

data visualization & design

PART 2

By **CAMILLE G LEE** FEB 26, 2016

2.26.16
FRIDAY

- 1.** finish **design elements**
- 2.** introduce **design principles**
- 3. build** data visualization

components of VISUAL LANGUAGE

design ELEMENTS

Basic components of a graphic: point, line, plane, shape, form, space, color, texture, pattern, light, imagery, typography, motion, sound

design PRINCIPLES

Principles applied to design elements when creating a composition.

design ELEMENTS

1

Elements that define BOUNDARIES, SHAPES & VOLUMES:

Point **Line** **Plane** **Shape** **Form** **Space**

2

Elements that define SURFACES & MATERIALITY:

Color **Texture** **Pattern** **Light** **Opacity**

3

COMPOSITE elements:

Imagery **Type**

4

Elements of TIME:

Motion **Sound**

design **PRINCIPLES**

Principles applied to design elements
when creating a composition.

1. UNITY

2. BALANCE

3. CONTRAST

4. EMPHASIS

5. RHYTHM

6. MOVEMENT

7. DEPTH

8. TENSION

unity

- Unity requires that the whole design be more important than any subgroup or individual part and that all the parts exist to support the visual and conceptual message of the whole.
- Unity can be achieved in part through the use of Gestalt Laws which provide powerful tools for organizing and grouping elements:
proximity, similarity, continuity, connectedness, symmetry, closure, and figure and ground

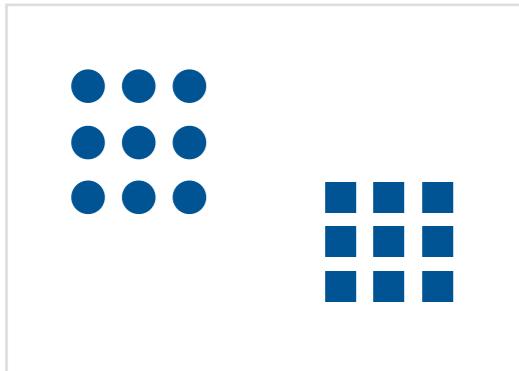


GESTALT LAWS

Robust rules which describe the way we group design elements into patterns.

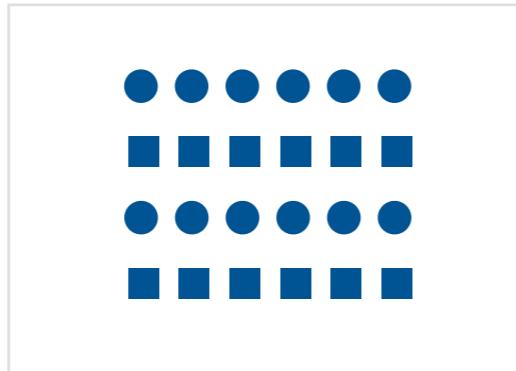
PROXIMITY

- Grouping or relative nearness
- Elements close together are seen as related.



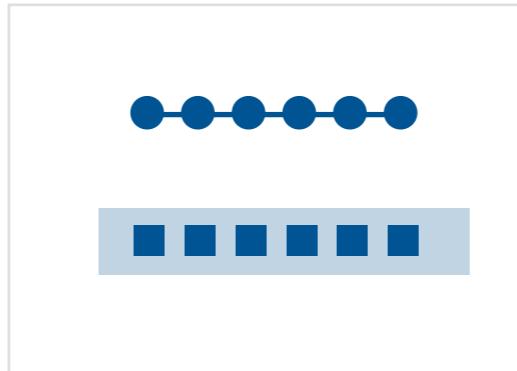
SIMILARITY

- Elements that share similar size, color, shape, position, or texture are seen as alike.



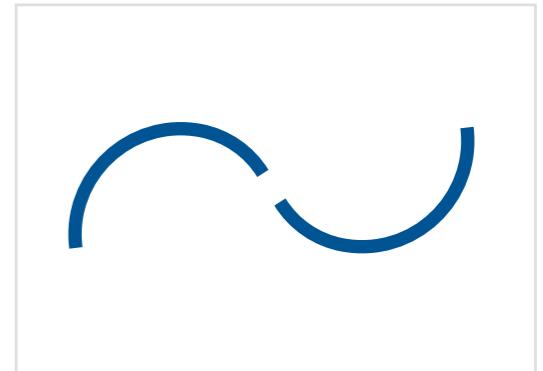
CONNECTEDNESS

- Connecting related or sequential elements with lines or ribbons of color indicate a strong relationship.



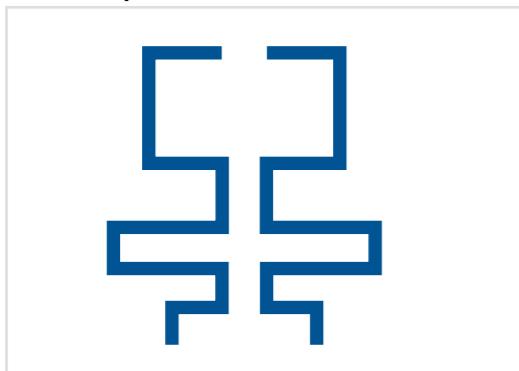
CONTINUITY

- Viewers find it much easier to perceive connections when contours connect smoothly.



SYMMETRY

- Symmetrically placing elements horizontally or vertically can make pattern comparisons easier.



CLOSURE

- Viewers naturally try to close gaps and complete unfinished forms.

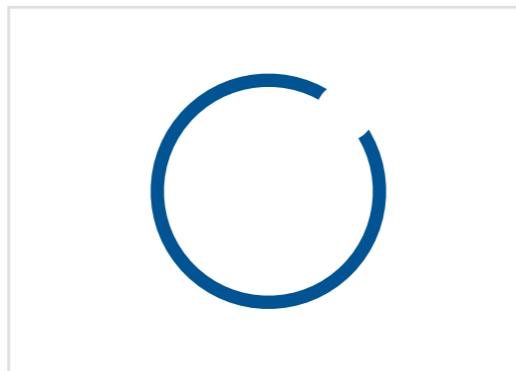
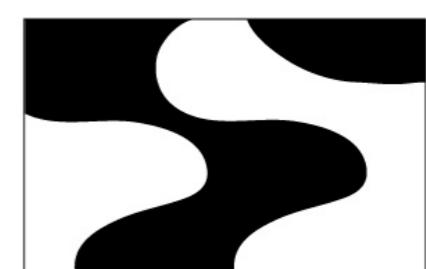
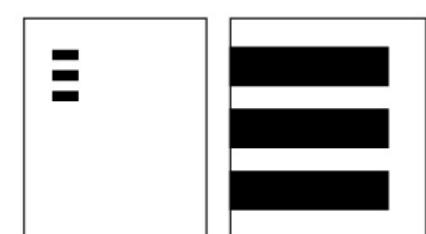
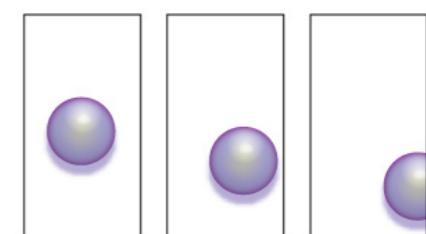


FIGURE & GROUND

- **Stable:** figures obviously placed in front of a background;
- **Reversible:** figure and ground can be seen equally;
- **Ambiguous:** elements may be in both foreground and background at same time;





CATFISH

MEAT ISN'T THE ONLY SOURCE OF PROTEIN. AS THE OCEANS GET TAPPED OUT, U.S. FISH FARMERS ARE RAISING 350 MILLION OF THIS BOTTOM FEEDER EVERY YEAR.

Energy

The water in the catfish pens needs to be circulated and oxygenated artificially.

PER FISH • U.S.

ELECTRICITY
8.2 kWh • 2.9 billion kWh

GASOLINE
0.4 gallon • 13.3 million gallons

DIESEL FUEL
0.23 gallon • 82.1 million gallons

IN

OUT

Nutrition

Catfish oil, sprayed onto catfish feed pellets, keeps dust down.

PER FISH • U.S.

CATFISH OIL 13.6 ounces • 150,034 tons

CORN GRAIN 13 pounds • 2.3 million tons

COTTONSEED MEAL 5.7 pounds • 1 million tons

DICALCIUM PHOSPHATE 9.1 ounces • 100,023 tons

MEAT/BONE/BLOOD 2.3 pounds • 400,091 tons

MENHADEN MEAL 2.3 pounds • 400,091 tons

SOYBEAN MEAL 20.7 pounds • 3.7 million tons

WHEAT MIDDINGS 11.3 pounds • 2 million tons

Nutrition

The vitamin E helps the fish flesh stand up better to freezing and storage.

PER FISH • U.S.

