GESTALT THEORY…

What is the Gestalt Theory?

- Basically it's the way the human brain perceives objects…
- The brain automatically and unconsciously simplifies, arranges and orders objects the eyes see.
- The whole is greater than the sum of its parts
- Gestalt is a psychological term meaning "unified whole"
- Theory was developed in the 1920's by German Phychologists
- People tend to organize visual elements…

Five of the Gestalt Laws of interest to designers…

1. Proximity
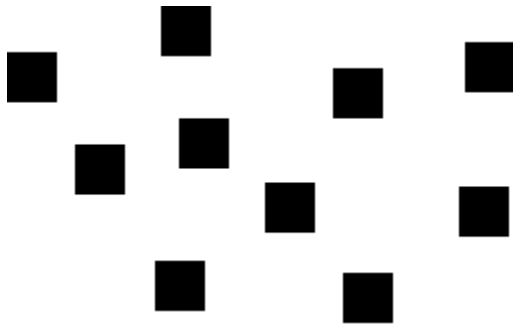2. Similarity
3. Continuity
4. Closure
5. Figure & Ground

Proximity

- Items close together are perceived to belong to the same group…
- The Law of Common Fate, says we perceive objects traveling in the same direction as part of the same group
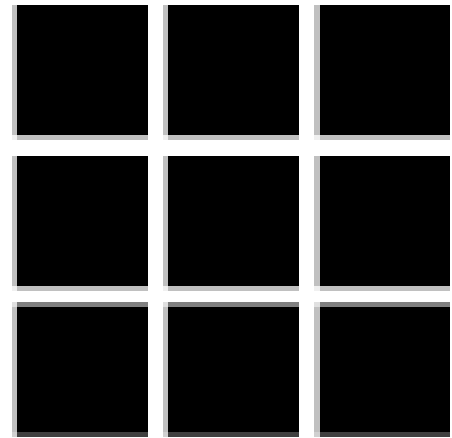- Physically group items that belong together

The unified whole is different from the sum of the parts.
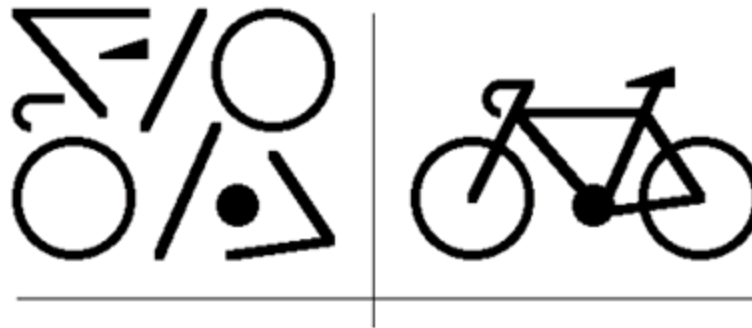
Proximity?

No…The 9 squares are placed w/o proximity…

When squares are given close proximity, unity occurs. Although they are separate shapes they appear to be perceived as one group…

