

HCI 2/27

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Gestalt Principles of Design

Proximity and Contiguity

- How close things are together can be an indication to the user about how related the things are
- We want to position sets of related things together to indicate their similarities in functionality

Similarity

- You have *visual similarity* but not proximity
- More similarity in the sense of size, shape, color, etc
- How do these visual characteristics imply similarity in functionality?
- Principle: Objects that have similar visual characteristics are perceived as belonging together
- Differences in visual characteristics are perceived as not belonging together, i.e. things are different
 - Color is a good visual channel for this

Common Fate

- Our brains look at a set of things moving together and we see them as a set of things because they're moving together
- An example of this in practice is when you move one slider and other sliders move with it
- You can also have connection by mutual exclusivity (i.e. you can only have one alignment button pressed at a time in a word doc)
- Principle: objects that move together are considered to be part of a group

Closure

- Our brains fill in gaps in figures that we see in order to convey things as a complete object
- Closing off open things skews our perception of what the thing is
- Mostly applies to how you choose to split things up in your UI
 - Esp. important with the popularity of minimalism design
- Principle: We see things as complete objects even when there are gaps in their shape
- Static objects don't need to be entirely drawn or use their entire effective space
- Use whitespace to imply component relationships while lightening the overall design

Continuity

- Principle: We tend to see continuity and smoothness rather than abrupt edges
- Sorry for the thin section I got distracted by filing my taxes
- Static objects look grouped when aligned horizontally and/or vertically
 - Alignment isn't **usually** treated as a gestalt property
- Position and shape hierarchies of related UI components using alignment

Area/Smallness

- Size can determine what you see as an object and what you see as a background
- Objects having a small area tend to be perceived as a figure, not ground
- Overlapping small and large objects tend to resolve into figure and ground, respectively
- Scale and overlap objects according to their relative interactive vs contextual importance

Symmetry