A 0.0003 ounce • 3 tons

B12 0.000009 ounce • 0.1 ton

C 0.05 ounce • 500 tons

D 0.0009 ounce • 10 tons

E 0.05 ounce • 500 tons

FOLIC ACID 0.002 ounce • 22 tons

PANTOTHENIC ACID 0.01 ounce • 150 tons

PYRIDOXINE 0.004 ounce • 50 tons

RIBOFLAVIN 0.005 ounce • 60 tons

THIAMIN 0.002 ounce • 25 tons

PRODUCTS
LOTS OF FISH SLURRY—
AND THOUSANDS
OF TONS OF NUGGETS
AND PET FOOD.
TOTAL ANNUAL U.S. CATFISH
OUTPUT: 220,484 TONS

Fat for omega-3 production
7,716 TONS

Fillets
38,177 TONS

Mincemeat
(surimi, fishmeal,
and pet food)
77,713 TONS

Nuggets
7,272 TONS

Steaks
3,075 TONS

Waste
18,388 TONS

Whole fish
68,343 TONS

Materials

Many catfish ponds are 10 to 20 acres, built of earthen berms 6 feet high and 16 feet wide.

U.S. OVERALL

ANTIBIOTICS
57,990 tons

SOIL
162.5 million cubic feet

WATER
743.2 billion gallons

BY ALEXIS MADRIGAL

+
Sources: FAO Fisheries Department; LSU Ag Center;
Mississippi State University; Oklahoma State
University; Southern Regional Aquaculture Center



- Creating areas of differing presence or quality can impart **emphasis** and **vitality** to a composition.

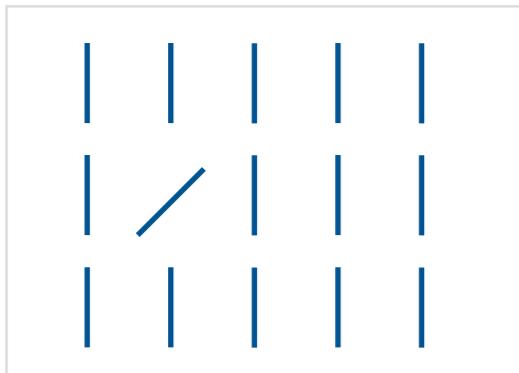
- **Visual contrast via preattentive attributes:** Create contrast by changing orientation, size, line length, line width, curvature, enclosure, shape, color, value or positioning.

- **Conceptual contrast:** Create contrast by differences in message or imagery.

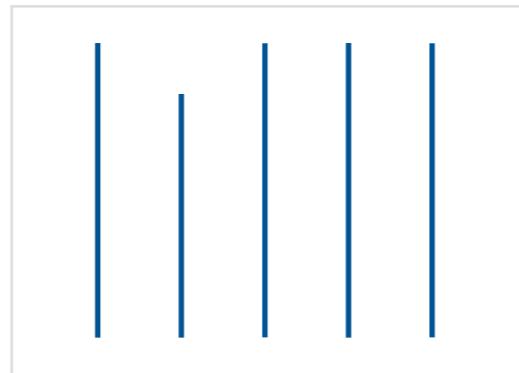
PREATTENTIVE VISUAL ATTRIBUTES

Visual attributes which are quickly and easily perceived by viewers.