The 15 shapes below for a unified whole bc of their proximity…

Similarity

- Similarity occurs when objects look similar to one another…people perceive them as a group or pattern…
- Our minds group things with similar properties (ie; color or shape)
- Like goes with like…
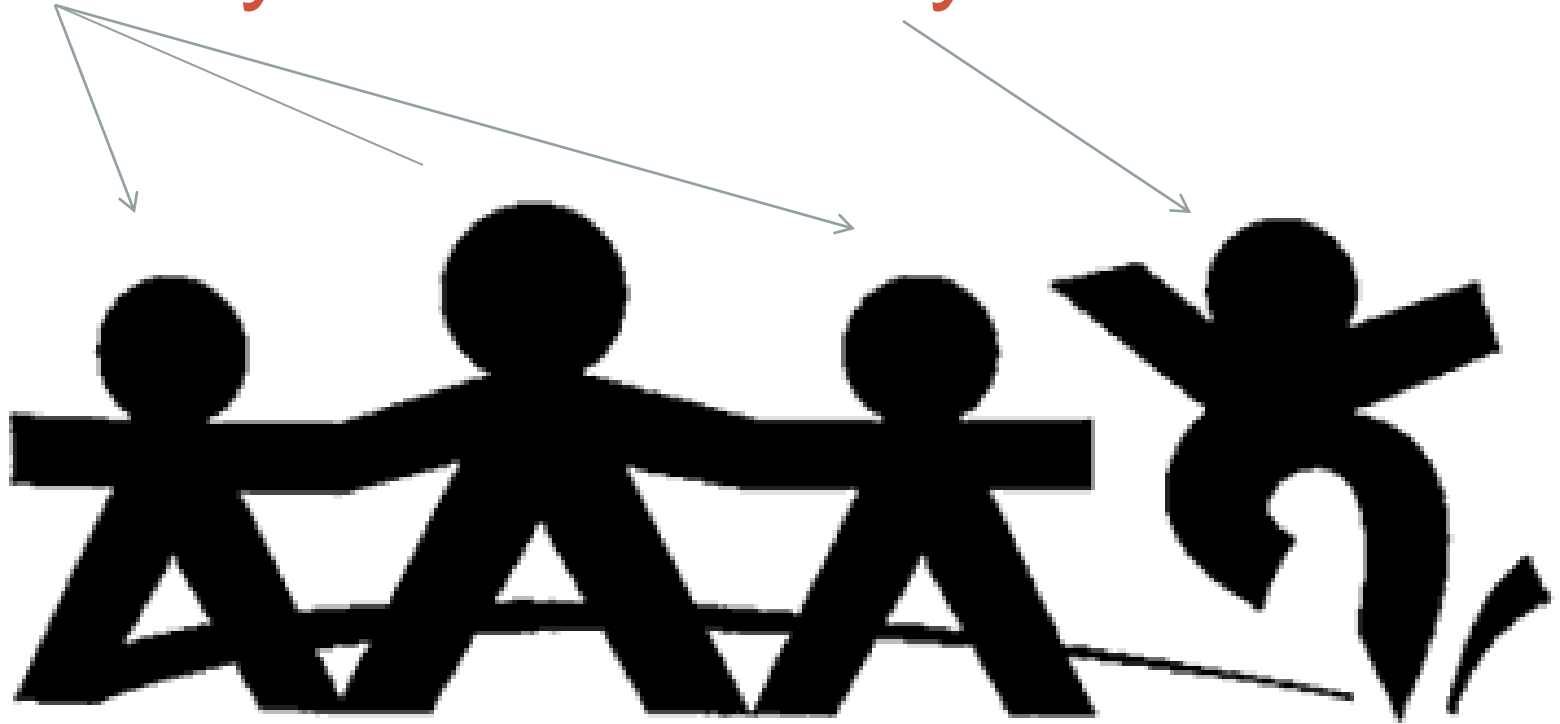- In layout, use similarity to create order and organization through unity

Similarity or an anomally?

Similarity or an anomally?

Continuity/Continuation

- Our minds continue a pattern beyond its ending point…
- Our eyes follow the direction of a line
- Apply this concept to add a sense of direction and movement to your layout…ERGO flow (design efficiency)…
- We see a cross instead of four shorter lines

Continuation examples cont…

- Continuation also occurs when the eye is compelled to move through one object and continue to another object…

Continuation occurs and draws your eye to the maple leaf…

Closure

- We mentally close in gaps of perceived shapes
- This can add interesting design
- The interplay of positive and negative space

Fig1--Even though the Panda isn't completely filled in, enough of the shape is indicated so people perceive the whole by filling in the missing information…

Fig2—Enough of the image is closed to allow the viewer to fill in the blanks…

Figure & Ground…

The words are clearly perceived as figure w/the surround white space ground…

- The eye differentiates an object form its surrounding area.
- A form, silhouette, or shape is naturally perceived as figure (object), while the surrounding area is perceived as ground (background).

- Balancing figure and ground can make the perceived image more clear. Using unusual figure/ground relationships can add interest and subtlety to an image.

Image using complex figure/ground relationships which change upon perceiving leaves, water, and tree trunk…

Famous Gestalt image devised by Danish psychologist Edgar Rubin…
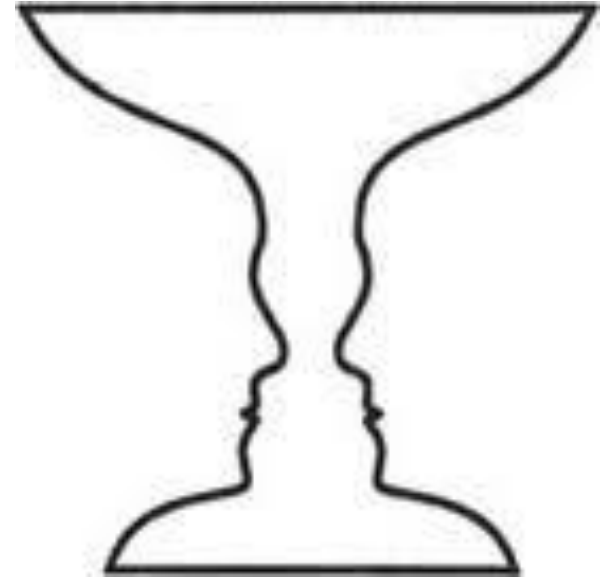
Are the figure white vases, goblets, or a bird-baths?

