on women with short figures, but it emphasized the legs so much that it made tall girls look grotesque. Fortunately, our fashion dictators soon remedied these proportions and eventually restored the female waistline to approximately its proper place.

Some of the experts tell us that there are certain proportions which have been generally preferred down through the ages, but there are so many

exceptions to this statement that it is of doubtful value. The three houses shown on this page, for instance, represent typical architecture of three different periods—eighteenth century Colonial, nineteenth century Victorian, and twentieth century modern. (Actually when each style first appeared it was “modern” for its time.) But notice that in each style there is an entirely different set of proportions. The compact, box-like Colonial house is based on a rectangle which is a little longer than it is wide. The Victorian house emphasizes a *narrow, vertical* rectangle: its ceilings inside, for instance, are two to three feet higher than those of the Colonial house. The modern house, however, emphasizes *long, low horizontal* rectangles. In a well-designed house of any period you will find that certain proportions are repeated again and again in many of its parts—perhaps in certain windows,

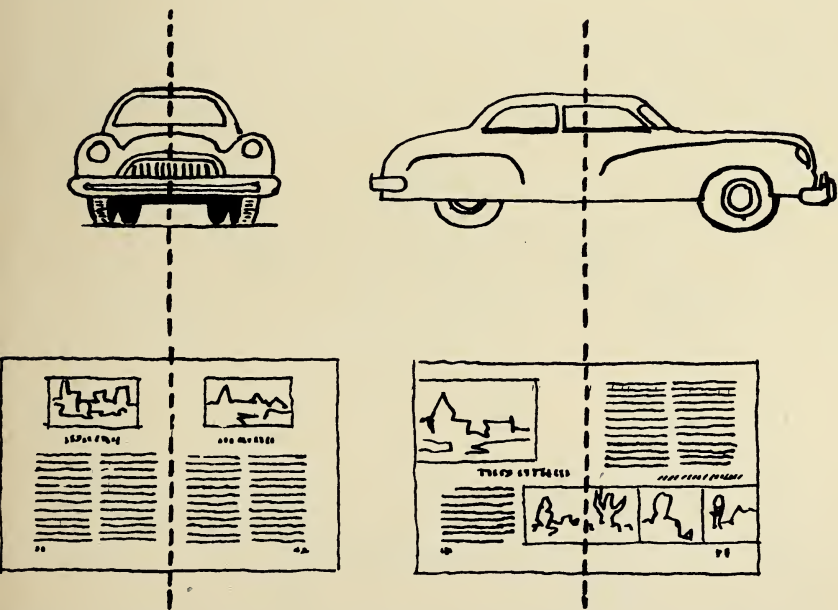


Houses from different historical periods may have different proportions.

doors, and whole walls. Some of these same proportions appear also in their interior furnishings.

Another problem which usually comes up in any discussion of design is that of balance. Most people assume that "balance" and "symmetry" mean the same thing, or, at any rate, that a design is balanced only if it is symmetrical—that is, if the two halves of the design are exactly alike. The front end of an automobile, for instance, is symmetrically designed because the fender on the left side corresponds exactly with the one on the right side, the left headlight with the right headlight, and so on. When we look at the same car from the *side*, however, we find that the left and right sides of the design are quite different from each other, even though the wheels and certain other details are repeated. Here, then, is another kind of balance—an off-center, or asymmetrical arrangement.

Both types of balance can be found in the designs of many objects we use in daily life. Look, for instance, at the pages of pictures and print in books and magazines. In some magazines, the page design (or layout) is symmetrical, in others an off-center system of balance is used, largely because it is more efficient in the placing of many photographs of different sizes or with different kinds of action in them. Compare, for instance, the two layouts shown at the bottom of this page, both of them used for school yearbooks. The one on the right allows for more *variety and flexibility*. Yet



The left and right sides of a design can be different and still balance.