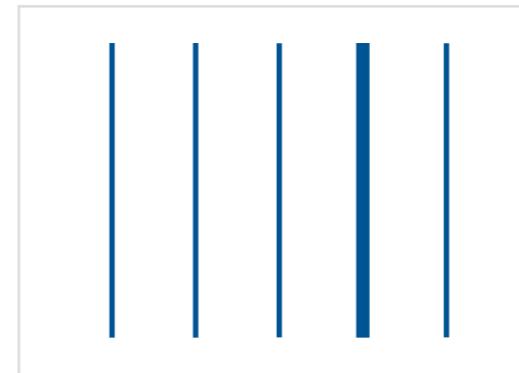
Orientation



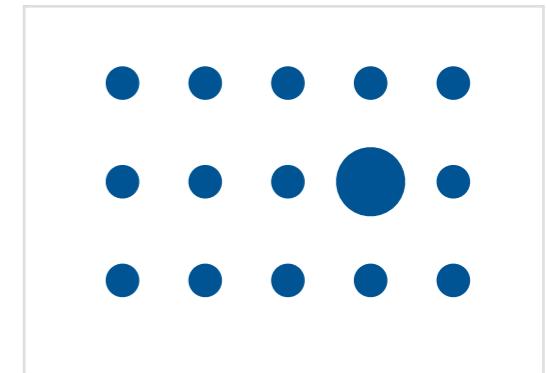
Line Length



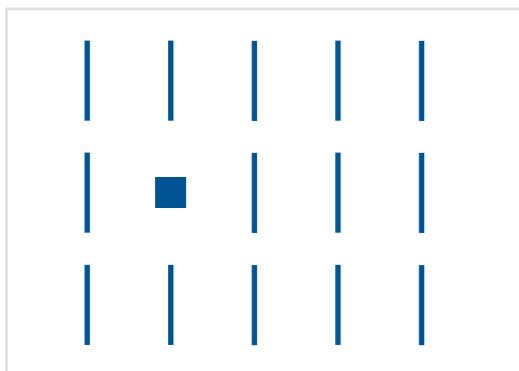
Line Width



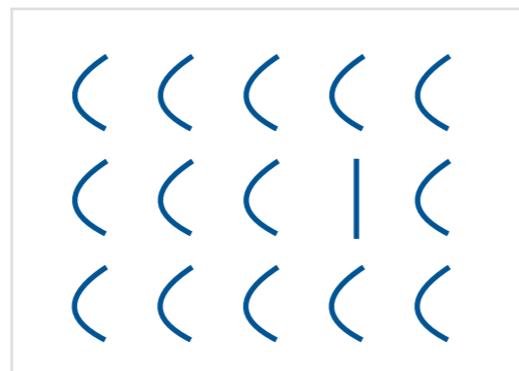
Size



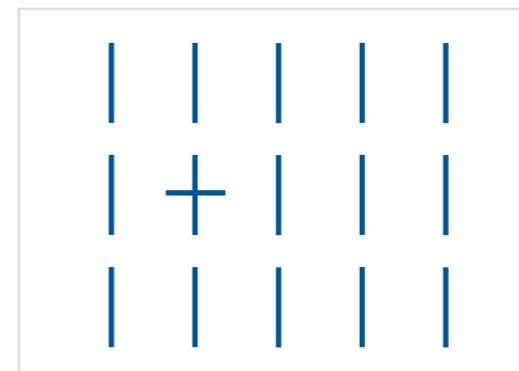
Shape



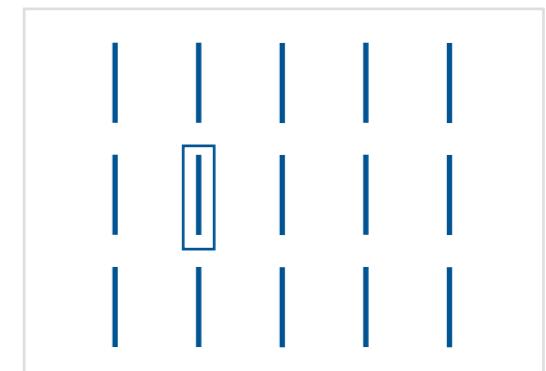
Curvature



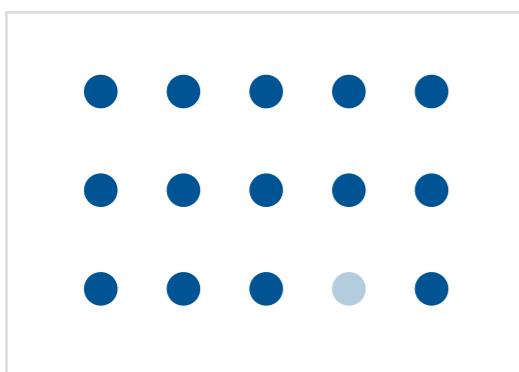
Added Marks



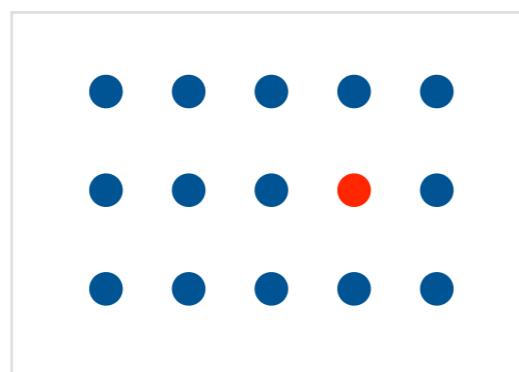
Enclosure



Intensity/Value

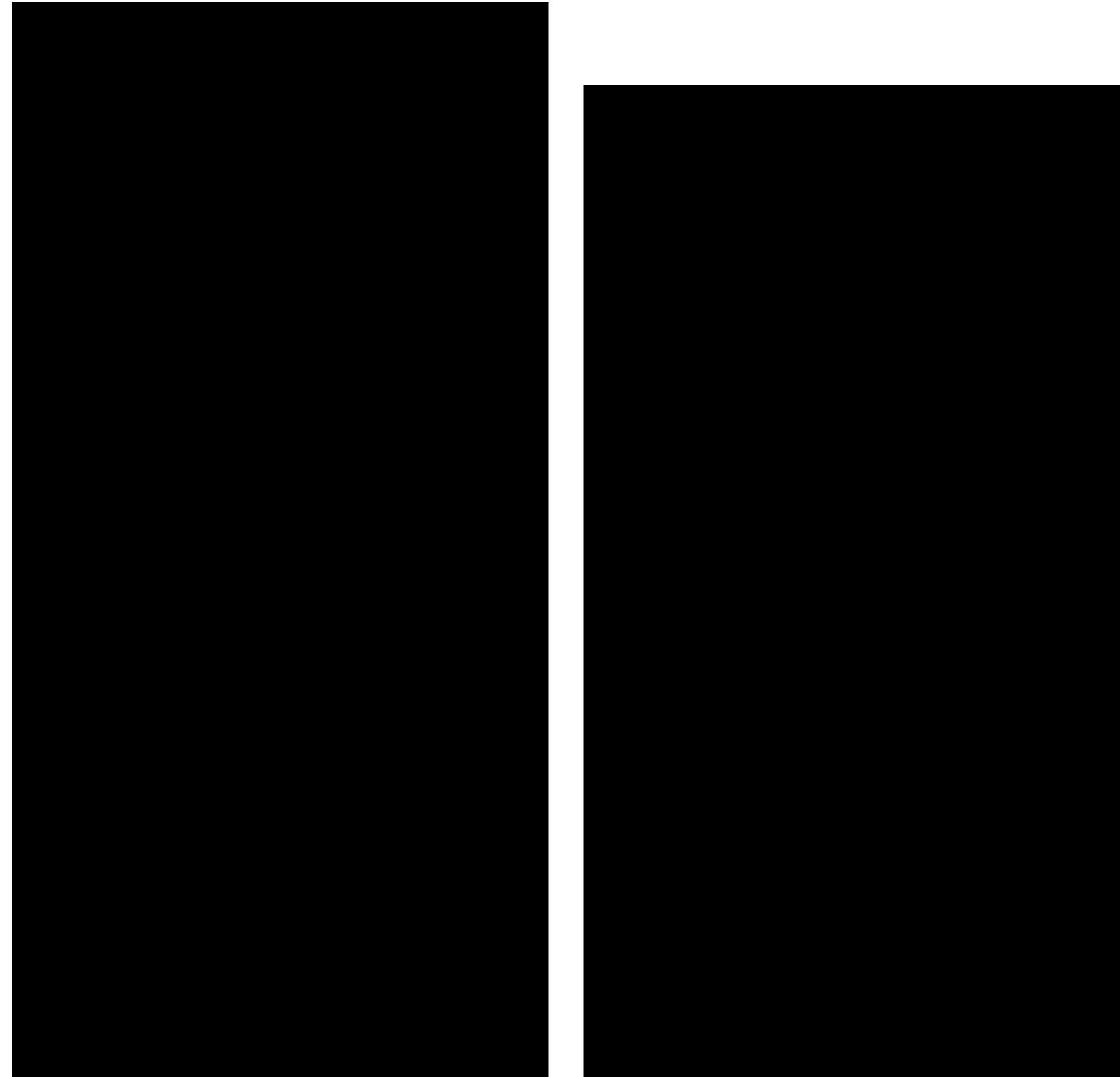


Hue



2-D Position







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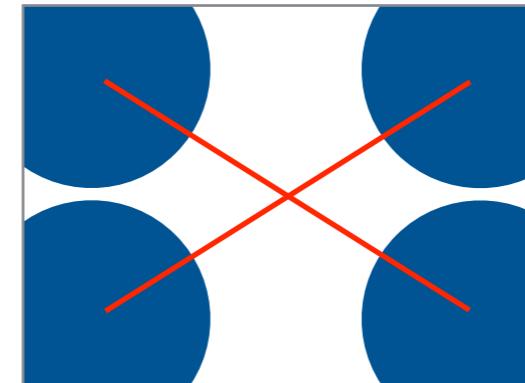
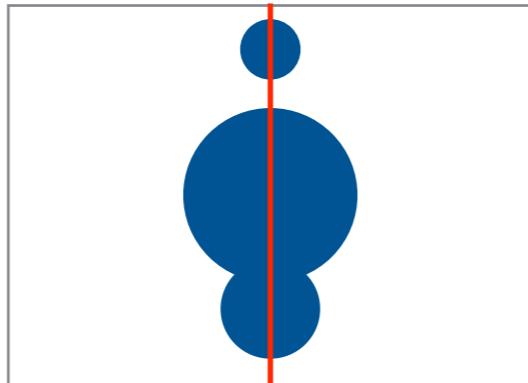
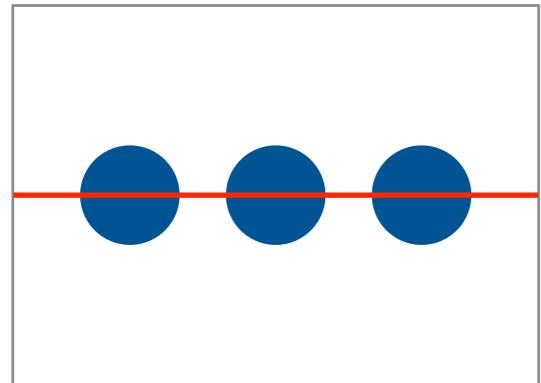
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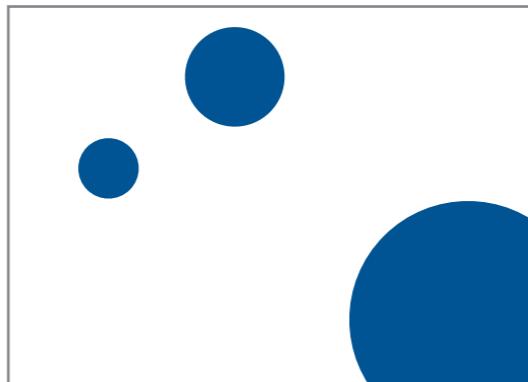
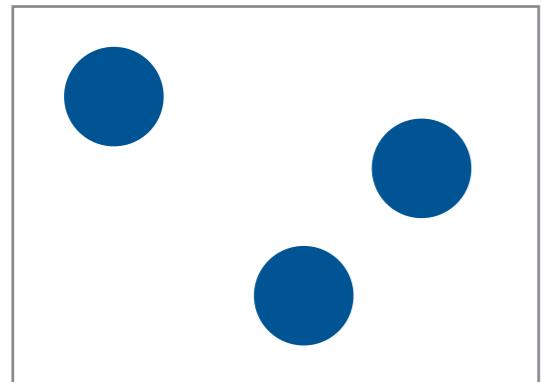
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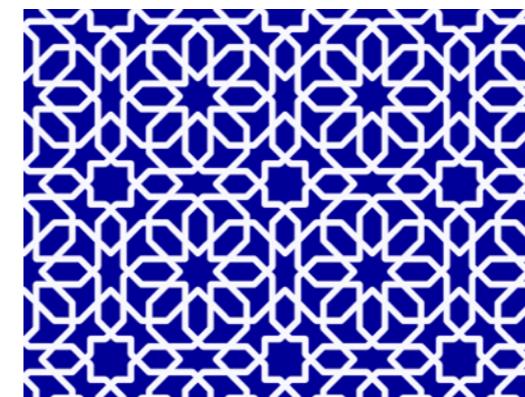
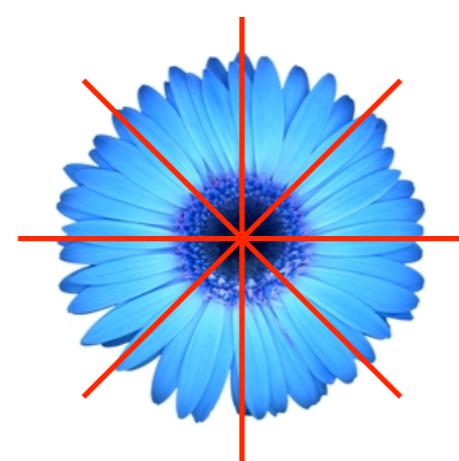
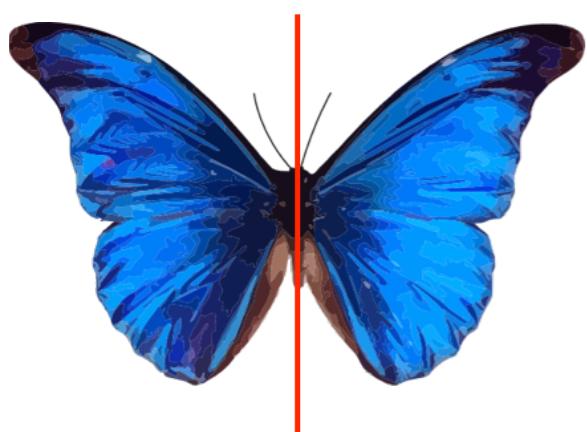
balance