Creating Hierarchy

- Visual hierarchy helps guide readers through a layout
- Rank items of content in order of their importance…
- A position near the top signifies importance
- Larger size = importance
- Examples of hierarchy can be seen in:
- Newsletters, Web pages, annual reports & other documents that include multiple stories or chunks of information…

Modular Layouts

- Work well with multiple topics on the same screen or page…
- Usually setup in a rectangular format
- Add variety with a sidebar

Side Notes on Sidebars…

- Sidebars are good for:
- Breaking up text in the absence of good photography
- Highlighting key information lifted from your text
- Providing additional information related to your adjacent copy
- Adding interactivity when presented in the form of quizzes or lists
- Giving a page a pop of color…

Sidebar helpful hints:

- Use a different font to contrast them from other text
- Use color, colored bullets, headings, a border or bg box (do not use all of these at once)
  - If you use a box, be sure the text doesn't crowd the box…Use ample margins inside & out…

Why study Gestalt?

- So the designer (you) has control over what the viewer sees and on what they focus…

Paragraph w/o Gestalt Principles…

Paragraph #1 as presented without these 3 Gestalt Principles:

Paragraph…organized…

- **The reason that what you're reading right now makes sense to you, other than the fact that you are familiar with the written English language, is due largely to the fact that I'm employing—and you perceive—three important Gestalt Principles. The structure of this paragraph is dependent on its adherence to and consistency with the principles of proximity, uniform connectedness, and good continuation. Without these three factors I would be unable to clearly communicate my thoughts to you through this medium (written/typed words) and what you are seeing would bear little or no relationship to language.**

Groups…proximity, similarity, continuity….

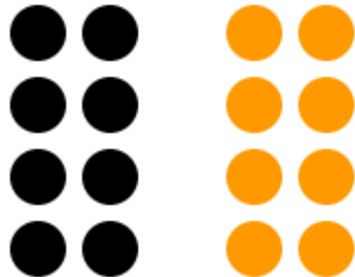This is perceived to be one group and the components somehow related to each other.

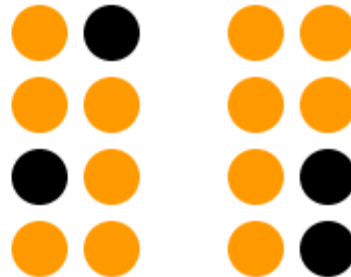We perceive two groups here, and understand that there are differences between them.
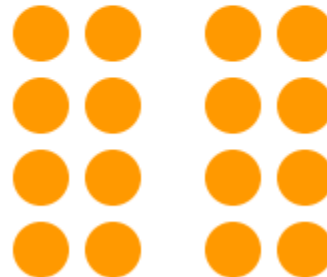
Color & Contrast…
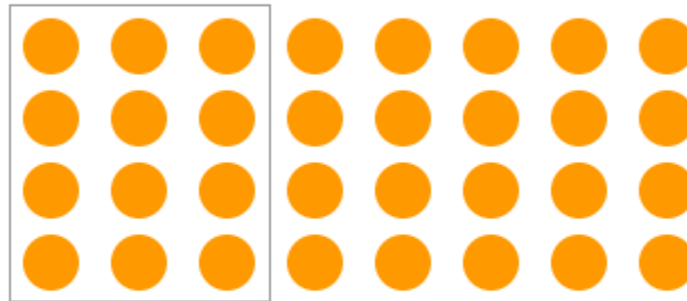

These groups appear to be separated by color or contrast.

Proximity overpowers other signals of distinction, as seen in this example.

Connecting w/lines…

Here, even though the spacing and color is consistent within this collection of elements, those inside of the connecting lines are perceived to be more related than the rest:


…as are the ones connected by lines:

Dashboard displaying connectivity in orgainization…

Here's an example (below) of how uniform connectedness can be useful in organizing a complex interface:

Continuity in Charting…

The graph on the right is easier to read and one may discern information from it more quickly than from the graph on the left …because the graph on the right suggests a continuous line.
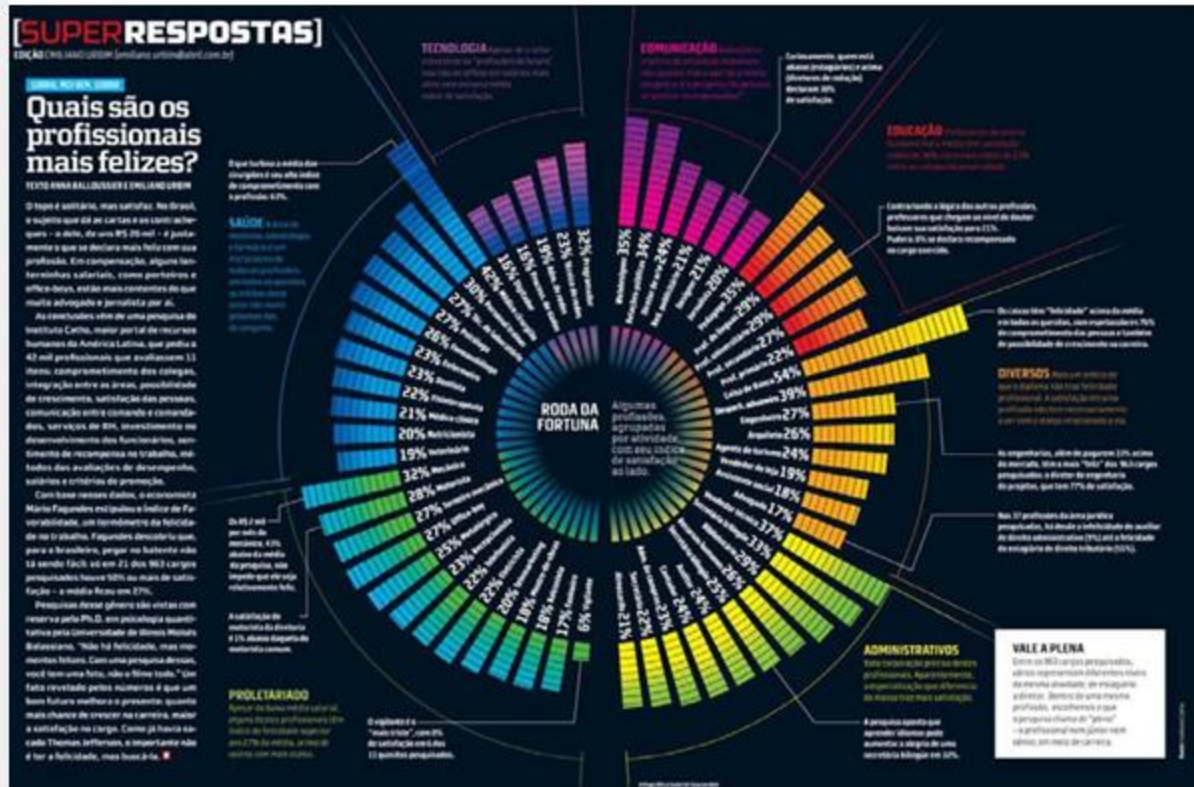
Tweets Per Hour — Mike, Jill, Alan, Lisa
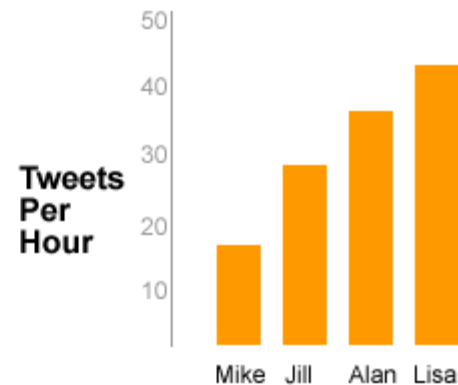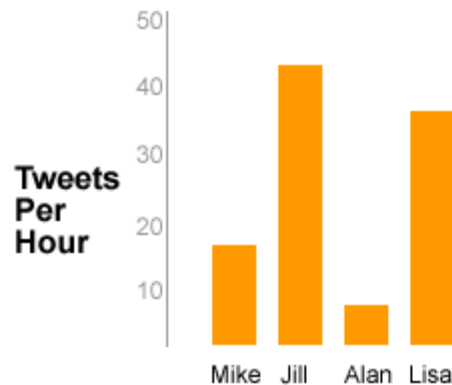
Linear config, color similarity, shape similarity…

Notice how the linear configuration here indicates the relatedness of the elements.

E-Mail Synchronization

1 — Bob sends e-mail to support@example.com

2 — Tender receives the email

3 — Tender creates a private discussion

Bob recieves replies to his email and Tender keeps a record

(There are other principles at play here. Can you discern which ones?)

Here, the elements arranged on the curve are clearly related to each other. More so than the elements not positioned on the curve.

In each of the images above, the components displayed have a clear indication of their relatedness because of how they describe a straight line or are positioned on a continuous curve (and information not on the curve is not as associated as those bits on the curve!). It is therefore easy to suggest or perceive a context that is described by the respective groupings.

