UI/UX DESIGN

Lecture 4. **Patterns, gestalt principles and user psychology**

UX patterns

UX patterns

Pattern-aware design allows you to:

- help customers achieve their goals;

- solve user problems in the least amount of time;

- minimize human error;

- satisfy users' needs and desires;

- minimize cognitive load so that users don't have to learn;

- achieve commercial success, i.e. fulfill business requirements.

UX patterns

The goal of all patterns in design is to simplify and ease the user's journey.

Experimental evidence

In 2015, UX expert Shay Ben-Barak conducted a study in which participants had to dial a phone number using standard and non-standard layouts. With the standard layout, the digits were arranged in order from left to right, just like on regular smartphones. In the non-standard layout, the digits were arranged from top to bottom.

Logo

Navigation

Cart
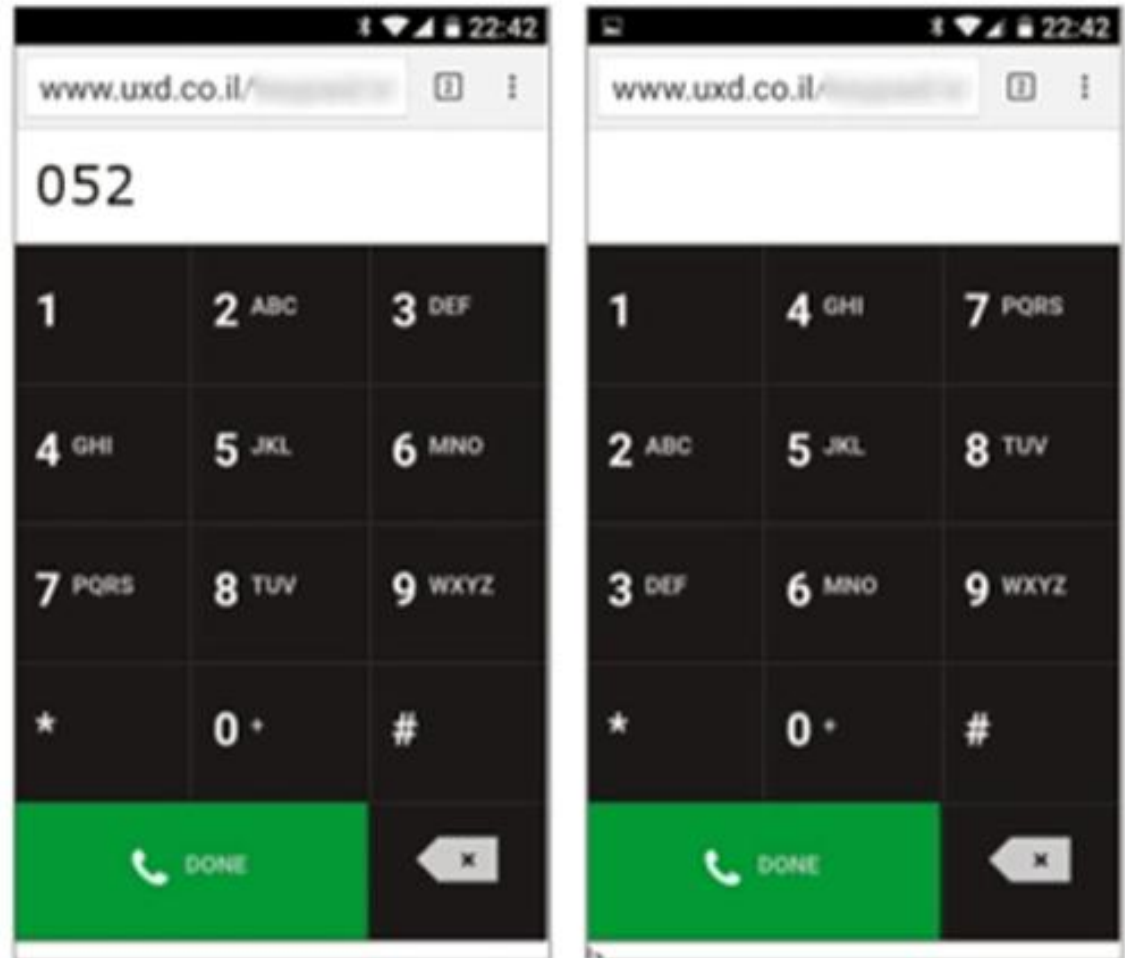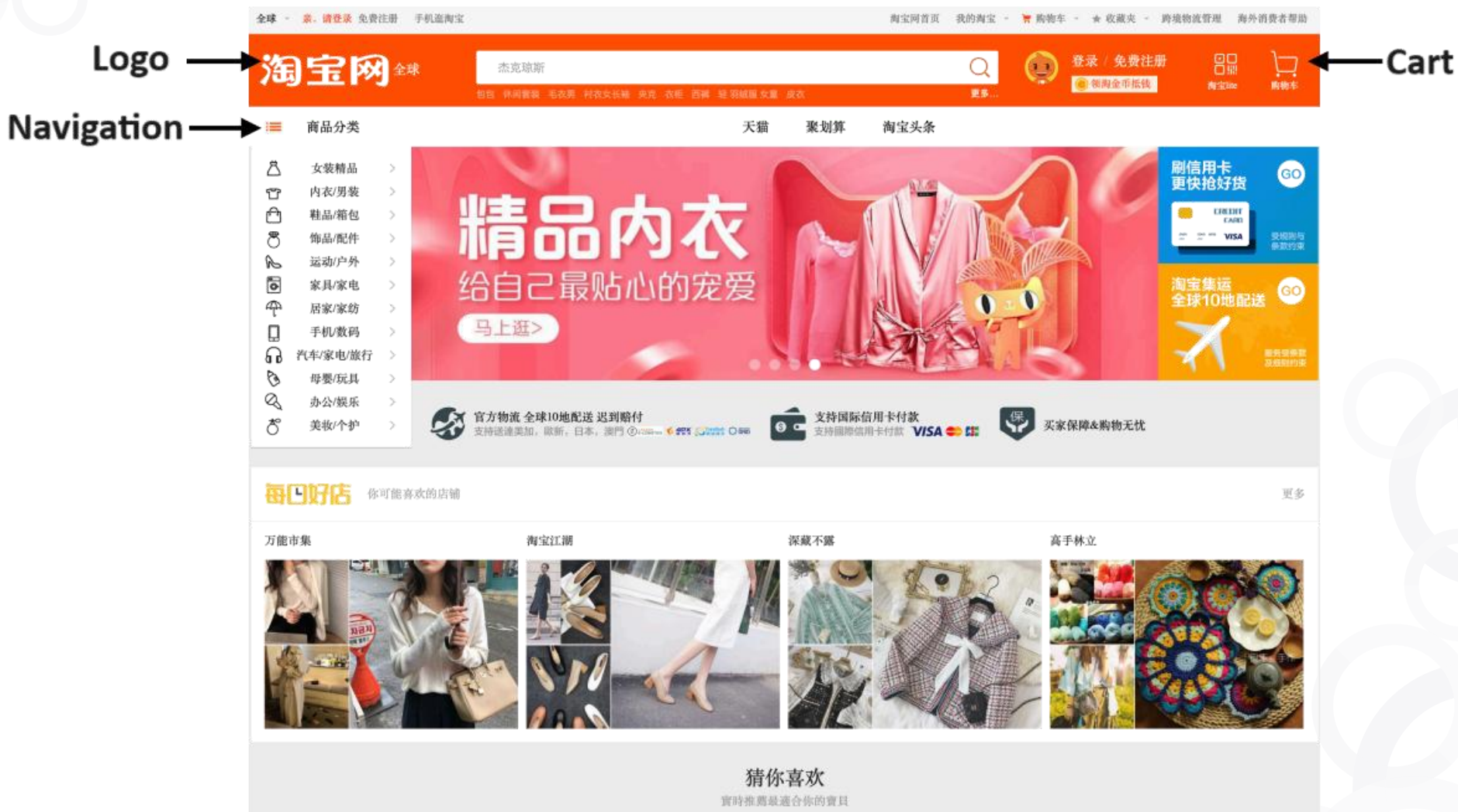
Visual communication