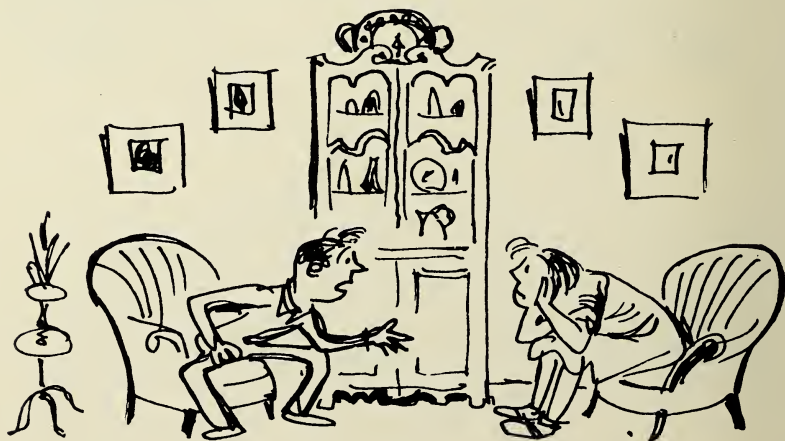
it is just as well balanced as the page layout shown next to it. If you study it for a moment, you can see why: the large heavy photograph placed high on a left-hand page is counterbalanced by a row of smaller photographs which seem to move—even to *pull*—our attention toward the right.

Balance should serve a purpose

Symmetry can be found in the design of many of the objects we use in daily living—objects such as glass tumblers, bowls, clocks, and so forth. These objects are symmetrical in design because of the purpose they are meant to serve—not just for the sake of symmetry. The symmetrical shape of a glass tumbler, for instance, is the simplest and most practical shape for a vessel of this type which is meant to hold liquids and to be held in one's hand.

But symmetrical balance, especially in the arrangement of pictures, bookcases, and other pieces of furniture in the home, isn't always functional, as you can see by studying the illustration below. Does this arrangement encourage easy conversation between two people sitting in the lounge chairs, or is the high bookcase between them a barrier to conversation? Notice that this is a *rigidly formal* grouping, which “builds” pompously upward step by step to a climax at the top. To be sure, this is a “balanced” arrangement; but has this kind of balance any real purpose or meaning in a room meant for relaxation and informal conversation?

Now study the asymmetrical grouping shown at the top of the next page. The high bookcase has either been sold or moved to some other part of the room where it won't interfere with informal conversation. Instead we



Do you think this arrangement of furniture encourages easy conversation?



Low, restful lines of modern furniture suggest comfort and informality.

have a series of bookcases and cabinets simple in form but designed to fit together in a long, low, horizontal row. Notice how restful this horizontal line is—how much less demanding than the high old bookcase. It provides a quiet, neutral background for informal living. Now that the strictly symmetrical grouping of the first arrangement has been broken up, the two chairs can be moved around without disturbing the arrangement of the furnishings in this part of the room.

Even without the chairs, the arrangement shown here would balance satisfactorily. For the plate, vase, and other small objects on the left side would hold their own with the off-center picture and the thin silhouette of the lamp on the right. Perhaps the balance isn't absolutely perfect, but what of it? This is *a room for modern living*—not an exhibit in a museum!

In general, off-center or asymmetrical arrangements are more useful to us today than those based on strict symmetry. Balance, however, isn't a matter of formulas or systems but is really an *expression of our needs and feelings*. *An arrangement of furnishings in your room is balanced if it "feels" right and if it has been organized around the purpose or function the room is meant to serve.*

Mixing old and new

If we avoid rigid formulas or systems in planning the furnishings in our rooms, we can even mix old and new pieces of furniture happily together. The two nineteenth century lounge chairs shown in the illustration above, for instance, look all right in front of modern bookcases and cabinets because, as mentioned above, the latter are so simple in their shapes that they provide a quiet background for the more ornate designs of the two

chairs. In other words, it isn't necessary in furnishing a room to try to match all pieces of furniture according to their historical styles. *Often very interesting differences can be brought out between the more elaborate shapes of old furniture and the precise geometric forms of modern design.*

Experimenting with color

This same sort of experimental approach is useful, too, in learning how to work with *color* so that you can make it play an important part in determining the character of a design. Various charts and systems for combining colors may be of some help to you. Some of these are included in the reading list at the end of this booklet.