- **Symmetry:** arranged equally on both sides of a composition; suggests stable or static motion, quiet; creates passive space



- **Asymmetry:** create deliberate imbalance; suggests variety or dynamic movement; creates active space;



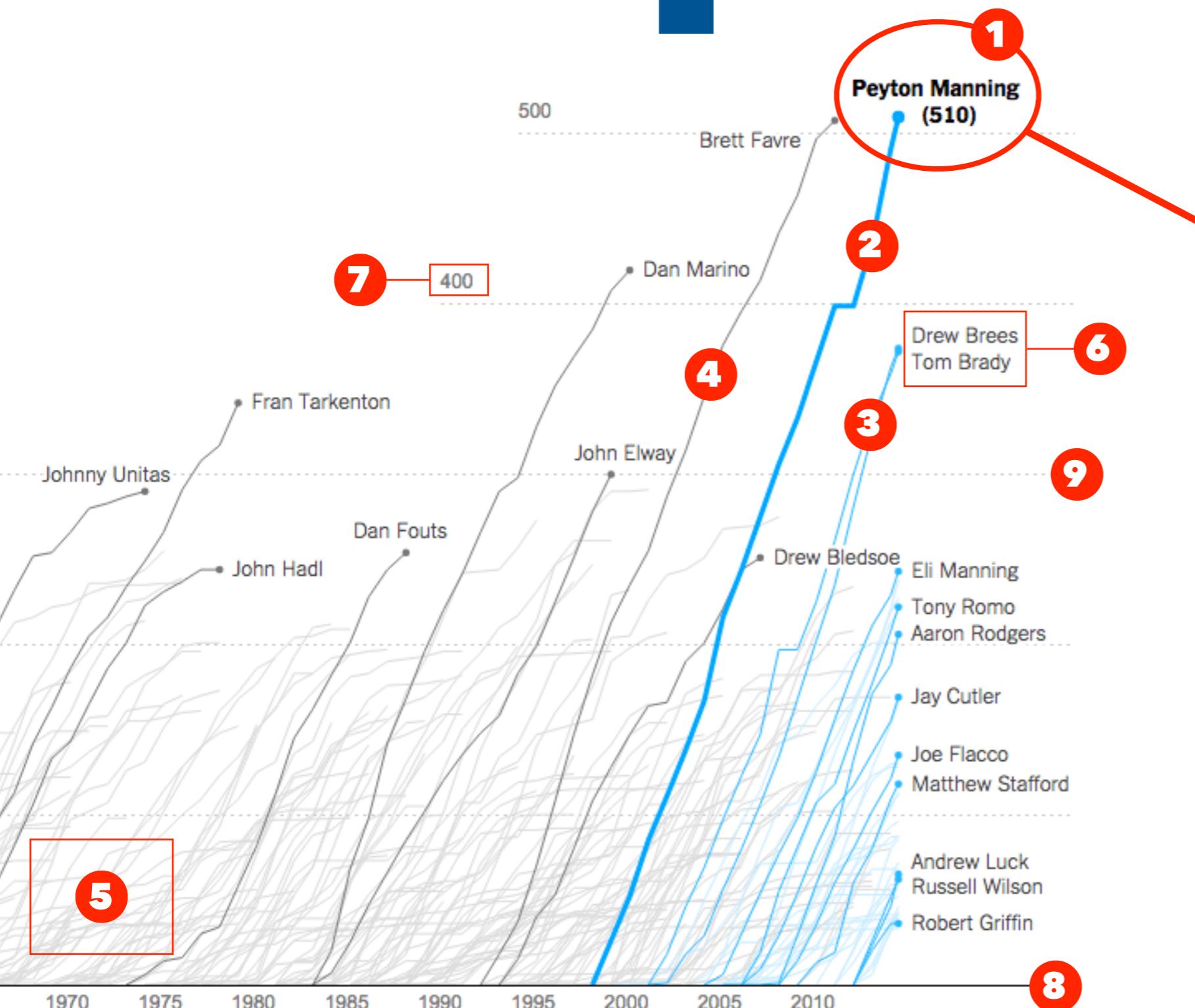
- **Bilateral, radial, or crystallographic symmetry** (e.g. "all over pattern," wallpaper)



What's in the cards for Pinehurst?
Breaking apart his father's vast
ClubCorp empire, **Bob Dedman** sold

everything but its signature resort.
Here's why **By Jaime Diaz**
Illustration by Jameson Simpson

emphasis



- Indicates most important element(s) in composition.
- **Focal point:** most emphasized visual element; attracts viewer's attention first
- Layer contrasting attributes to focal point(s) enhance emphasis.
- Create **visual hierarchy:** prioritized patterns of design elements that viewers use to differentiate the relative importance of elements in a composition.

1

Wayne Hudson
Partner
118 Hobson St
www.HudsonGavinMartin.com
+64 9 308 7300 fax +64 9 308 7300
+64 9 308 7300 fax +64 9 308 7300

Wayne Hudson is a technology and intellectual property law expert. He advises on the commercialisation of intellectual property, the acquisition and sale of technology businesses, raising capital and the establishing and structuring of start-up businesses. He also advises on all aspects of licensing, franchising and international distribution agreements.

Before joining Hudson Gavin Martin, Mr Hudson worked with that firm for twenty-eight years, including twenty-one years as a director. Mr Hudson is a board member and former president of the New Zealand Chambers Association and a trustee of the Government-established Growth Project Trust.

**Hudson
Gavin
Martin**

2

Mark Davis
Partner
118 Hobson St
www.HudsonGavinMartin.com
+64 9 308 7300 fax +64 9 308 7300
+64 9 308 7300 fax +64 9 308 7300

Mark Davis is a litigator who also advises on all aspects of intellectual property including copyright, passing off, Fair Trading Act and trade mark infringement (including anti-counterfeiting), as well as brand protection and development. He also has expertise in consumer law, advertising, food and privacy law.

Before joining Hudson Gavin Martin, Mr Davis spent nearly one year at Russel Morgan, four years as a litigation and advocacy partner specialising in intellectual property and consumer law. Mr Davis also for a number of leading New Zealand and International companies in such diverse areas as FCC, Radio, the fashion and advertising industries, manufacturers and pharmaceutical companies.

3

Simon Martin
Partner
118 Hobson St
www.HudsonGavinMartin.com
+64 9 308 7300 fax +64 9 308 7300
+64 9 308 7300 fax +64 9 308 7300

Simon Martin has focused on technology and intellectual property for eighteen years. His expertise covers a broad spectrum and includes new technology joint ventures, technology licensing, acquisition and sale of technology businesses, franchising, sponsorship, and commercial arrangements for telecommunications providers.

Mr Martin worked in Australia at one of the large accounting firms before moving to London for further experience in London for over two years, spent most of the time at one of London's leading law firms. Upon returning, he joined Bell Gully and spent a further three to three-and-a-half years before forming Hudson Gavin Martin.

4

This
That
Other
Way
Shape
Form
Ideas
Ideas
Ideas

5

Equity
Assets
Liabilities
Family
Friends
Fools
Beg
Borrow
Steal
Shake
Rattle
Roll
Hop
Skip
Jump
Lights
Camera
Action

Every business has a life cycle. It starts with an idea, a new way of doing something, a better way of doing something. Developing an idea means looking from every angle to understand, explore and transform. An idea is a new answer, a better answer, an elegant twist, an opportunity worth protecting. The idea comes to nothing until it does something, goes somewhere.

Every idea is a problem wanting an answer. Is your answer unique? Does it already exist in some way, shape or form? Has it been done before? If not, how do you do it? If it has, how do you learn from past lessons? How do you improve on it? How do you protect what's new? Should you protect it? Can you develop it into a viable, valuable piece of intellectual real estate? Can you build a business around it? Can you build it into your business?

To get your show on the road, it's our job to know. Building your idea into a business, building a business around your idea, requires experience. We help you establish intellectual property, exploit intellectual property and secure the appropriate rights to intellectual property. We help uncover the value by understanding the opportunities presented by that intellectual property and how it could be part of your business. Hudson Gavin Martin has a passion for advising you on your business. It's what we do, because we like doing it.