•We recognize similarities and differences.
•We look for patterns.
•We create relationships between the things we see.

According to different studies, including the publications by **Nielsen Norman Group** as one of the pioneers of this field, **UXPin team** and others, there are several popular scanning patterns for web pages, among which "**F" and "Z" patterns.**
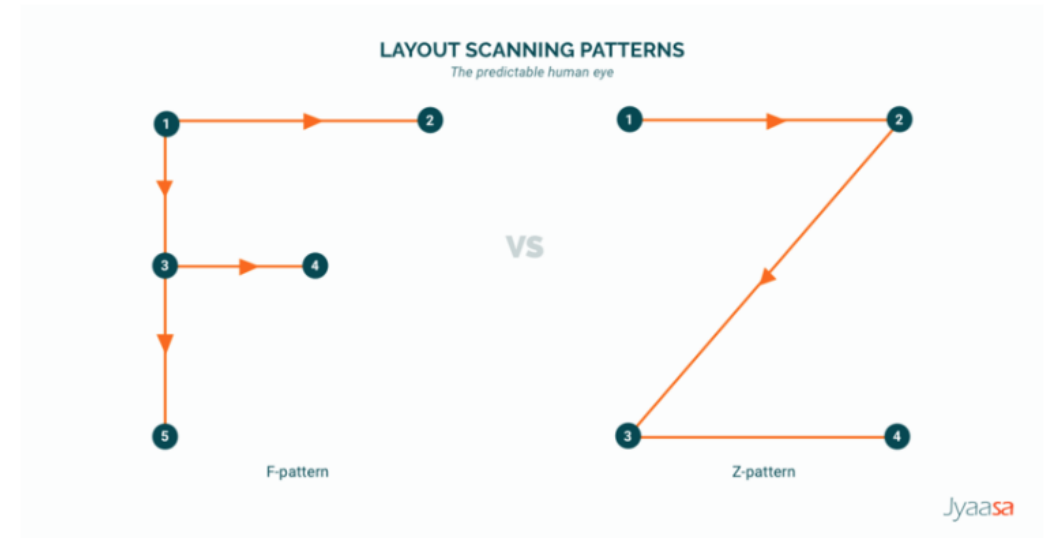
The Gutenberg Diagram