There are a few generalizations we can make here, however, which may prove useful. First, try to think of how *active* each color appears to be. A pure blue, of course, seems to be more active than a blue which has had gray mixed into it. But even certain pure colors seem to be more active than others. "Warm" colors such as orange-red, orange, and orange-yellow, for instance, seem to expand outwards toward you. If you were to use a warm red in large areas on your bedroom walls, for example, the walls would seem to close in on you, so that the room would seem smaller than it really is. When such colors are used in large areas for clothing they tend to make the figure of the person wearing them seem a little *larger* than it really is. On the other hand, blues, blue-greens, greens, and greenish yellows tend to make one's figure smaller—especially if these colors are grayed a bit. When used for draperies or on the walls of your room, these "cool" colors tend to remain in the background, producing a pleasant, restful effect. Yet even these colors may be made to appear lively and stimulating if you combine them with accents of white or certain contrasting colors.

Colors, like shapes and textures, seem to change when placed in different combinations. The same gray becomes darker or lighter, depending on the tone of its background. Likewise, a blue-green may be made to look either bluer or greener, depending on the colors you place around it. You can verify this statement by cutting out several pieces of the same colored paper and placing them on backgrounds of different colors. What you learn in experiments of this sort may eventually prove very useful to you in selecting colors for your home furnishings.

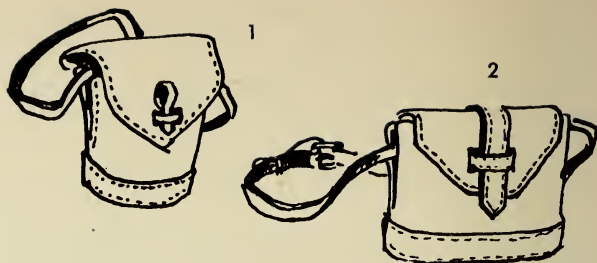
It's useful right now

But don't feel that the knowledge you gain from reading this booklet and from experimenting with colors and shapes will be useful only in the distant future.

You can use your knowledge of good design right now. Every time you set the table for guests, you have an opportunity to combine shapes and colors in a pleasing way. Every time you buy a gift for a friend you have an opportunity to judge it in terms of usefulness, materials, and the way it has been manufactured. Every time you rearrange your room, you can experiment with relating shapes in new ways.

And every time you dress, you can employ the principles of good design. A girl is creating a very complex design every time she puts on a dress and chooses the hat, gloves, purse, and shoes to go with it. A fellow is doing much the same thing when he combines slacks, a sports jacket, shirt, and necktie to make a single outfit. To create a really good design when you dress, you need to employ your knowledge of color combinations, of textures, of shapes, and how to relate them.

In countless little ways, you'll find that you can use your knowledge of good design right now to improve your appearance, choose attractive, functional articles, give you self-confidence, and increase your enjoyment of the beauty around you.



VI

Judgment test

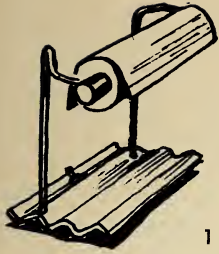
ON THE next few pages, a number of objects are placed side by side for you to judge and compare. By picking the items you feel are well designed, you can get practice that will help you in daily life. In making each of your choices you will probably want to consider these points:

- (1) Does the design express the use of the object?
- (2) Does the design make good use of the materials?
- (3) Has the designer made good use of the process by which the object was made? (If the article was produced by machine methods, it should not be an imitation of handicraft products.)
- (4) Do the various *parts* of the object seem to be related in shape, color, and texture to the *whole* design?
- (5) Will the shapes, colors, and textures of the object relate well to those of the other objects with which **you** plan to use it?

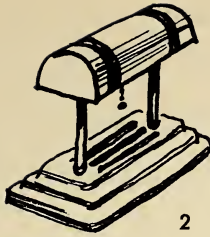
Most people would agree that both bags above are attractive, but one is better designed than the other. Which bag is it? Show your choice by checking one of the blanks below. Then read on to see if you agree with the answers in the next paragraph.

