DESIGN: BASIC PRINCIPLES

What do we mean when we talk about design? At its essence, we are talking about the abstract framework that lies beneath any piece of artwork: from work that’s actually abstract to the most detailed photo-realistic art. Any artwork can be distilled to an abstract essence and it is how those fundamental elements are arranged that is the essence of design.

It is always there, always a concern. Design is intrinsic to any work of art. If you draw then you design. And while not all designers are necessarily artists, all artists are necessarily designers. When we design, we are organizing, we are structuring, we are simplifying the clutter.

We are also recognizing the truth that it is design that makes pictures, regardless of subject matter. Through design, we convey ideas and concepts. We reveal insights, our intentions and purpose, and our personality. It is with design that we establish a point of view. And, our viewers will respond and react just as immediately and just as strongly to your design as they will to the vitality of your gesture, the eloquence of your line, and the accuracy of your likeness.

Design is:

- The arrangement and the subsequent interplay of the artistic elements (line, shape, value, volume, texture, color). It’s not only important where you place your elements on your surface, but how they then will relate to each other.

- The placement of forms and the subsequent division of space. This plays into the idea of positive and negative space, which are both equally crucial to your design. Your negative shapes will read as shapes, and as such their impact to the design must be as considered as the positive shapes.

- The reinforcement and clarification of expression, ideas, and intent.

- Something the viewer wants and expects. They want order and organization. They don’t want unbridled chaos. We have to help these people out! Most people have an innate design sense and they will react to it, sometimes on a very subtle level but some sort of reaction is guaranteed.

- Always subservient to the creative impulse. It is never overly academic. It should never take the place of real invention and discovery. It is always a means to an end, not the end itself. We do not create art to make good designs, we use design to make great art.

The fundamental goal in good design is **unity**. Also called harmony, it is a sense of wholeness, of complete coherence; it is when we can absorb a piece at once, as a whole, and not just a jumble of parts. A unified picture is one where we don’t wish to add or subtract a thing, for to do so would be to upset the unity.

A great example of unity is a checkerboard. It employs all the elements we will soon discuss to great effect. The square element repeats; they are close together suggesting connections; the eye easily moves through it; the consistent rhythm of black, white, black, white. We effortlessly take it in at once. If you just came in from the planet Jupiter and had no idea what a “checkerboard” was, you would still intuit that these elements go together. This is a great example of unity.
You know what else it’s a great example of? Tedium. It’s boring; it’s predictable. It can’t all be the same, or boredom will result. Our true goal, our true ideal is unity with variety. In music, it’s called theme with variations. We strive, then, for a unity that doesn’t just rely on the repetition of like elements, but varies them enough to create and sustain interest. This is can be done in many ways:

- Lines of similar thickness, that vary in length.
- Similarity of shape, but different sizes and colors.
- The same color throughout, but it varies in value.

...and on and on and on.

What we are looking for is a delicate balance. To far to one side, when the similarities overwhelm the variations, boredom will ensue. To far to the other, when the variations overwhelm the similarities, we get chaos. Neither extreme is desirable. We don’t want to bore the viewer, but we don’t want to confuse them either. The correct balance will vary with each artist and, really, with each new artwork’s purpose.

THE DESIGN ELEMENTS

A) Repetition
B) Contrast
C) Balance
D) Emphasis
E) Rhythm
F) Simplification

You will notice when you continue your own investigations that not one single source will list the same set of elements, let alone these six. But these are the ones that seem to come up the most often. And they are the ones I find the most relevant.

Now, it is not desirable to think of the elements as stand alone concepts. They are only being presented that way here for the sake of discussion., so you develop a sense of them as concepts. It’s never a matter of “OK, now I’m going to work on my emphasis. And then I’m going to work on my balance.” You’re not moving down the checklist. No one works that way. You will quickly discover that, while drawing, you think of the elements all at once. They are interconnected. When you work on one, you are affecting the rest of them and, so, you are really working on all of them simultaneously. And your elements are always wearing many hats. Some circle might be serving as an accent in your hierarchy of emphasis while at the same time participating in the picture’s rhythm, and also contrasting with some other circle.