The Gutenberg Diagram is applied to users with a genuine interest on the page content.
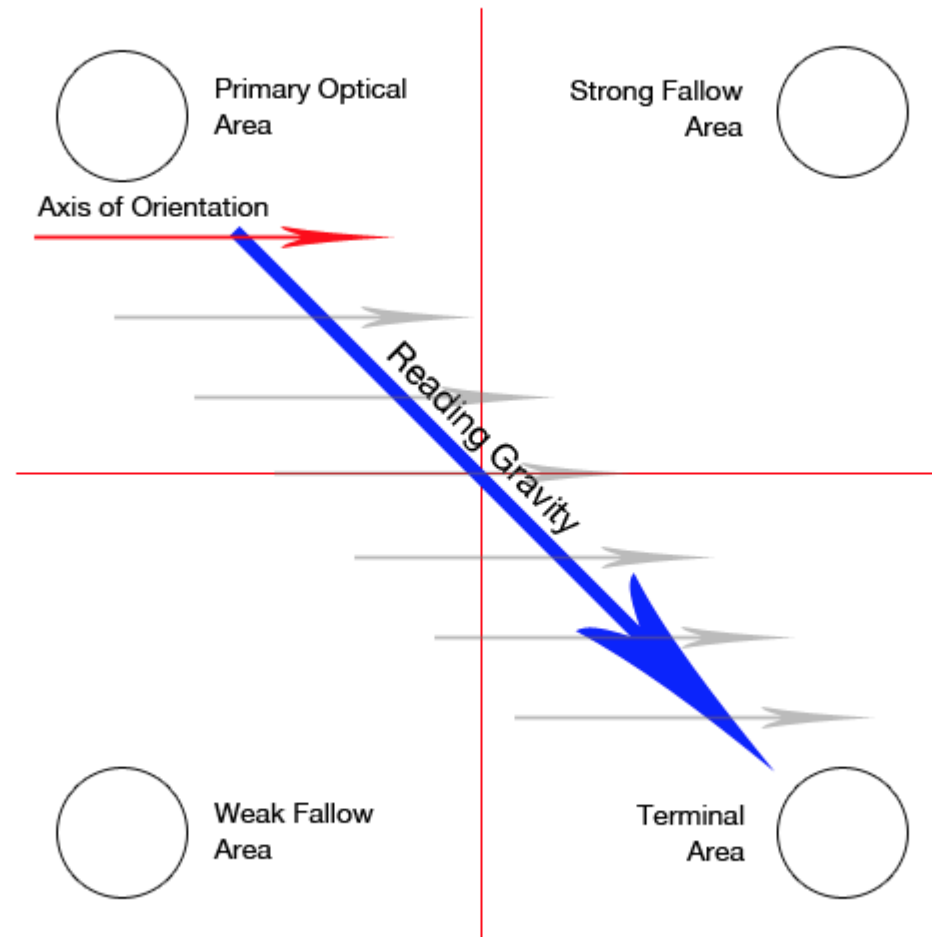
F-pattern

F-pattern is referred to as the most common eye-scanning pattern, especially for web pages with a **big amount of content**. It usually occurs on **text-heavy pages**:

- **blogs**,
- **news platforms**,
- **thematic editorials,** etc.

How could designers use this knowledge?

First, **placing the information of key importance or core interest on the most scanned spots and trying to use short catching headlines and bold headers to draw users' attention**.
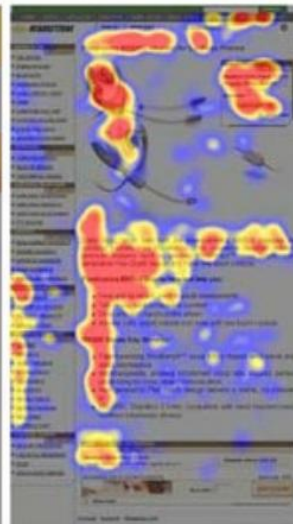
F-pattern

About Us page
on corporate website

Product page
on e-commerce

Search engine results page
(SERP)

Eyetracking visualizations show that users often read Web pages in an
F-shaped pattern: two horizontal stripes followed by a vertical stripe.

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On average, people read only 20% of the text on a page. And only 16% of users read the entire text!

General behavior pattern:

•Start in the upper left corner.

•Read/scan the first (head)line of the text.

•Scan down the left side of the column until you find something interesting.

•Read the interesting thing more carefully.
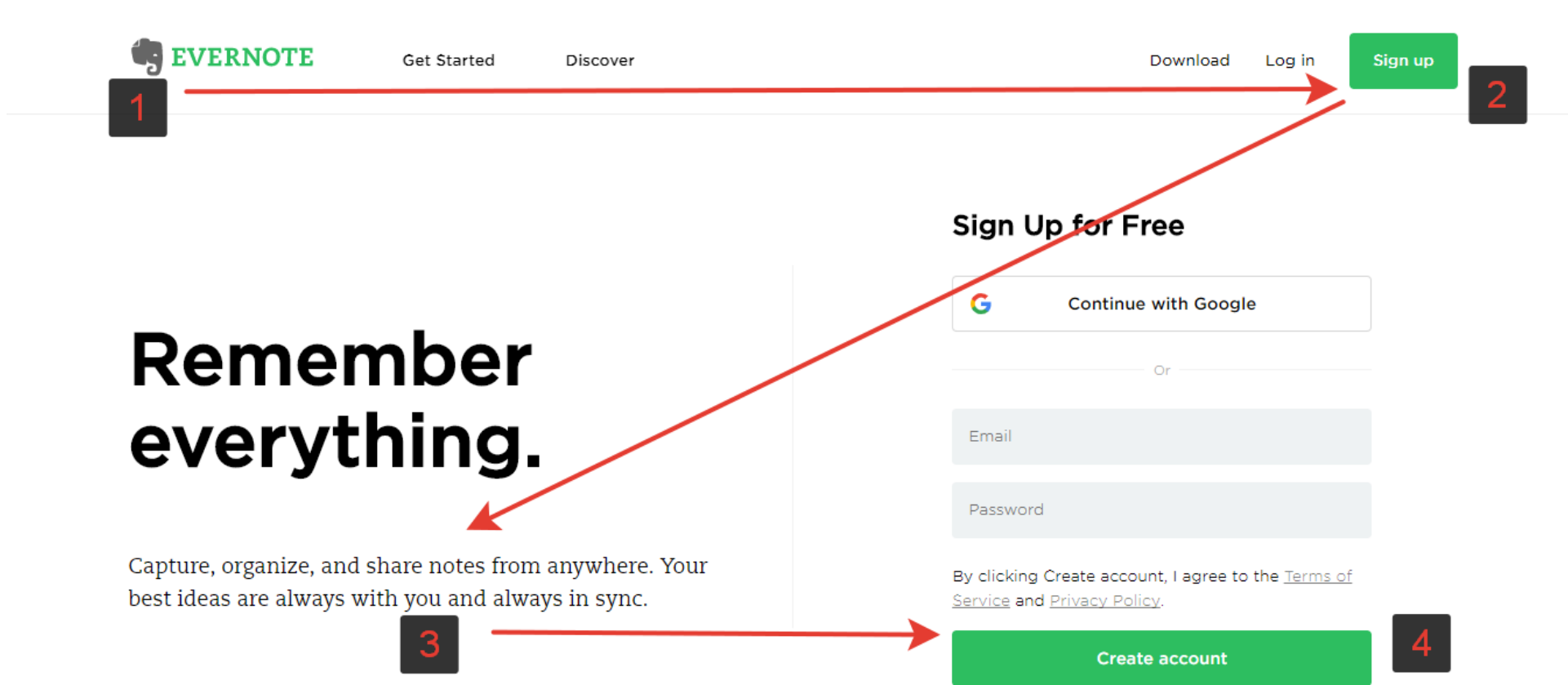
•Continue scanning down.