Bag 1 _____ Bag 2 _____

Bag 2 has several advantages over bag 1. The shape and size of its fastener strap are well related to the design as a whole. This large, simple type of strap is easy to use, whereas the smaller one on the left bag is too small and complicated in shape to be handled efficiently. Bag 2 is also more useful because it fits snugly against the hip when it hangs from one's shoulder. The other bag is so deep, and so narrow at the top, the wearer would have trouble reaching its contents. And the bottom is so bulky that it would bump uncomfortably against her hip when she carried it.



1



2

Both of the desk lamps above serve their purpose inconspicuously on your desk as they should, but one is better designed than the other. Show which lamp you think it is by checking one of the blanks below.

Lamp 1 _____

Lamp 2 _____

Lamp 1 is a good answer to problems created by mass production. The base, which has grooves for pencils, is a corrugated piece of metal; the shade is a curved piece of metal bent around the bulb. This design emphasizes the character of the material used (metal).

The base of lamp 2, on the other hand, is a metal imitation of a wooden base meant to be constructed by gluing or screwing blocks of wood together. Such details are unnecessary in a metal object. It's easy to see that lamp 1 uses its material more satisfactorily.

Now look at the lamps along the margin of this page. Which has the best design?

Lamp 1 _____

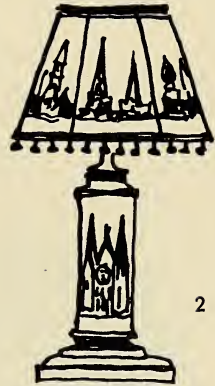
Lamp 2 _____

Lamp 3 _____

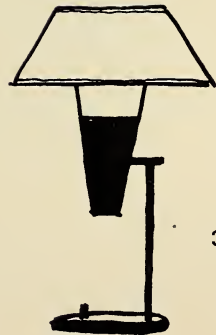
The stem of lamp 1 pretends to be a piece of modern sculpture (which is not well related, incidentally, to the shape of the shade it supports). Lamp 2 pretends to be a picture gallery. But notice the pictures don't fit well on the curving lamp stem. Number 3 is strictly "lamp"—the best of all three designs. There's no pretense here. And you can turn it on at the base so that you won't bump the shade with your arm.



1



2



3

On these two pages are examples of things high school boys and girls wear every day. You might buy them with your allowance or with the money you make on your after-school job. You might go into a store to choose and purchase them without anyone else along to help you. How would you go about choosing between the two scarves, the two belts, or the two shirts shown on these pages? What have you learned in this booklet which might be helpful in making these choices? You can get practice right now in using your critical judgment by answering the questions below.

Which belt is better designed?

Belt 1 _____

Belt 2 _____

Which shirt do you prefer?

Shirt 1 _____

Shirt 2 _____

Which scarf is better designed?

Scarf 1 _____

Scarf 2 _____

To check your answers, read page 45.



1



2





On page 30, we mentioned that pictures shouldn't be used on neckties! Pictures aren't usually satisfactory when used as ornamental patterns. This is an important principle to remember when choosing between the similar objects shown side by side on these pages. In the case of the belts, the bronco buster on the buckle of belt 1 looks crowded in so small a space. And it does away with the ornamental effect which should be supplied by the metal and the shape of the buckle itself. The second buckle serves its purpose better. Here ornamentation is reduced to two firmly cut lines which provide a pleasant accent, emphasizing the polished surface of the metal.

Of the two sport shirts on the opposite page, the one on the left has the more suitable printed pattern. It is a simple all-over pattern which looks equally well on the front of the shirt, the sleeves, and collar. The picture of the fishing scene on shirt 2, however, obviously doesn't ornament anything. It isn't designed to fit the shape of the shirt but instead calls attention to itself. But who wants to see a picture draped around a person's body? Pictures belong on a wall or on the printed page, where they can be seen properly.

And look at the two scarves above. You can't enjoy the picture of palm trees and sailboats on the scarf at left unless the scarf is spread out flat. When worn around the shoulders or head, the folding of the material breaks the picture into a series of meaningless fragments. The all-over pattern of scarf 2 serves its purpose better.



Compare the study-bedrooms shown on these pages. Which do you think is better designed to satisfy your needs?

