Design fundamentals
NOTES
on VISUAL ELEMENTS & PRINCIPLES OF COMPOSITION

Rose Gonnella
Christopher J. Navetta
Max Friedman
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Notes on Visual Elements & Principles of Composition
Design Fundamentals: Notes on Visual Elements and Principles of Composition
Rose Gonnella, Christopher J. Navetta, and Max Friedman

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These are my notes from Visual Elements & Principles class. I tried to include all the key points and exercises with my illustrations. The class website, www.design-fundamentals.com has some great information as well—and so do our Pinterest boards: Pinterest.com/DSNFundamentals
ES, SHAPES, FORMS, ES. PATTERNS, COLORS, CE — THE VISUAL ELEMENTS OF DESIGN COMPRIZE THE PHYSICAL ENVIRONMENT ALL AROUND US
TERMS VARY

Not all artists, designers, writers, and critics agree on what constitutes the basic visual elements and principles of composition. Terms vary as well.

For some, the word “formal” replaces “visual,” referring to the basic elements.

Some separate “space” into its own category between elements and principles.

Others consider dot, line, and form to be one element, subsets of shape.

A subset of color, value (shades of gray) can be seen as distinct enough to separate into a visual element apart from color.

The terms for the principles also vary.

The word “contrast” sometimes replaces the word hierarchy. Harmony in some discussions replaces the word unity. The single term for the overall successful composition of the elements is also harmony.

Despite the variations (there are more), with any discussion of the visual elements and the principles of composition, the outcome is the same:

Success in design.
WHAT IS BEAUTY?
NEED TO TAKE PHILOSOPHY AESTHETICS COURSE RECOMMENDED.

homage to GRANT WOOD (1891-1942)
Design selects, borrows, simplifies, translates, synthesizes, & reorders visual elements into tight, beautifully orchestrated compositions on the flat plane of two dimensional surfaces or in actual three dimensions.

Hierarchy, balance, unity, and rhythm — these are the guiding principles of composition that bring physical order to the design.
The Grand Canyon is a complex textures, pattern, and space—a elements created in nature.
COMPOSITION OF DOTS, LINES, SHAPES, FORMS, COLORS. COINCIDENTAL ARRANGEMENT OF VISUAL
Our efforts to make images, deliver information, and create objects, environments, and structures—

to design—is not coincidental.

Unlike the random coincidences found in nature, humans employ their senses, mind, & heart as the decision makers in the process of composing images, information, objects, and structures—whether with a camera or computer, or a painting or sculpture, or with any other medium.
Design Requires Decision Making:

- What is the message of the design?
- How should the audience respond?
- Is the use of line appropriate?
  - Should it wiggle or crack?
- What colors best communicate the message?
- Which shapes are necessary to include?
- Should the forms be geometric or fluffy?
- How should the textures feel?
- Is the space vast or small?
- Should the elements be asymmetrically or symmetrically composed?
The purposeful composition of the visual elements is in service of the grand pursuit of original, aesthetically engaging, meaningful design to communicate ideas, concepts, commentary, or messages.
IDEAS & MESSAGES CONVEYED THROUGH DESIGN
CAN BE PERSUASIVELY INFORMATIVE, DEEPLY
PHILOSOPHICAL, A CULTURAL
CRITIQUE, OR SOCIO-POLITICAL.

But design does not necessarily need
to have a profound
message.
The message can be intended
to simply delight.

after BEN SHAW (1898-1969)
Two Whispering Politicians
For instance, an aesthetically pleasant and better functioning teapot delights.

Advertising design creatively informs the audience of the value of a particular brand.

Pre-existing individual and cultural standards determine aesthetics. (Like the law, beauty is what we say it is.)
ALTHOUGH ARTISTS AND DESIGNERS WORK WITH ESTABLISHED PRINCIPLES OF DESIGN AND AESTHETIC STANDARDS, THEY OFTEN LEAD THE WAY TO ESTABLISHING NEW FORMS & IDEAS.