How to use F-Pattern

Therefore, when creating a text:

1. Place important information in the first two paragraphs.
2. Use headings and subheadings.
3. Bold the important points in the text.
4. Structure your text - 1 paragraph = 1 thought.
5. Use bullets and lists as well as tables.
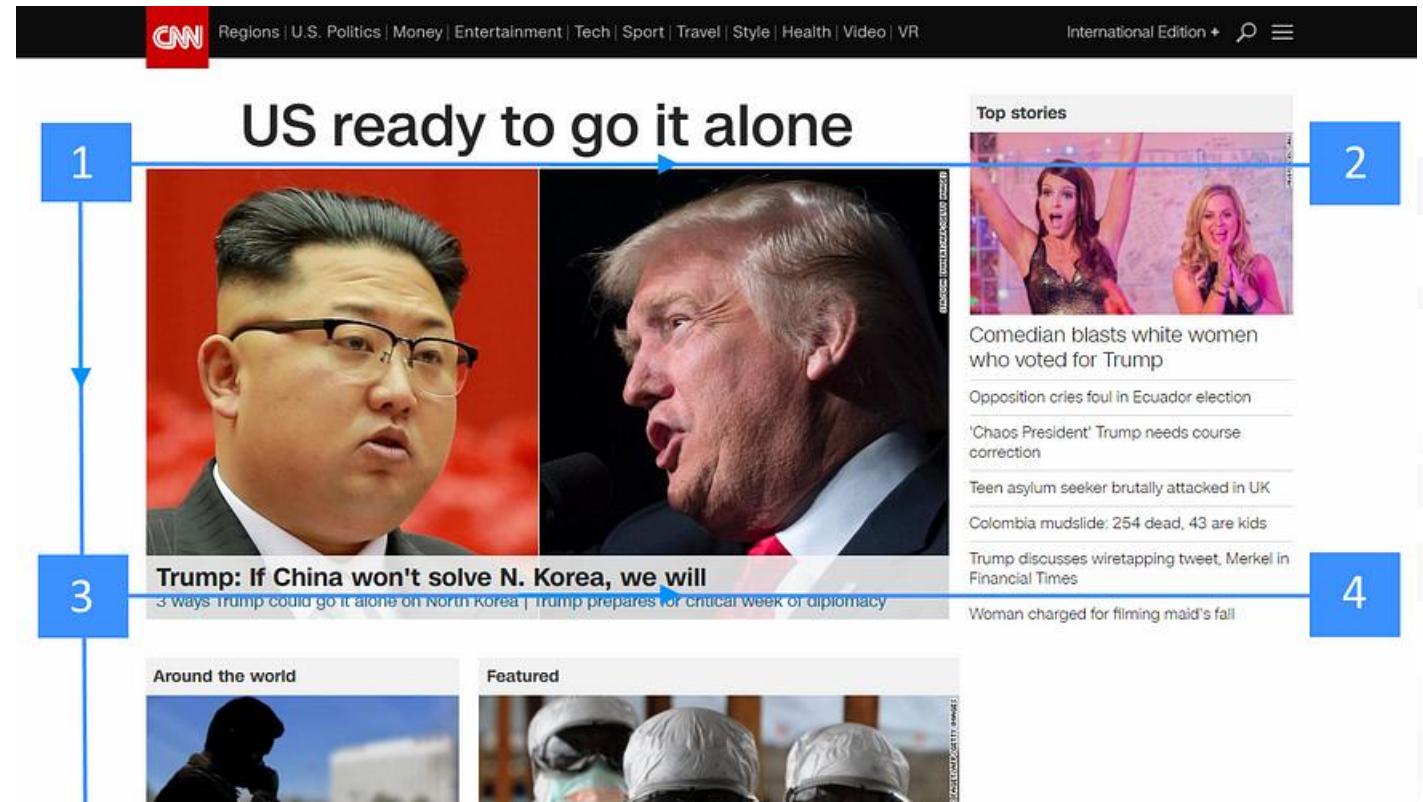
Z-pattern

How to use Z-pattern

The Z pattern is a design understanding that attempts to get ahead of the user, abstracting any distraction and presenting encouraging action as quickly as possible. Z-layout truly shines in design projects where simplicity and a call-to-action are the most important principle.