A) Repetition

We have already hinted at the importance of the repetition of elements to unity. It is truly crucial for when we see like elements we assume they go together and it becomes an obvious unifying theme. The element that repeats can be anything: a shape, a color, a texture. And it can repeat in an obvious or, ideally, more subdued, less apparent fashion. Of course, we can’t employ the unity with variety ideal if there isn’t something repeating in the first place.
Repetition also:

- is the basis for rhythm. We cannot have rhythm without repetition and we will discuss rhythm as its own element.

- the basis of pattern. If a pattern effect is what you wish to achieve, you will do so through repetition.

- provides a "motif." Both in terms of abstract form and representational content. And in all this talk about underlying abstract forms, let's also realize that your picture can also unify around the repetition of subject matter.

B) Contrast

One strategy for creating variety is through contrast. By picking your repeating element's polar opposite, we will certainly create variety. Polar opposites are bound together. They need each other. One intensifies the other. Black seems much darker when placed next to white than it does when placed next to gray or blue. Something large seems even larger when placed next to elements smaller than it. In fact, how can we say that something is large if it doesn't have those smaller items to compare? Contrast is reliant on context and relativism to get the full effect. In fact, the whole idea of value is reliant on contrast. Value, being essentially defined as light and dark, needs contrasting forces to achieve the idea of darker and lighter.

Here's just a sample of some of the most prominent opposing forces:

Big - small
Dark - light
Horizontal - vertical
Thick - thin
Curved - straight
Abstract - representational
Smooth - rough
Word - image
Calm - chaotic

Opposing forces generate tension, which provide no small amount of energy, dynamism and interest. Contrast, as we shall soon see, is also frequently employed for balance and emphasis.

C) Balance

Or equilibrium, it is the equal distribution of visual weight. Weight is defined as how much attention a particular element attracts, how much visual interest it stimulates. With balance, we assume a center vertical axis that divides our rectangle in half. We then expect an equal amount of interest in each half. Both sides should command the same amount of attention. This holds true for the two basic ways we achieve balance.

1) Symmetry
2) Asymmetry

1) Symmetry - elements are found in the same position on either side of the vertical axis. However, most work you find that uses symmetry are really examples of near-symmetry. There is variation on either side, which is possible without compromising the overall symmetrical effect. Symmetry suggests dignity, solemnity, authority, and formality. It also suggests calm and stasis,
as well as artifice. Our own human bodies an exception, there is very little formal symmetry in
nature. There is a lot in man made objects, of course, such as building facades, or cars.

One interesting strategy to employ is to contrast symmetry’s calm authority with some wild
imagery. In such a piece, the symmetry seems to organize and stabilize complex, multi-faceted
images and keep it from going off the rails.

2) Asymmetry - much less formal, much more dynamic, and far more common. Here, elements
are not placed in the same spot on either side of the vertical axis, but manipulated in more subtle
ways to generate equal visual interest. Essentially, we are determining which elements are the
most visually stimulating and then making them small in contrast to other elements, so as not to
overwhelm them and arrive at balance. You will find that too much of a good thing can throw your
piece out of balance.

We are still assuming the vertical axis in the middle and that each side must generate an equal
amount of interest. Here are the most basic methods of doing so:

- Balance by color
- Balance by value
- Balance by shape
- Balance by position

Color - bright colors attract the eye. Small amounts would have to be used to balance a larger,
gray area.

Value - sharp value contrast (black/white) draws the eye. So, only a small area of such contrast
would balance a larger but less distinct value contrast.

Shape - irregular, organic, freeform shapes draw the eye. They should be small to balance
larger, geometric shapes.

Position - in instances where the distinguishing characteristic is size, we would place the larger
element closer to the axis and the smaller closer to the edge. Groupings of elements would
work the same way: the more numerous group close to the axis, the less numerous group
closer to the edge.

The spaces between

Stasis is created when all positive shapes have a similar size or presence. But it is also
achieved when the negative intervals between them have themselves a similar presence; if the
space between is more or less equal. If you change the size of the elements, the static quality will
decrease, but the stasis will still remain. To really energize the space, to really increase the
dynamic quality, pay attention to varying the intervals, the distance between forms.