Room 1 _____

Room 2 _____

Room 1, with all its bows and other frills is obviously meant to look “cute” and feminine. It’s perfectly all right to have a feminine-looking room, but it should be a practical room, too, and this room isn’t practical. In gaining cuteness, it has lost usefulness.

Notice how few flat working spaces there are for books, a typewriter, and other study equipment. Think how silly a typewriter would look amid such dainty surroundings! The lounge chair with its large leaf pattern seems too bulky for so small a room. The “petticoats” on its slip cover, on the desk chair’s seat, and on the bedspread are fussy and a nuisance to keep clean. The bedside lamp is insecurely perched on a dainty table, and the lamp on the dresser takes up more than its share of space. The desk is too small for our needs today. The bed is about the right size and height; but you would bump your knees on the curved ends of its footboard, and its “streamlining” is unrelated to other decorative details in the room.

Finally, notice the bedspread and rug. Does a picture of a landscape

belong on a bed spread? As for the rug, the overlapping flower design has a bumpy, three-dimensional appearance—hardly the right sort of thing for the flat surface of a floor covering.

Generous areas of flat working space extend around two walls of room 2—even behind the bed, so that a lamp can be placed there, out of harm's way. The elimination of the footboard allows the bed to double as a daytime studio couch, and the wooden chest at the end adds both extra seating space and storage room for blankets.

The two chairs are easy to move and easy to clean under; also both of them are so open and light in appearance that they make the room seem larger than it really is. Notice the generous size of the pin-up board and the mirror to the right of it. The window draperies have been extended to cover all of one wall—not strictly for usefulness, but to make the room seem wider.

Finally, note how handy the bookcase and cabinet are to both the bed and desk. The pleasure you would get from using such a room would more than make up for its lack of "cuteness." By careful selection of colors and textures, such a room could be made to seem as cozy as any interior "done up" in bows or other fussy ornamental trimmings.



91097

If you're wise you probably won't smoke while you're in high school, but nevertheless, you may want to buy a cigarette lighter as a gift for a friend or relative. Below are three table lighters you might choose when making your purchase. Which do you think is best in terms of good design?

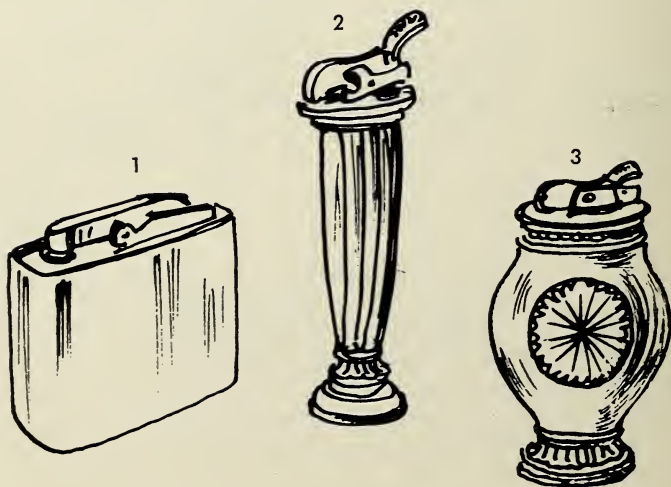
Lighter 1 _____

Lighter 2 _____

Lighter 3 _____

Lighters 2 and 3 are make-believe antiques mass-produced by modern machines. A hundred years ago or so, expert craftsmen often worked silver into complicated ornamental shapes, but the effect of these embellishments depended upon sensitive and skilled *hand* workmanship. Such complicated shapes usually look crude when manufactured by today's machinery. Also, the complicated designs of these two lighters have no relation to the function they are meant to serve. The first lighter, however, is well designed for mass production. It depends for its effect on good proportions, regularity of shape, and the beauty of the reflective metallic surfaces.

But don't forget: these are only pictures! Though pictures in books and magazines may be helpful up to a point in guiding your taste for good design, the real test will come *only when you have studied the actual objects themselves*. So, in addition to reading some of the books suggested on the next page, be sure to develop your skill by visiting various stores and making careful comparisons of objects on display. Here you will learn to see the difference between really good design and merely "smart" or novel design prepared to stimulate sales. The important thing is that you should learn to rely on your own judgment—even if it takes a while to develop it.