- When visitor lands on a page what information do you want them to notice first (the key message)?
- In what order do you want them to see other information?
- What do you expect users to do on a page?

Z-pattern
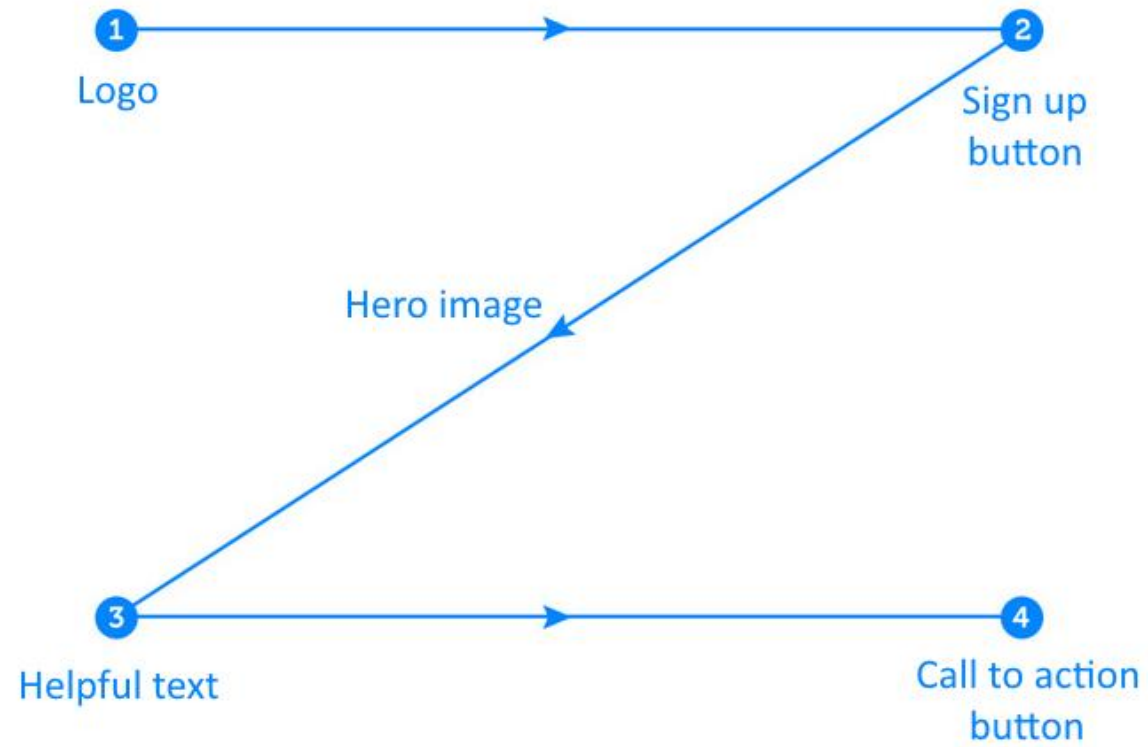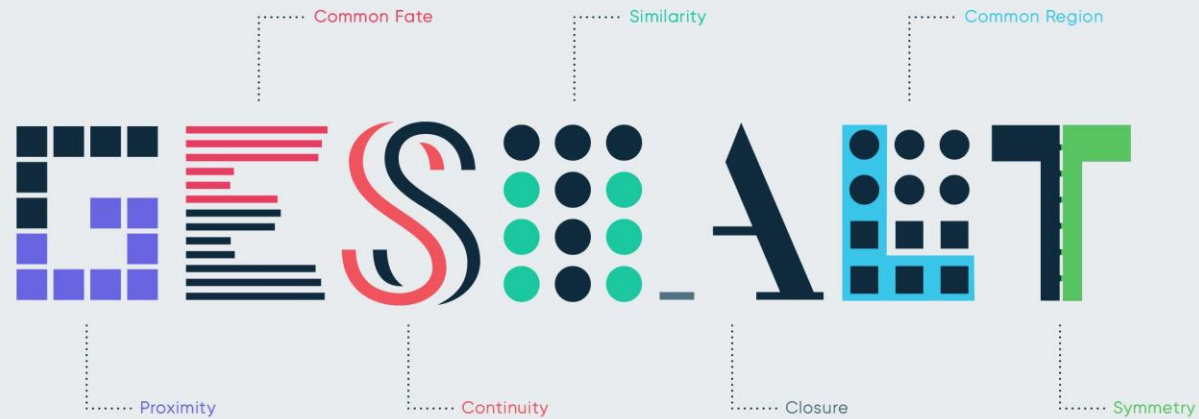
The Gestalt principles are a set of psychological laws that describe how humans perceive and organize visual information. These principles are widely used in visual design to create cohesive, intuitive layouts and interfaces.
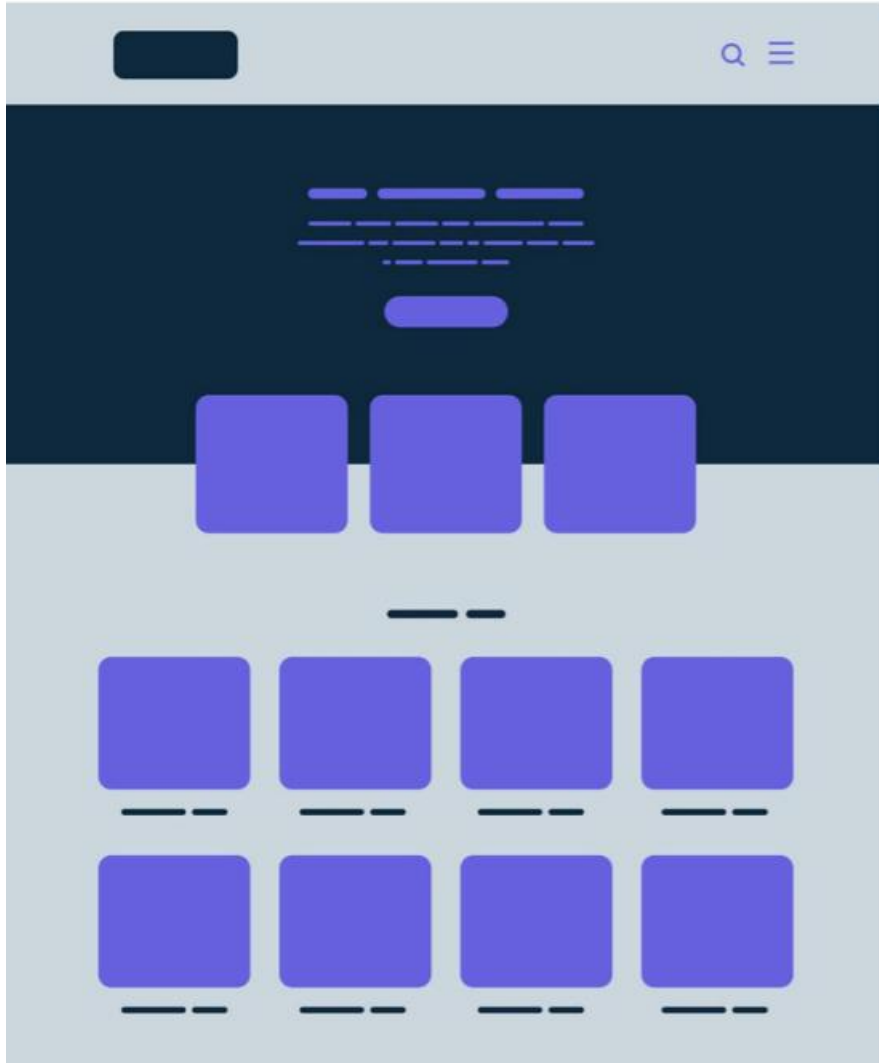
Proximity