BUT, BEFORE YOU CAN BREAK THE RULES, YOU MUST MASTER THE BASICS, WHICH REQUIRES PRACTICAL KNOWLEDGE AND DEMONSTRATED CONTROL OF THE VISUAL ELEMENTS AND PRINCIPLES OF COMPOSITION.
PLAY WITH THE

{ Boundaries }

The conceptual artist

MARCEL DUCHAMP

wanted to disrupt the status quo by claiming anything is art if the artist says it is — such as a stool with a bicycle wheel perched on top.

For him, the discussion of the visual elements would be a bore and a distraction from the message.

But Duchamp held the knowledge of the visual elements and principles of composition somewhere in his mind even though his primary interest was with the message, not the design.
Identify the guidelines that describe the visual elements, be able to analyze established "rules" governing the principles of composition, and recognize the boundaries—then go ahead and break the rules, play with boundaries, and...
DOT: AN ELEMENT.
FEELIN' GROOVY!
TEXTURE AND PATTERN
REAL OR SIMULATED.

Texture is the active surface quality of a dot, line, shape, or form. The surface is active because our eyes rapidly scan up, down, over, across, and around the texture to get a visual feel for it.
TACTILE MEMORIES

Smooth and elegant or peaceful like water, marsh and prickly, or sleek and slick, earthy or ethereal, TEXTURES suggest emotions and ideas.

EACH OF US RESPONDS to texture based on our own strong memories & associations.

FURBALL: SCARY OR ADORABLE?
Textures can be visually metaphorical or poetic too.

Consider this metaphor:

LOVE IS A ROSE.

And perhaps this poem:

A ROSE IS A ROSE IS A ROSE IS MARVELOUSLY SOFT & WICKEDLY THORNY.
SIMPLY, TEXTURE

Differentiates Dot from Line, Line from Dot, and Between Shapes, Dots, and Lines.

Side Note:
Designing with Texture engages the viewer and creates a sense of physical connection to the otherwise flat remote feeling of a screen.
Expansively, texture ignites the sense of touch. Texture compels the viewer to care, pat, stroke, hug, and embrace— to both see & feel a design.

Touch it. Tactile experiences engage the viewer. Our senses love to be tickled.
Engaging and touch sensory ex design. Add cracked, gooey, ornamented, ridged, velvety, element and see what.
both sight swells the experience of a blistered, encrusted, fuzzy, lustrous, pleated, tessellated, wooly to a design (feel) happens.
ORGANIC

Textures feel and look random, which makes a design feel life-like.

Apply an organic brick or stone texture to a drawing of a cube & the cube will appear dense & heavy.

The texture enhances the reality of the illusion.

Draw feathers w/ a brush and a soft line quality to make them "feel" real.

TEXTURE

makes objects seem more life-like and imbue them with inherent meaning.

↔ STONE CUBE = mechanical, stable, solid, strong.

↔ DOWNY FEATHER = natural, soft, gentle, unrestrained.
The structure and ordered repetition of shapes creates a specific type of texture.
NOTE:
WORDS HAVE TEXTURE TOO.
BEFORE BEING READ, A GROUP OF WORDS IS FIRST SEEN AS A SHAPE
(RECTANGLE, SQUARE, ETC.) WITH A LIGHT OR DENSE TEXTURE.
FLAT OR WARPED: DESIGNING WITH DENSITIES

In designing with textures or patterns, use them loosely and keep it simple or make them tight & dense.

A pattern’s density determines its relative lightness or darkness.

At times, dense texture assumes the character of a pattern due to the overall continuity.

A high contrast of light and dark density of dots or lines creates the illusion of dimensionality and/or the illusion of volume, and can help bring an object to life.

Both repetition and continuity make patterns appear flat—until warped, which causes the patterns to take on the illusion of volume and makes them appear to have dimension.
"A "Rough" World,"
From the notebook of Hoyley Gruespan

Nature has many design secrets. A fractal used to be one of them. Mathematician Benoît Mandelbrot coined the term "fractals" to describe a mathematical structure and extended the concept to describe patterns in nature.