PO Box 100-800, Dunedin St
Auckland 1010, New Zealand
+64 9 308 7300 fax +64 9 308 7300
info@hgmlaw.com

rhythm



Repetition of elements creates rhythm within a composition; can become monotonous

Repetition with variation of elements increases variety; can become chaotic



Patterns are created by repeated elements

Sequence refers to viewing order of elements and to determine the flow of a multi-page publication

GOOD MORNING O'S Okay, but too buttery. RATING: 2	GOOD FRIENDS CINNA-RAISIN CRUNCH Minus two points for the cinnamon. RATING: 2	KASHI MIGHTY BITES RAISIN BREAD Kashi for the kiddie set. RATING: 2	RAISIN BREAD Too sweet, but high-quality bread. RATING: 3	MOTHER'S CINNAMON DAY CRUNCH Nice oatsness, but death to cinnamon. RATING: 2	PEACE CEREAL WILD BERRY CRISP Nice and crispy, but lose the wild berries. RATING: 2	KASHI HEART TO HEART OAT FLAKES AND WILD BLUEBERRY CLUSTERS Crunchy in milk, good berries. RATING: 3	PEACE CEREAL RASPBERRY GINGER CLUSTERS Like drinking tea with ginger. Yet kind of edible. RATING: 3	KASHI ORGANIC SMART BREAD Tastes like goat food at a petting zoo. RATING: 1	WILDFOODS ORGANIC PEANUT BUTTER GRANOLA Peanut butter and granola just don't mix. RATING: 1
WEITEBAKSH BITE-SIZE SHREDDED WHEAT A solid, doppelganger for the real thing. RATING: 3	NATURE'S PATH ORGANIC FLAX PLUS Hearty, grainy, flaxy. RATING: 3	KASHI ORGANIC STRAWBERRY BROWN RICE CRISPS Rice Krispies in rosewater soup. RATING: 1	CINNAMON RAISIN GRANOLA Tastes like week-old apple pie. RATING: 1	MOTHER'S CINNAMON DAY CRUNCH More natural cocoa flavor than Cocoa Bumpers. RATING: 3	RAISIN BREAD Grandma's shredded wheat: refreshingly plain. RATING: 3	KASHI 7 WHOLE GRAIN HONEY PUFFS Like your basic Kashi puffs, only sweeter. RATING: 3	PEACE CEREAL PEAK PROTEIN PUFFS Like neutered Cap'n Crunch. RATING: 4	WEITEBAKSH ORGANIC OAT BRAIN FLAKES WITH RAISINS Fine, but don't like the raisins-in-the-pouch gimmick. RATING: 2	WILDFOODS ORGANIC PEANUT BUTTER GRANOLA Peanut butter and granola just don't mix. RATING: 1
KASSET GOLEAN Simple, healthy, no cinnamon. RATING: 3	GOOD FRIENDS ORGANIC BROWN RICE CRISPS Quite palatable despite synthetic aftertaste. RATING: 2	KASHI BUNNY LOVE Not bad. The janta reference will have traction with yuppie kids. RATING: 3	WEITEBAKSH RAISIN NUT CRUNCH As generic as the name. RATING: 2	PEACE CEREAL TOASTED WHOLE WHEAT FLAKES & PLAKED Frighteningly healthy bad supermarket food. RATING: 1	MOTHER'S HONEY BUNNIES Like Bunny Love but sweater. RATING: 2	KASHI COCOA BUMPERNS My daughters would like this, but not me. RATING: 2	PEACE CEREAL ORGANIC DATA HONEY GRANOLA Whole Foods has its honey flavor down. RATING: 3	WEITEBAKSH MAPLE PECAN CRISP Maple is the rich man's vanilla. RATING: 1	FOOD FOR LIFE EZEKIEL 4:9 CINNAMON RAISIN More bad cinnamon RATING: 1
NATURE'S PATH ORGANIC MILLET RICE Not as good as steel. RATING: 2	PEACE CEREAL ESSENTIAL 10 Yankee Candle cinnamon taste. RATING: 2	KASHI AUTUMN WHEAT The gold standard of wheat. RATING: 4	ORGANIC SOY CRUNCH A disconcerting piña colada back-taste. RATING: 2	GARIBOLDI'S FARM ORGANIC MULTIGRAIN SQUARES Malty, for a cereal. RATING: 3	KASHI SHREDDED OATS CINNAMON CRUNCH Would be a 3, but for the cinnamon. RATING: 3	NATURE'S PATH ORGANIC HERITAGE O'S The purist's favorite. RATING: 4	WEITEBAKSH BANANA NOT ALL NATURAL GRANOLA Very banana-like; surprisingly good. RATING: 3	WEITEBAKSH ORGANIC CRISPY FLAKES AND FIBER Same as the other Weitebaksh. RATING: 1	WEITEBAKSH ORGANIC HONEY AND NUT MORNING O'S Good natural honey taste. RATING: 3
WEITEBAKSH ULTIMA ORGANIC HIGH FIBER Lots of twigs, tons of fiber. RATING: 4	CANADIAN FARM ENKA ALMOND CRUNCH Good, but minus 1 for the vanilla. RATING: 2	ORGANIC RAINBOW RINGS Possible Froot Loops facsimile. RATING: 3	NATURE'S PATH ORGANIC ENERGY Straightforward, inoffensive. RATING: 2	EVOLVED ORGANIC KOALA CRISP Like dry, chocolate-flavored Skittles. RATING: 1	DOROTHY LUCILLE SUPER CRANBERRY, CHERRY, AND ALMOND Stardingly bland, for all the ingredients. RATING: 1	KASHI SHREDDED OATS VANILLA ALMOND The vanilla is the killer. RATING: 1	CARIBBEAN FARM HONEY NOT O'S A likable copycat of the Cheezios original. RATING: 3	PEACE CEREAL ORGANIC MAPLE RAISIN LOW-FAT CRISP Not bad if you meat eat maple. RATING: 4	KASHI GOOD FRIENDS Stupid name, but densely flavorful. RATING: 4
AIRPOWDER MILLS SHREDDED WHEAT Berry, but not good boozing. RATING: 3	KASSET GOLEAN CRUNCH Okay, despite the pumpkin flavor. RATING: 2	KASHI PEANUT BUTTER BUMPERS A vaguely healthy version of peanut butter Cap'n Crunch. RATING: 2	MOTHER'S 2 WHOLE GRAIN PUFFS Like bird food on steroids. RATING: 1	WEITEBAKSH ORGANIC WHOLE GRAIN BISCUIT British mushiness may be comforting to some. Not me. RATING: 1	AMERICAN GRANOLA GREEK DROVE A posse of misguided oddments. RATING: 1	KASHI VIVE TOASTED GRANAM & VANILLA Vanilla is the Antichrist. RATING: 2	WEITEBAKSH HEART TO HEART HONEY TEASERZ OAT A hearter Cheero, maybe too hearty. RATING: 4	WEITEBAKSH FRUIT AND NUT ALL NATURAL GRANOLA If I ate granola, I'd eat this one. RATING: 4	KASHI HEART TO HEART HONEY TEASERZ OAT A hearter Cheero, maybe too hearty. RATING: 4
NATURE'S PATH ORGANIC ACAI APPLE GRANOLA WITH POMEGRANATE An unspeakable disaster. RATING: 1	ORGANIC RAISIN GRANOLA Odd fake tasting, like a snack pack from JetBlue. RATING: 1	ULIMA ORGANIC POMEGRANATE Pomegranates? Barbara's version isn't so bad. RATING: 3	7 WHOLE GRAIN FLAKES Simple and pure on the palate, with a rice crunch. RATING: 4	CANADIAN FARM RAISIN BREAD Dull, tastes too organic. RATING: 1	FRANCE CEREAL VANILLA ALMOND CRISP I've made my position clear on vanilla. RATING: 1	NATURE'S PATH ORGANIC OPTIMUM ZEN Essence of garden snailch. RATING: 1	AMERICAN GRANOLA BUCKWHEAT FLAKES Okay, but tastes nothing like maple or buckwheat. RATING: 2	GRANOLATE CLASSIC GRANOLA As advertised. Classic. Granola. RATING: 3	KASHI CINNAMON HARVEST A miracle! Cinnamon done properly. RATING: 3
NATURE'S PATH ORGANIC HONEY CORN FLAKES Bogus honey tasting flakes are oddly un-faky. RATING: 1	NATURE'S PATH ORGANIC GRAIN SPiTZ Big and beefy. RATING: 4	WEITEBAKSH ORGANIC CORN FLAKES Is fruit juice a good substitute for sugar? Sort of. RATING: 2	MOUNTAIN MEDLEY GRANOLA Lots of good raisins though probably 800 calories per bite. RATING: 2	AIRPOWDER MILLS ORGANIC SPLIT FLAKES Not as offensive as R scones. RATING: 3	WEITEBAKSH ORGANIC SPLIT FLAKES A misconceived riot of sugar. RATING: 3	KASHI PEANUT BUTTER PUFFS Barbara's shredded wheat is better—more texture. RATING: 2	WEITEBAKSH SHREDDED OATS Barbara's shredded wheat is better—more texture. RATING: 2	WEITEBAKSH ORGANIC POMEGRANATE GRANOLA WITH CHERRIES Very fruity. RATING: 2	WEITEBAKSH ORGANIC AMARANTH FLAKES A lesser example of the amaranth school. RATING: 2
WEITEBAKSH ORGANIC OPTIMUM POWER The power fades as you go. RATING: 2	KASSET PURELY O'S The weak little O's dissolve sadly in the milk. RATING: 2	HONEY PUFFED WHEAT Excellent beef, and almost tastes like real honey. RATING: 4	T WHOLE GRAIN NUGGETS Light; better as a topping than as a whole bowl. RATING: 3	KASHI CINNAMON PUFFIES Plastic-y. And cinnamon! RATING: 1	KASHI ORGANIC KAMUT FLAKES Nice spotted look, but lacks crunch. RATING: 3	WEITEBAKSH ORGANIC OAT GRAN FLAKES Turns milk brown, tastes heavy, like horse food. RATING: 2	CORN FLAKES Stick to the top of the teeth in an unswerving way; not as good as the real thing. RATING: 2	ORGANIC GOLDEN FLAX FLAKES Nice crunchiness, if you like flax. RATING: 2	BACK TO NATURE FLAX & FIBER CRUNCH Almost too much roughage to bear. RATING: 2
FOOD FOR LIFE EZEKIEL 4:9 ORIGINAL Rightously tasty. RATING: 4	GAT BRAIN FLAKES The flakes have an eerie Pringles uniformity, but they're crisp and sweet. RATING: 3	SHREDDED SPOONFULS Simple and straightforward. RATING: 3	GRANOLADE MEX ORGANIC AMARANTH FLAKES What's amaranth? Good, that's what. RATING: 3	WEITEBAKSH BITE-SIZE FROSTED SHREDDED WHEAT Good wheat, too much frosting. RATING: 2	WEITEBAKSH ORGANIC HERITAGE FLAKES Just flakes. Refreshingly pure. RATING: 3	FROSTED FLAKES Another successful, feel-good ripoff. RATING: 2	WEITEBAKSH ORGANIC HERITAGE BITES A study in the absence of taste. RATING: 1	WEITEBAKSH ORGANIC OPTIMUM REDGOLD BANANA-FLAX-ALMOND MATCHA GREEN TEA Yankee Candle meets the monkey house in the Bronx Zoo. RATING: 1	PEACE CEREAL CRANBERRY COCONUT CRUNCH Yankee Candle meets the monkey house in the Bronx Zoo. RATING: 1