Elements arranged close to each other are perceived as more related than those placed further apart. This way different elements are viewed mainly as a group rather than as individual elements.
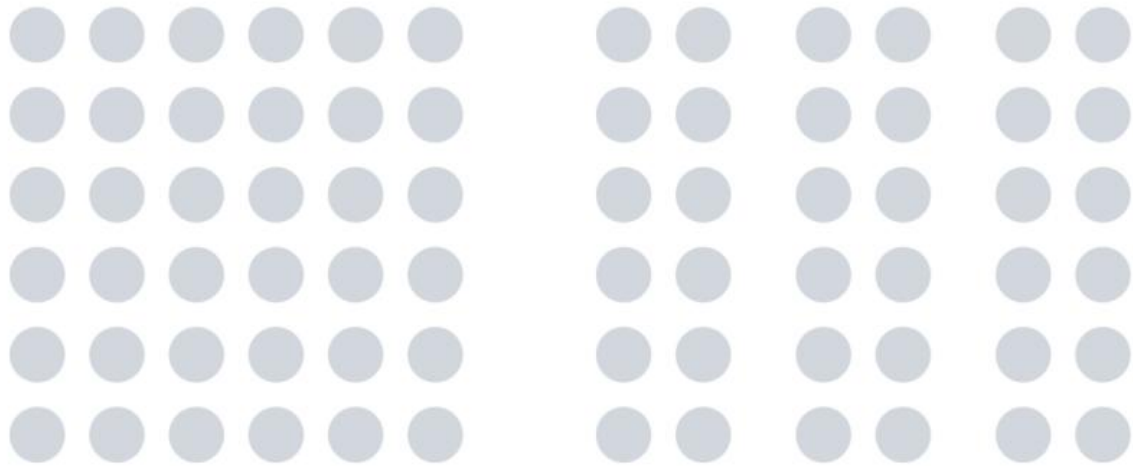
Due to the proximity principle, people will interpret this image as showing two groups of 4 cats each.
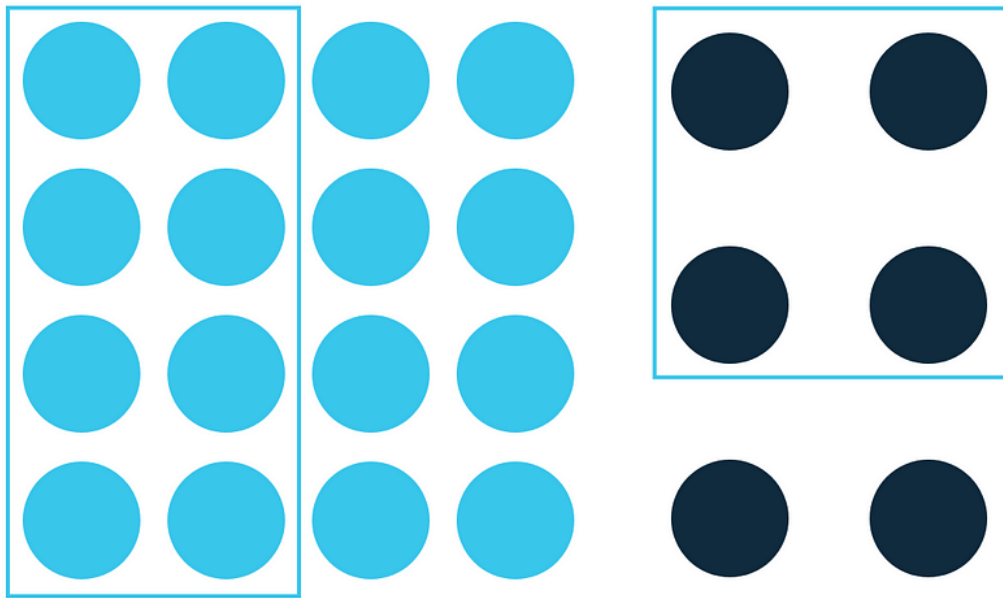
Proximity