From the mysterious twirling Romanesque broccoli to spiraling seashells, fractals are everywhere.

Identify a fractal by its never-ending irregular, repeating shapes.
An organic pattern!

Classic geometrical shapes are regular with a collection of points that have a definite measure. Fractals are more irregular or rough.

The fundamental unit of a fractal is a pattern. A pattern structure establishes a fractal (roughness) beyond the geometrical dimensions.

This is why fractals are hard to measure precisely. Fractals are not just theoretical constructs, but a part of nature.

Fractals can also be found in many types of art, with great examples in African art.

Fractals are most familiar to people as computer generated graphics and were once popular as screen savers.

Math, nature, and art all have fractals in common. Mandelbrot thought of himself as a mathematician who did not play with formulas, but played with pictures.
REAL!

Texture

For 3D design, including sculpture, architecture, built environments, textiles, packaging, and the vast range of industrial products—from baby bottles & cars to potato peelers and Xerox machines—consideration of texture is not optional; it's essential. Slippery smooth, or rough hewn, 3D objects always have texture.
PAYING ATTENTION TO THE MATERIALS AND SURFACES OF PRODUCTS YOU USE EVERY DAY MAKES YOU A BETTER PRODUCT DESIGNER.

Design Note:
ENVISION: POLISHED STEEL, RUSTY IRON, BRICK, GRANITE, WOOD, FEATHERS, ENAMEL PAINT, SOAP, BUBBLES, CACTUS, LACE, PEBBLES ON A BEACH, OXFORD CLOTH, MUD, LINEN PAPER, MASHED POTATOES, ETC.
TEXTURAL RELIEF FOR 2D

Two Dimensional Art and Design can use actual textures to RAISE the Surface, ACTIVATE the Sense of TOUCH, & HEIGHTEN the Overall Sensory Experience.
A VISUAL Relief from FLATNESS

Some of these techniques and materials include:
- Specialty Printing
- Paper
- Collage

PRINTED design
Relies on texture & pattern
for added dimensionality & physicality.

Specialty Printing
techniques create actual textures.

Scavenger Hunt!
Find examples of specialty printing techniques and paste them here.

- Die-cut
- Laser cut
- Spot varnish
- Foil stamping
- Embossing
- Debossing
- Thermography
- Engraving
Collage - The arrangement or assemblage of actual textures: bits and pieces of printed matter, fabrics, metal, wire, paper, cardboard, etc. A collage is meant to be physical and inspire a visceral response from the viewer.
Print-based design using thick paint + collage for a tactile sensation.

Note: Lots of websites use the collage to give the flat screen at least an illusion of dimension and texture. Touch adds a perceptual feeling that is lacking in screen-based art and design.

**Paper Substrates**

Have textures and/or patterns that are woven, sleek, rough, glossy, pebbly, striped, embossed, checkered, crinkled, etc.

But you can print on more than just paper including fabric, vinyl, leather, wood, and metal—each has its own characteristic texture.
TEXTURAL ALTERATIONS

In sculpture, architecture, and 3D design, the element of texture is an actual, physical thing. Buildings and sculptures are made of slick glass or rough stone, wood, or steel—often there are many textures combined for functional and aesthetic effects.

When painted, burnt, scratched, or polished, the natural texture of the materials transforms into something other than itself.

Manipulating texture changes the character, expressiveness, and meaning of an object or design.

Textures expand our visual vocabulary.
after EDGAR DEGAS (1834-1917) (BRONZE, TULLE, & SILK)

after ALBERTO GIACOMETTI (1901-1966) GREAT STANDING WOMAN III (BRONZE)
PLAYING WITH MEANING

A CUBE (GEOMETRIC FORM) MADE OF FEATHERS (ORGANIC FORM) CARRIES A CONTRADICTION IN ITS INHERENT MEANING. A FEATHER DRAWN WITH THE TEXTURE OF POLISHED BRONZE ALTERS THE REALITY OF THE FEATHER.