The 100-Cereal Taste Test

BY
Adam Platt

Assisted by
Katie Goldsmith

MANY OF the healthier people I know—my wife, my daughters, my yoga-loving friends—are cereal addicts. I am not a cereal addict. You could even describe this humble critic as a cereal curmudgeon. When given the choice between a bowl of virtuous-looking oat flakes and a greasy mess of eggs, bacon, and grits in the morning, I will choose the

FOOD STYLING BY SARA JANE CRAWFORD

greasy mess every time. But sometimes a man must eat cereal, especially when his employers insist upon it. On these pages are the results of my 100-bowl taste test, dutifully conducted in the New York office kitchen on a recent Friday afternoon. Note that we've included none of the classics here—no Cheerios, no Rice Krispies, no Cap'n Crunch, no

Froot Loops. The focus, instead, is on righteous, next-generation New Age cereals, all of which were chosen more or less at random from the shelves of Whole Foods. When it comes to cereals, you will notice, I tend to be a purist. The fewer ingredients listed on the box, the better. Sugar is permissible, but not too much of it. Artificial colorings should be avoided

(except, for the record, when ingesting Froot Loops). And all newfangled, Yankee Candle-style flavorings (cinnamon, vanilla, etc.) are a really bad idea. Here, my ratings (1 is the worst, 4 the best) and tasting notes. Given my general distaste for the food group, it's safe to say that any cereal I liked is probably pretty good. Now, pass the bacon.

Photographs by Mitchell Feinberg



movement



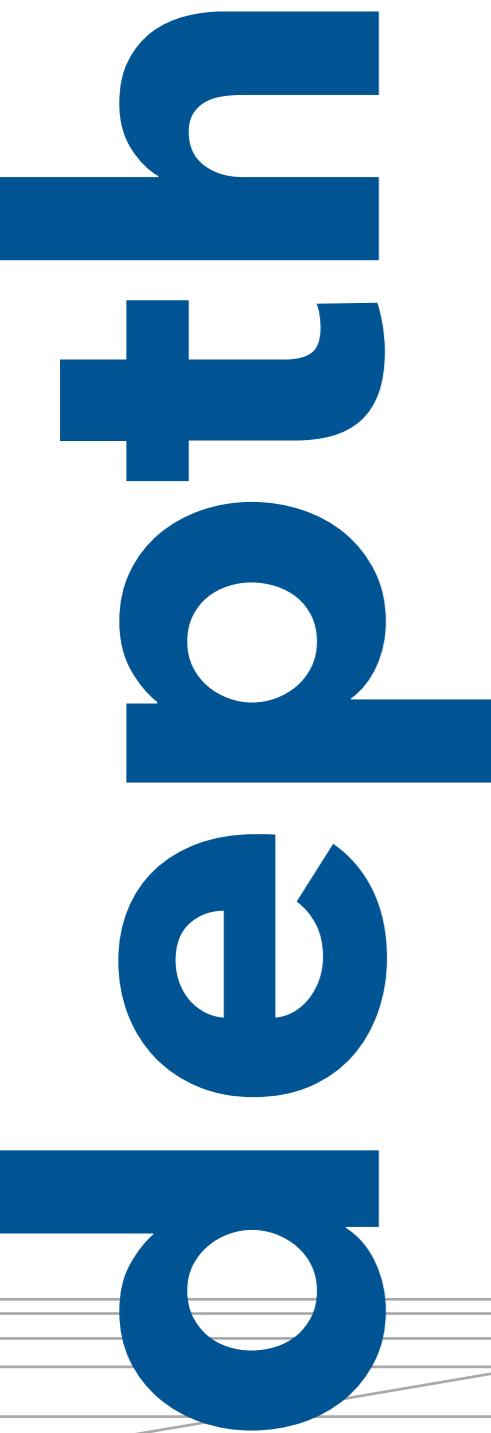
Creating a sense of **implied movement** can increase the tension/vitality/energy of a composition.

Helps lead the viewer via the **desired sequence** of visual elements.

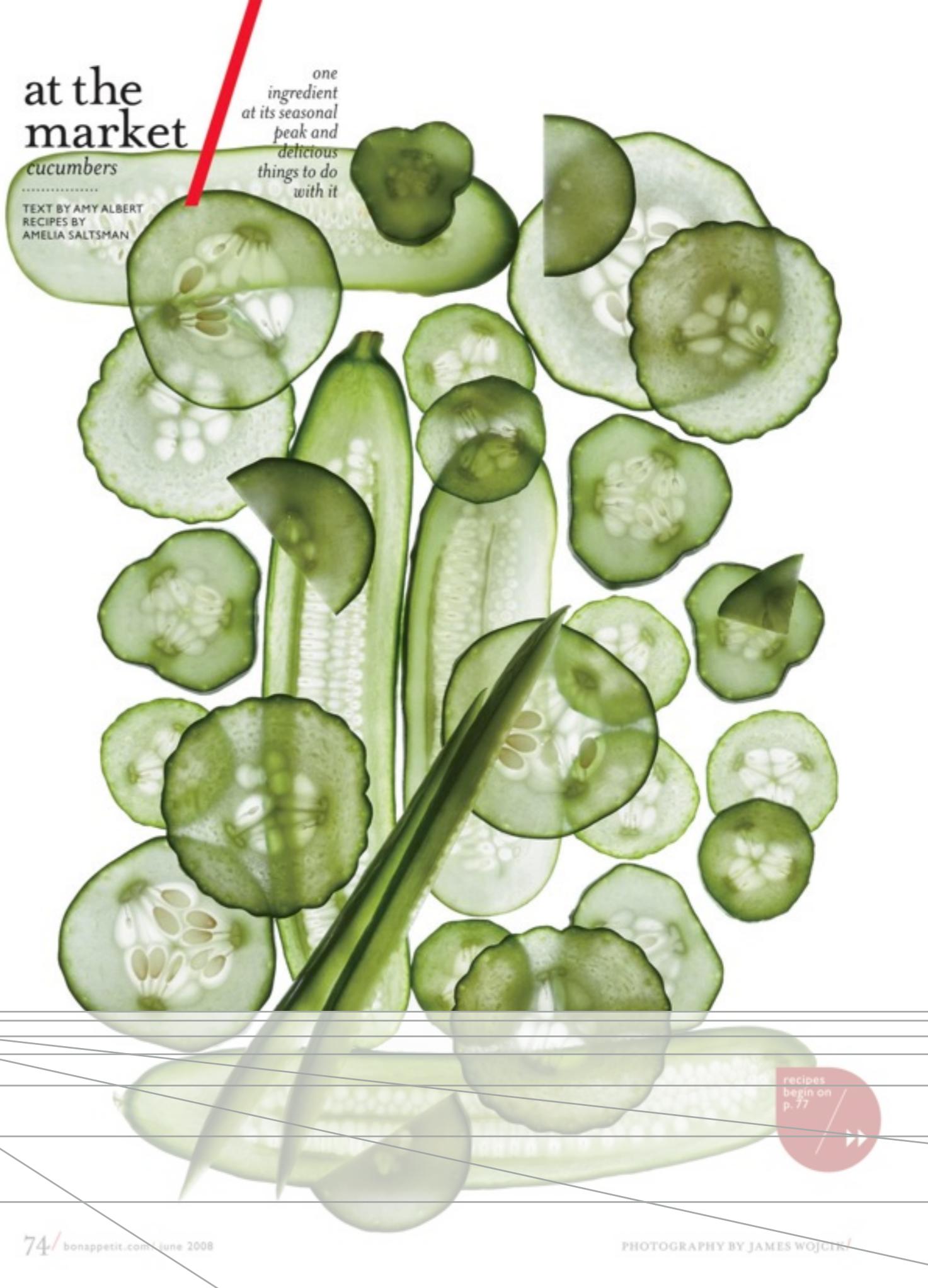
Helps spice up the inherent two dimensionality of flat media.