We usually talk about balance in terms of the vertical axis. You don’t hear nearly as much
about the horizontal axis. I think it’s definitely less of a concern but one thing to keep in kind is an
assumed sense of gravity. We expect larger, more heavy-seeming shapes to be at the bottom.

D) Emphasis

When we address emphasis we:

- make clear our intentions, what is important.
govern how the picture is seen: what is first, then next, etc.

dictate how the eye travels, and how quickly.

Emphasis is establishing a hierarchy: this includes a dominant focal point and subordinate accents, which lead the eye to the focal point, or by their very existence make explicit what the focal point is.

We emphasize by

1) Contrast
2) Isolation
3) Placement
4) Value
5) Detail

1) Contrast: In a design of like elements, the solitary differing element draws the eye.

- a lone highlight in a subdued, low-key work.
- a lone vertical in a group of horizontals.
- the one recognizable element in a morass of abstract forms.
- a cluster of short strokes amidst a series of long, elongated strokes

2) Isolation: If a number of forms cluster together, your focal point immediately becomes the element placed alone. This a good spot to point out that for the sake of unity and balance and everything else we have been talking about, the focal point needs to be simultaneously obvious and subtle. It should never be so overwhelmingly obvious that it upsets the overall unity; it needs to still tie in with the rest of the elements. So, if you choose to isolate your focal point, make sure it still relates to the rest of the picture in some way.

3) Placement: we can place the focal point at some sort of nexus where other elements are in some fashion pointing at it.

-in a representational scene, figures can be depicted actually pointing at the focus, or looking at it - we will follow their gaze. If you employ this strategy, use more than two figures. Two figures will be staring at each other, so the effect is cancelled out. We don’t know where to look. If you add a third person and they are both staring at the other, we will know where to look.

-objects can be arranged so that their edges, contours, and corners are “pointing”. They can also be made to “point” just by the nature of their linear movement.

-we can place the focus at the nexus of intersecting horizontals, verticals, diagonals - both real and implied. A great example of this is a picture that relies heavily on linear perspective; our focus will go to the vanishing point.

-we can place the focal point in the middle of an encirclement of forms.
4) Value: a strong value contrast will always draw the eye. The stronger the contrast the more attention it receives.

5) Detail: we emphasize by degree of rendering. This is a common strategy: we leave the bulk of the picture in a looser, more gestural state, and we render our focal point with more detail.

Also:

Top Before Bottom: all else being equal, elements placed at the top will draw the eye over elements at the bottom. This is likely because of the assumed sense of gravity we've discussed; elements at the bottom seems more grounded and, hence, less dynamic, less interesting.

Left Before Right: all else being equal, elements placed at the left will draw the eye over elements placed at the right. This is likely because of how we read.

Top Left Before Bottom Right: if the two concepts are combined we can expect the eye to be drawn to the top left of the surface first.

This only works if all elements are otherwise equal. If you make the bottom/right element more interesting, then it will draw the eye first.

The Division of Thirds

A classic strategy, we use four lines - two horizontal, two vertical - to cut the surface into nine segments. Your focal point can at any one of the four points those lines intersect. The center is studiously avoided.

The Center

.....is generally avoided, especially in an asymmetrical balanced picture. Placing your focus dead center is not only too obvious - just a little too easy - but also too non-committal. We feel more interest when our focal point takes a stand. We want it to be closer to one edge than the other. And the same is true for either left/right or top/bottom. The division of thirds, by avoiding the center, actually plays to this idea.

Eye Control

We can control the viewer’s eye. We can send it on a journey. We can dictate in what order the viewer perceives elements and how quickly; we can control the tempo. Generally, we want to lead the eye in, entertain it with the focal point, and lead it back out. It should be a clear, unobstructed path. And it should be just one path. Avoid more than one, which leads to confusion.

We can use the elements to literally “point” - the contours of objects - of cars, buildings, awnings, tree branches, snatches of cloth, anything really - become pointers. Actual paths - sidewalks, highways, foot trails - immediately draw the eye in and are obvious eye control strategies.