For more information . . .

The following reading materials will help to supplement the information in this booklet. Ask your counselor or librarian if they are available in your school or public library.

Art Today. *Ray Faulkner, Edwin Ziegfeld, and Gerald Hill.* New York: Henry Holt & Co., 1949. The best textbook on the various arts today. It has chapters on architecture, community planning, furnishing one's room, design in industry, textiles, ceramics, painting, and sculpture. Color charts also are included.

Color and Design in Apparel. *Bernice G. Chambers.* New York: Prentice-Hall, Inc., 1942. An excellent book for general reference on clothing. It has many illustrations including color charts and color samples.

Designing Women. *Margaretta Byers with Consuelo Kamholz.* New York: Simon and Schuster, 1938. An amusing and instructive little book for girls on the "art, technique, and cost of being beautiful." Most books on fashion quickly become dated, but this one still holds up very well.

Good Taste Costs No More. *Richard Gump.* New York: Garden City Publishing Co., Inc., 1951. A witty discussion, analysis, and criticism of design in all sorts of things, ranging from jewelry to furniture. The book was written by the head of a famous store in San Francisco which sells home furnishings, both old and modern. The illustrations and comments in the back are particularly worth studying.

Guide to Easier Living. *Mary and Russel Wright.* New York: Simon and Schuster, 1951. A thorough, stimulating discussion of the many problems all of us encounter at one time or another in selecting things we like to have around us—especially furniture, furnishings, and various household gadgets. Good advice on how to mix old and new furniture sensibly and how to take care of what you have. Excellent drawings, plans, and charts.

So You Want to Build a House. *Elizabeth Mock.* New York: Museum of Modern Art (distributed by Simon and Schuster), 1946. An entertaining and informative book about the problems involved in planning various rooms for modern living and how to solve them. Emphasis is on modern design. Amusing cartoons by Robert Osborn and many photographs of modern interiors.

Tomorrow's House. *George Nelson and Henry Wright.* New York: Simon and Schuster, 1945. One of the wittiest and most instructive books written to date on the modern house and how it can be planned to suit our modern needs. The discussion of furniture and furnishings is also good.

What Is Modern Design? *Edgar Kaufmann, Jr.* New York: The Museum of Modern Art (distributed by Simon and Schuster), 1950. A paper-bound, low-priced booklet, well illustrated with carefully selected examples of good modern design in furniture, textiles, glass, and ceramics. A few pages of intelligently written text explain the characteristics of modern design.

LIFE ADJUSTMENT BOOKLETS

... to help young people solve the problems of everyday living

MY SCHOOL

High School Handbook
How to Write Better
Streamline Your Reading
Study Your Way Through School
What Good Is High School?
Why Stay in School?

ABOUT MYSELF

Building Your Philosophy of Life
Exploring Your Personality
Facts About Alcohol
Facts About Narcotics
How to Solve Your Problems
Understanding Yourself
What Are YOUR Problems?
What Is Honesty?
Your Behavior Problems
Your Heredity

MY HOME AND FAMILY

Getting Along with Brothers
and Sisters
How to Live with Parents
Money and You

BOY MEETS GIRL

Dating Days
Looking Ahead to Marriage
Understanding Sex

GETTING ALONG WITH OTHERS

Getting Along with Others
Growing Up Socially
Making and Keeping Friends
Where Are Your Manners?
Your Club Handbook

HEALTH

You and Your Health

LOOKING AHEAD

Baby-Sitters' Handbook
Choosing Your Career
Discovering Your Real Interests
Getting Job Experience
How to Get THE Job
Our World of Work
School Subjects and Jobs
Should You Go to College?
Understanding Politics
What Employers Want
You and the Draft
You and Unions
You and Your Mental Abilities
Your Personality and Your Job

THINGS IN GENERAL

Enjoying Leisure Time
Facts About Juvenile Delinquency
How to Be a Better Speaker
Keeping Up with the News
Primer of Atomic Energy
Your Taste and Good Design

Single copies 40c. Quantity prices on request.
Instructor's Guides available (One copy free with
each order of 15 or more booklets of the same title)

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