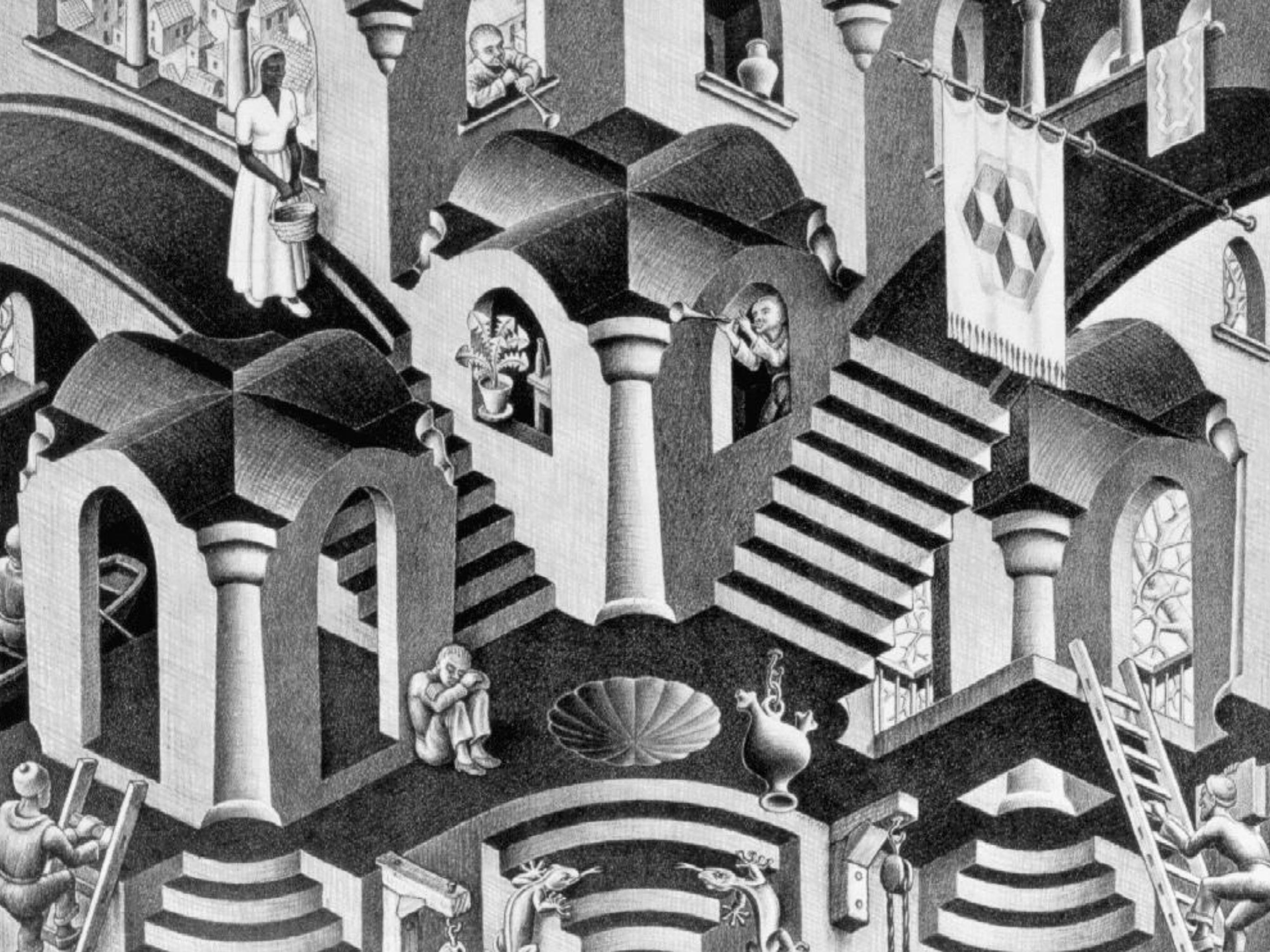
Gestalt laws, overlapping, bleeding, and rotation of elements can induce a feeling of kinetic movement.

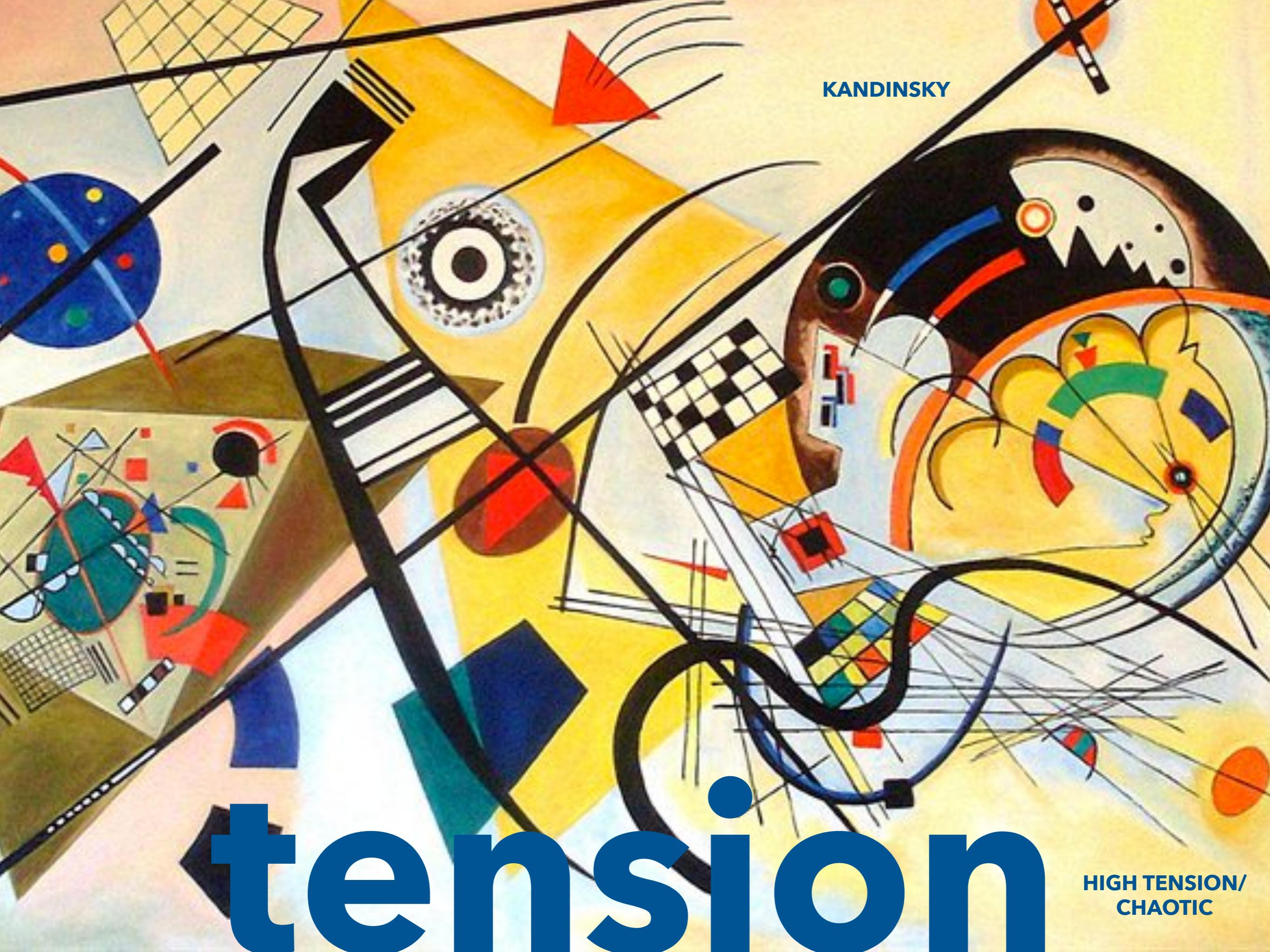




- Elements can be arranged in **illusory dimensional space**: foreground, middle ground, background
- The **apparent depth** of a composition can be deep or flat.
- The use of **overlapping, light/shadow, opacity** and **perspective** techniques are used to define apparent depth.