Perhaps more subtle is the use of implied lines, which usually derives from the alignment created by the edge relationship between forms in close proximity. This creates a sense of continuation from one form to the next. The eye will move smoothly from one form to another.
Any leading of the eye out of the work before we want it to should be avoided. Strong, propulsive lines or forms should not disappear of the edge. Their direction should be either countered or stopped. If it does go out, there should be another nearby line to draw in right back it.

Controlling the tempo, which is part of rhythm, can be done these ways:

- Clusters of shapes - eye will move more slowly through clusters of small shapes than it will through large shapes.
- Line - Straight lines will direct the eye quickly and with authority. Curved lines will move the eye at a slower, more meandering pace.

E) Rhythm

Rhythm in art is not motion, of course, nothing is really moving; it is the essence, the idea of motion. It is how quickly the eye moves through similar shapes.

Eye control and rhythm often go hand in hand. A quick rhythm is established when elements are close together. A slower rhythm is established when they are farther apart.

Elements need not repeat exactly or even too obviously to create rhythm. There should be some sense of consistency. Our rhythm can proceed across a surface horizontally (usually using verticals), up the surface vertically (usually using horizontals), or diagonally.

In addressing rhythm we are addressing space, time, and motion. The elements themselves take up physical space, a sequence of them and the subsequent rhythm takes time to experience and requires eye movement. This all ties together as a palpable sense of motion.

Some types:
- Legato - connecting, flowing
- Staccato - abrupt, dynamic
- Alternating - a rhythmic sequence in which the elements are different: black, white, black, white or big, small, big, small.
- Progressive - a gradual, consistent change of an element as it repeats. It gets bigger, darker, redder, etc.

F) Simplifying

This involves:
- analyzing and reducing our subject to its essential characteristics. Simplifying is another word really for abstracting.
- finding the heart of the subject’s forms.
- extracting from nature those aspects that amplify our meanings and intentions.
We as artists are not bound to depict every last thing we see in front of us, every last form, every last value. That is both impossible and undesirable. We are not cameras. We are presenting an observation based on a point of view. Our job is to pick and choose - to keep what is essential and tone down or discard altogether what dilutes our intentions or simply can't be resolved design-wise. We are always keeping in mind that our priority is the picture. Our viewers have no idea what we used as original source material, they only have the picture. So, if there is something in the view you are depicting that throws your picture out of balance, you are not under any obligation to keep it where you found it or to even include it at all. The picture has to work as a picture on its own terms.

Simplifying is usually a collaboration between artist and viewer. The viewer has a capacity to “fill in the blanks” and that enables the artist to simplify. When we do so, they are usually more than willing to make the leap. Making those leaps - filling in those blanks - can become a major, very pleasurable part of the viewing experience.

Do not be fooled by the maxim “less is more” however. That's not a blanket rule. Sometimes, less is just less. Try this maxim instead: don't use three lines if two will do, but don't use just two if more are necessary. And, of course, making that determination is up to each artist and each situation.

Cropping

This strategy came into vogue in the 1880s influenced by the snapshot quality of photographs and is one of the defining characteristics of a more modernist approach to picture-making. Leonardo would have never done this.

It remains a popular strategy so it's worth exploring what we are suggesting when we crop:

- we create drama and a sense of mystery, a sense of atmosphere.
- we pull the viewer into a scene.
- from a purely 2-D design sense, we create interesting shapes.
- we provide balance and some interesting tension if we decide to crop in more than one place.
- we create the impression that events are transpiring beyond the edges; that the panorama continues. This is something we take for granted with photography. We can also suggest it with our drawings.

The only real "rule" with cropping is not to crop at a critical juncture, particularly with regard to the figure. That includes: wrists, knees, ankles, and, especially, the neck.

UNDERLYING STRUCTURES

These can be thought of as schematics, blueprints, or foundations that underlie and strengthen an artwork, subtly exerting its influence from below. You could say they are the drawing underneath the drawing.
They include, but are not limited to:

1) The grid
2) The circle
3) The triangle
4) The L - shape
5) Horizontal dominant
6) Vertical dominant
7) Diagonal dominant

1) The Grid

This is the crisscross pattern created by horizontals and verticals. These directions can be embodied by actual lines, implied lines, alignments, and the edges of shapes. The grid is very common in art. Horizontals and verticals reinforce our natural orientation and, of course, their opposing nature works to enliven any piece. The grid suggests stability and efficiency. As such, it makes a great jumping off point.