We can use the Proximity principle in UI design for grouping similar information, organising content and decluttering layouts. Its correct use will have a positive impact on visual communication and user experience.
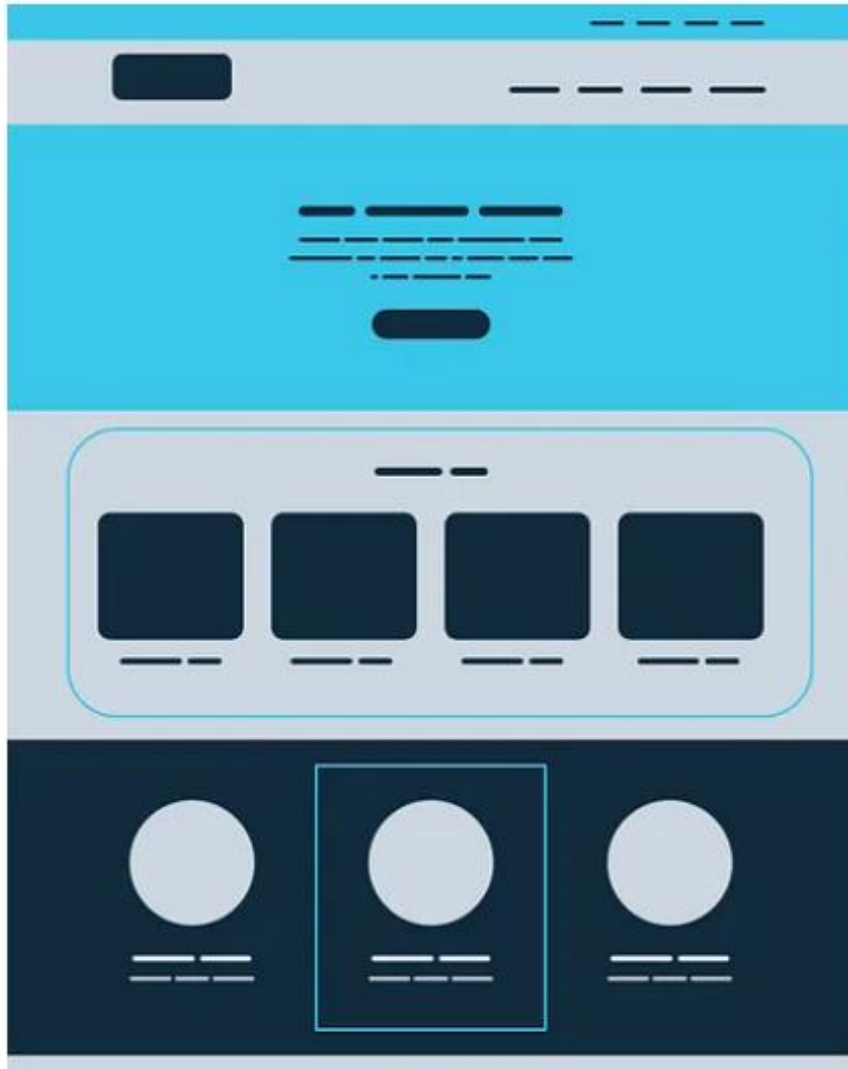
Common Region

Similarly to the Proximity principle, elements placed within the same region are perceived as grouped.

You immediately identify that there's a separate group of sheep in the pen. Maybe they're the next ones to be sheared.

Common Region

The Common Region principle is particularly useful. It can help with information grouping and content organisation, but it can also achieve content separation or act as a focal point. It boosts hierarchy, scanability and assists in promoting information.
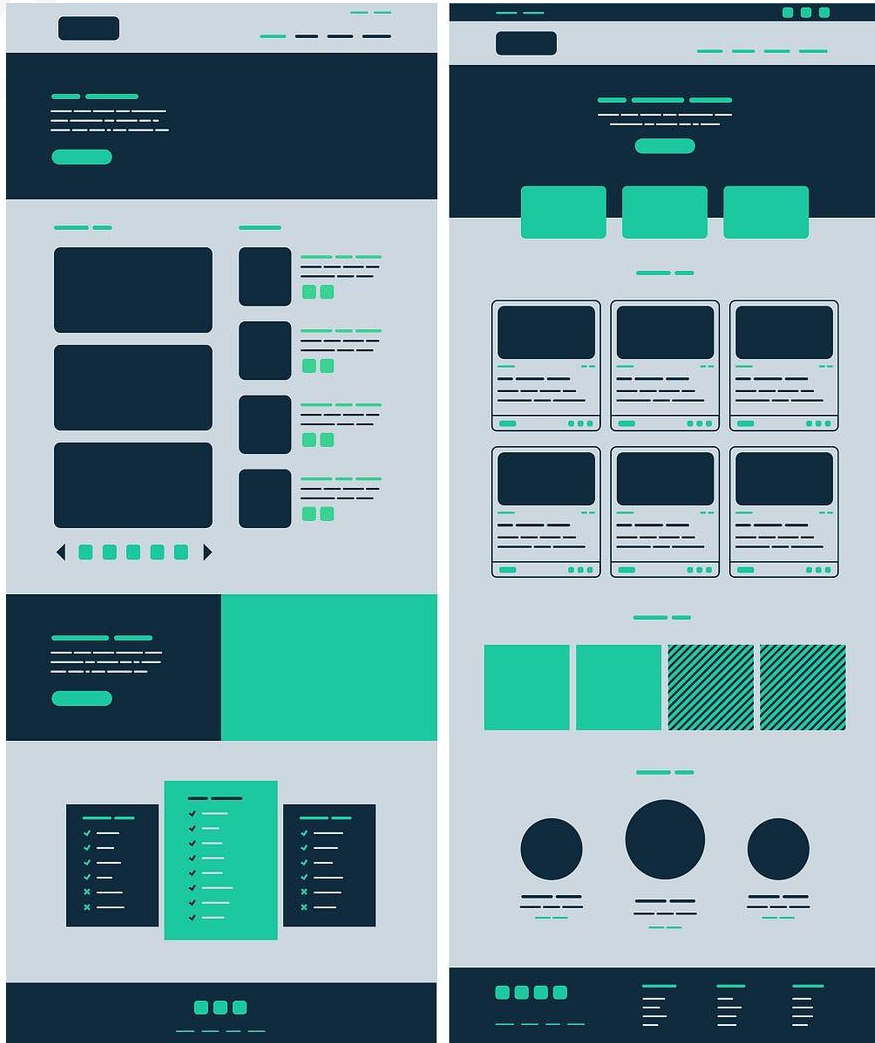
Similarity