KANDINSKY

tension

HIGH TENSION/
CHAOTIC

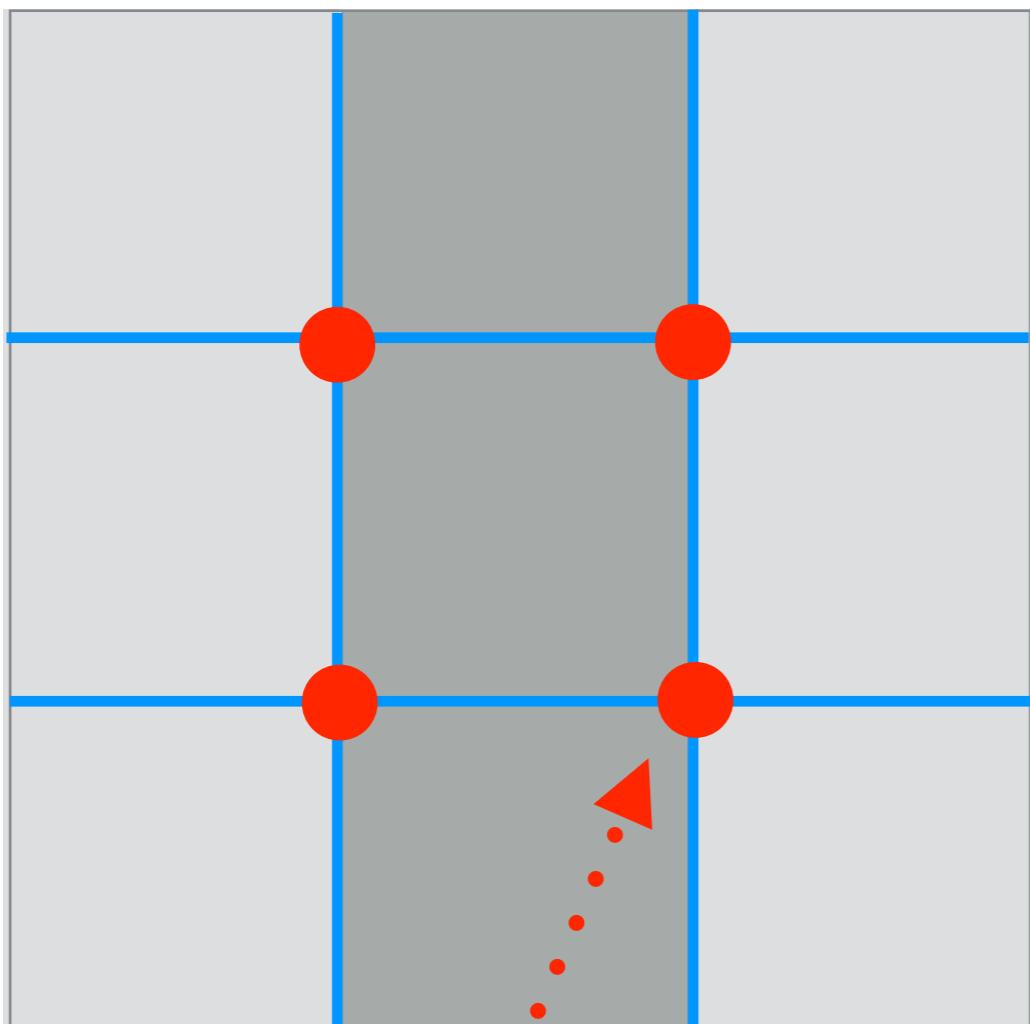


MALEVICH

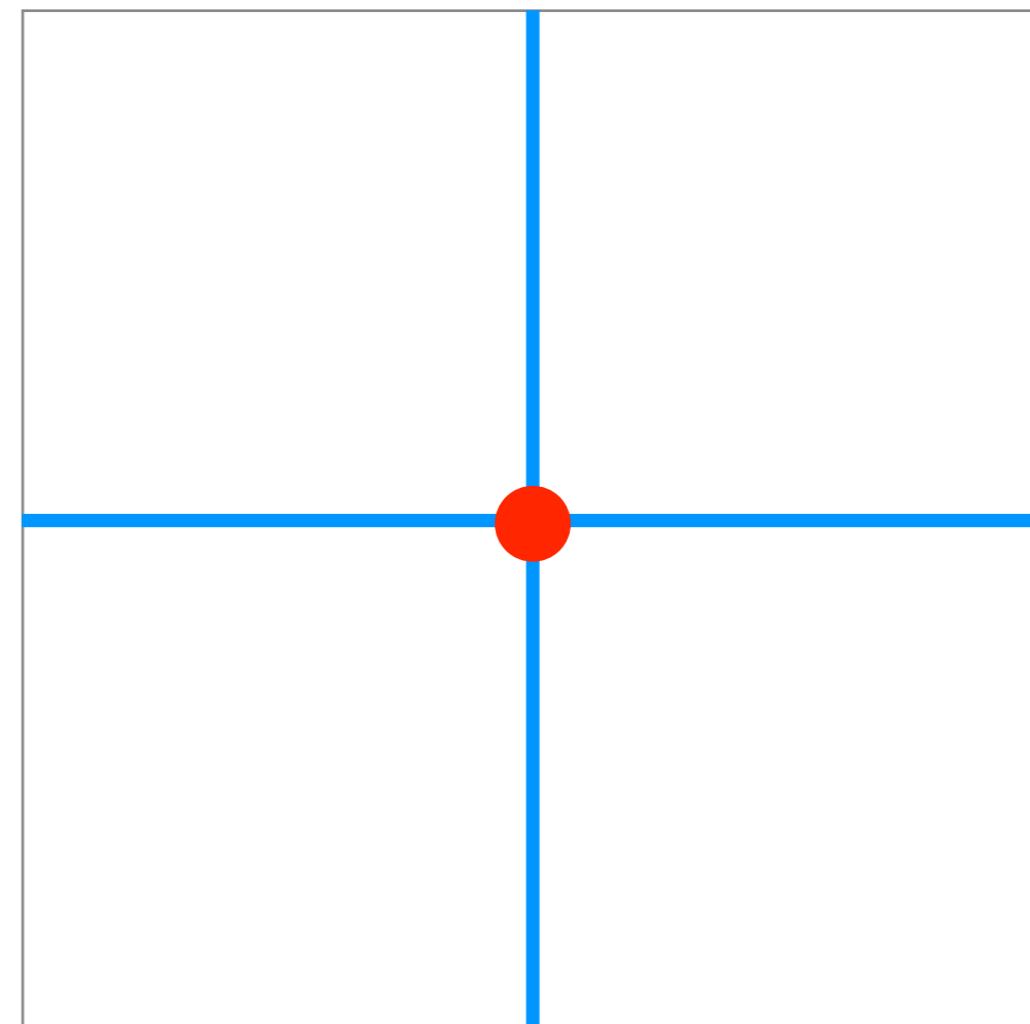
LOW TENSION /
CALM

- Every composition has an inherent tension or **"energy" level** between the poles of **calm** and **chaotic** based on the different states of contrasting relationships among the design elements.
- **High tension** compositions tend to have high levels of contrast or sharp peaks of emphasis among design elements.
- **Low tension** compositions tend to have high levels of symmetry and homogeneity among design elements.

Remember the RULE OF THIRDS



ENERGY
ACTIVATING
POINTS



ENERGY
DAMPENING
POINT

components of a DATA VISUALIZATION

- **Headline>Title**
- **Subhead** (if needed)
- **Byline/Dateline**
- **Lead**
 - opening paragraph or sentence
 - highlights the most important information or interesting aspect of the data in a clear, concise and interesting manner
 - establishes voice and direction of visualization
 - which of the five W's or How is the most important question for this story?
 - Or, How much? So what? What next? Why not? Who benefits? Who's hurt?
- **Directions** (if needed)
- **Visualization title** (if not the headline/title)
- **Visualization(s)**
- **Time or timeframe**
- **Key/Legend**
- **Narrative text** (if needed)
- **Source of data/citation**

resources

Information Visualization: Perception for Design

<http://www.amazon.com/Information-Visualization-Third-Edition-Technologies/dp/0123814642>

Tapping the Power of Visual Perception

http://www.perceptualedge.com/articles/ie/visual_perception.pdf

Thank you!! :)

Camille G Lee

CGL8@cornell.edu

607.255.0780