With the grid, design coherency is a given, right from the start. We can think of the squares as “containers” to fill up. We can make connections between the containers. We can combine containers and make super-containers. We can cover up some of the containers. We can also vary the sizes of the containers without compromising the grid effect.

2) The Circle

This always implies a central point. Every element should ideally have a center. Every grouping of objects or elements has a center. Like the grid, this plays to our comfort, for all things ideally have a center, a point of balance.

A circle motif can be developed around either its 2-D aspect (the ferris wheel), or its 3-D aspect (the merry-go-round).

We can choose to use a circular motif to create emphasis, putting our focal point into the middle of a circular arrangement.

3) The Triangle

The triangle seems less stable than the circle; it is scrappy, assertive, restless, and turbulent. Much of this is because of the diagonals that comprise the triangle. Unlike a circle’s usually calm center, a triangle’s is like a “command post”, sending energy out in three directions.

When oriented on a picture’s vertical axis, however, and playing a role in symmetrical balance, the triangle can suggest calm and stability, a sense of aiming upward in a majestic fashion.

4) The L-shape

This structure suggests strong moving energy and dynamic power, it often underlies many still lifes and landscapes. The two lines/shapes of the “L” often act as guides, leading the eye to their intersection, where the focal point resides.

Care should be taken not to isolate the rest of the format. The two portions must be integrated. One strategy is to link the two with some smaller form that crosses the boundary
separating the two.

5) Horizontal dominant

Horizontals imply calm, repose, tranquility, and low tension. When we choose to make our format horizontal, we are not just doing it to fit our subject in, but also to reinforce and strengthen the predominantly horizontal marks.

6) Vertical dominant

Verticals imply stability, strength, balance. They are strong because they seem to challenge gravity. They can also imply stubbornness, an obstacle to move around. So, while they are every bit as stable as horizontals, they possess energy, a “prickliness” if you will that horizontals lack. As with horizontals, a vertical format will reinforce any and all vertical marks and energies on our surface.

7) Diagonal dominant

Diagonals always imply movement, tension, energy, and conflict. Any picture with a diagonal emphasis will immediately project those aspects. As stated with the triangle, diagonals moving consistently up can suggest a sense of moving up in a majestic sense.
EXAMPLES

The classic checkerboard, a great example of unity...and monotony.

A great example of the unity with variety ideal. Mondrian gives us consistency with the uniform white background and black lines, but enlivens the picture by varying the sizes of his squares and throwing in some color.
A classic example of symmetrical balance. Notice how the elements do not repeat exactly, which enlivens the work without compromising the overall symmetrical effect.

Here, Degas is emphasising by isolation. The pitcher at left is meant to be the focal point. Our eyes are drawn to it because it is separated from the other objects. Notice how care has been taken to unify the pitcher with the other elements. It shares its white color with the blanket and the bowl. The round shapes painted on it parallel the round shapes of the fruit.
Here we have simplifying. Egon Schiele leaves out the torso altogether, leaving us to focus on the face, medals, and hands. But notice how easily we fill in the blanks. We have no problem perceiving the parts left out.

Degas unifies his picture with not just the repetition of similar round shapes - the hats, the woman’s head - but also around the subject matter - the hats themselves.
There is no question what the focal point of this picture is. Our eyes are drawn right to the preacher and supplicant by a number of methods: they are in the center of a circle (the crowd); the people are all looking directly at them; the contours of the windmill and barn are pointed right at them. Notice also the asymmetry at work: the large shape of the barn on the left is balanced on the right by the road receding in the distance. This is a common device, as are eyes are naturally drawn in that direction as we wonder where the road goes.

A classic example of the use of a triangle as an underlying structure...
Degas was a pioneer in the then-revolutionary use of cropping, as shown on the right. The edge of the table is a diagonal that threatens to cleave the picture in two. Care must be taken to integrate the two sides, which is done by placing the handles of the hairbrush and the kettle over the diagonal/edge. Notice also how the diagonal is not placed dead center and how it parallels the woman’s left arm.
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