In the image, even though the content is not visually uniform, the clear vertical grid makes organization obvious. The content in the lower section of the layout is arranged according to category and even though there is no visible structure, each bit of content is clearly defined and easily associated with its appropriate category. All of this is made possible by the employment and perception of good continuation.

When designing a web page, we designers will usually employ a mechanism that facilitates good continuation: *the grid*. A grid is most useful in bringing order to a layout, but it also is useful in indicating context. For instance, the example below shows how a horizontal-linear configuration helps to preserve context:
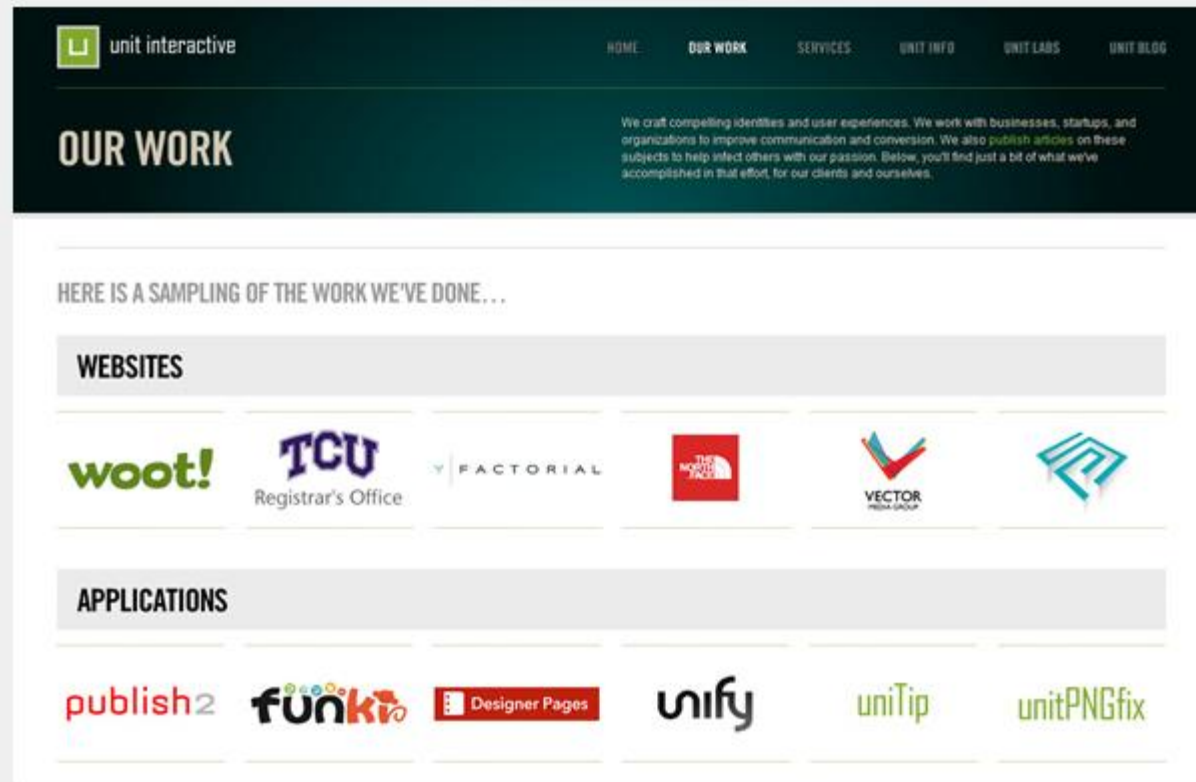
In the above example, several thumbnails are presented under each portfolio category heading. The fact that the arrays are arranged consistently along a horizontal line under the category helps to make clear which thumbnails belong to which category.

Conclusion

These principles are among the more fundamental of the Gestalt Principles. They reference ideas that we all intuitively understand, so you should have no trouble bringing these principles into your design work automatically and intuitively. Whatever else you do to achieve distinction and association among design elements, Gestalt Principles should be utilized as the foundational mechanisms.

By now you've realized that the different principles often work toward the same result, but each has its own unique character, context, and strength. Make a practice of being efficient in your application and exploitation of these principles; use the least amount possible. Don't employ three of them when one will do. That way, you work to maintain elegance and invisibility. And design should almost always be elegant and invisible. It follows that efficiently applied fundamentals are always superior to heavy-handed stylistic techniques. I hope, therefore, that you look beyond this article and the ones previously presented and continue to research Gestalt Principles and find ways to apply them in your work.