SWAPPING THE REALITY OF TEXTURES ALSO EXPANDS THE VISUAL VOCABULARY OF SHAPE AND FORM BY CREATING A VISUAL OXYMORON.

NOTE: MÉRET OPPELHEIM'S WORK ENTITLED OBJECT (FUR-COVERED CUP, SAUCER, AND SPOON) WAS CREATED FOR A SURREALIST EXHIBITION OF OBJECTS.
Design to Touch

Because texture heightens the sensory experience and creates a powerful memory.
SUMMARY

The most touchy feely of all the design elements, texture forces the other elements to get physical. Texture activates the surface of dots, lines, and shapes, ignites our sense of touch, makes the unreal seem real, gives objects a sense of meaning, and can even make you feel happy, sad, confused, excited, or afraid. Whether randomly organic or a geometric pattern, textures make your designs stand out.

EXERCISES & PROJECTS

1. IDENTIFYING PATTERN

INDIVIDUAL ACTIVITY

A. A PATTERN THROUGH TIME: Pattern, like the other elements, can be used to identify a person or group, a place, or even a brand. Historically, complex plaid patterns known as tartans represented specific regions, families, or clans in Scotland. These tartans signify heritage and are a source of ethnic and national pride.

SUPPLIES: Colored pencils or pens, computer with graphics software.

COMPOSE AND SHARE RESULTS

- Research the history of Scottish tartans and how they’re designed and created—and why.
- Use visual elements such as color and line and shape to represent yourself, your family, or a group to which you belong. Consider what colors represent the person, family, or group. What kinds of lines and/or shapes work together with the colors to make the complex pattern unique?
- Create a tartan using the chosen visual elements. This can be created by hand with colored pens and pencils or digitally on a computer.
- Photograph or scan the compositions and save in a digital file.

Share results with the class. How is your tartan similar or different from everyone else’s? Be able to discuss how and why yours represents you or your family or group.

2. VISUAL OXYMORON

INDIVIDUAL ACTIVITY

A. CONTRADICTING TEXTURES: A texture, whether represented two- or three-dimensionally, carries with it a specific feel or connotation. Pairing opposites against each other results in a visual surprise. Create a visual oxymoron—an incongruous or seemingly self-contradictory composition.
SUPPLIES: Any imaging media such as paint, pencils, ink, crayon, etc., plus any number of three-dimensional objects that have specific texture(s).

3. ORGANICALLY GROWN PATTERN

INDIVIDUAL ACTIVITY

A. ZENTANGLE: Zentangles are images of repetitive patterns that grow spontaneously and without "rules." Growing the pattern focuses creativity and is meant to be relaxing.


COMPOSE AND SHARE RESULTS

- There are no requirements or rules for a Zentangle but the process is not doodling. Be deliberate.
- The resulting image can be a non-objective organic or geometric multi-unit pattern. Suggestion: 8" x 10" board.
- Start in one corner of the board with a simple unit such as triangle with a swirl within it.
- Repeat the unit and allow it to grow geometrically or organically outward in any direction and change as your thoughts flow.
- The point of a Zentangle is to focus on the design process so that external distractions fade away.
- There is no end. Keep tangling.

- Pick two objects that are opposites or represent an oxymoron (see Oppenheim's Object—a teacup, saucer, and spoon, covered in fur—in this chapter). Consider an object that has a "slippery" connotation, like a banana, wrapped in grippy tape.
- If working two-dimensionally, visualize (draw, paint, collage, etc.) the object covered with the oxymoronic texture. If working three-dimensionally, cover, wrap, or otherwise envelop the object in the textural substrate. Be sure not to lose the form (and therefore the identity) of the original object, or the effect will be ruined.
- Photograph or scan the compositions and save in a digital file.
- Share the archive with the class on Pinterest or in a group digital file system.
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