Elements sharing similar visual characteristics are perceived to be more related than those not sharing similar characteristics.


The Gestalt principle of similarity predicts that you will perceive two groups of cats in this image.

Similarity

We tend to perceive similar to each other elements as grouped or a pattern. We also might think that they serve the same purpose. Similarity can help us with organising and classifying objects within a group and linking them with a specific meaning or function.
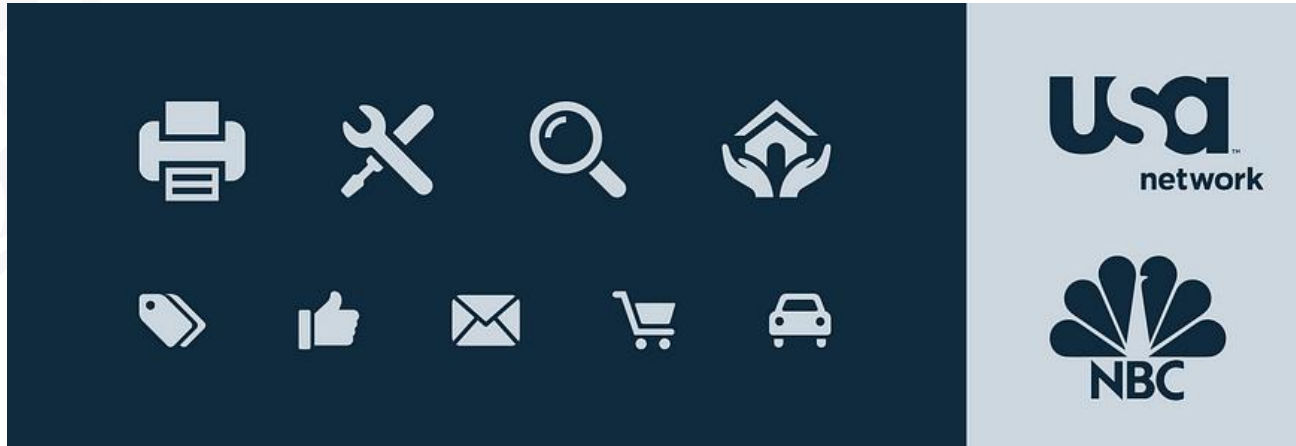
Closure
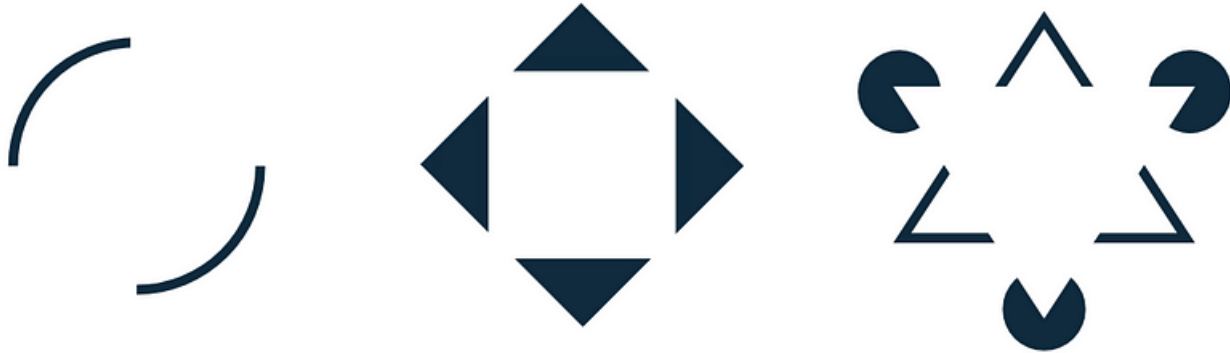
A group of elements are often perceived to be a single recognisable form or figure. The Closure also occurs when an object is incomplete, or parts of it are not enclosed.

Closure

As the Closure principle states, when presented with the right amount of information, our brain will jump to conclusions by filling in the gaps and creating a unified whole. This way we can decrease the number of elements needed to communicate information, reducing complexity and making designs more engaging.

Symmetry

Symmetrical elements tend to perceived as belonging together regardless of their distance, giving us a feeling of solidity and order.
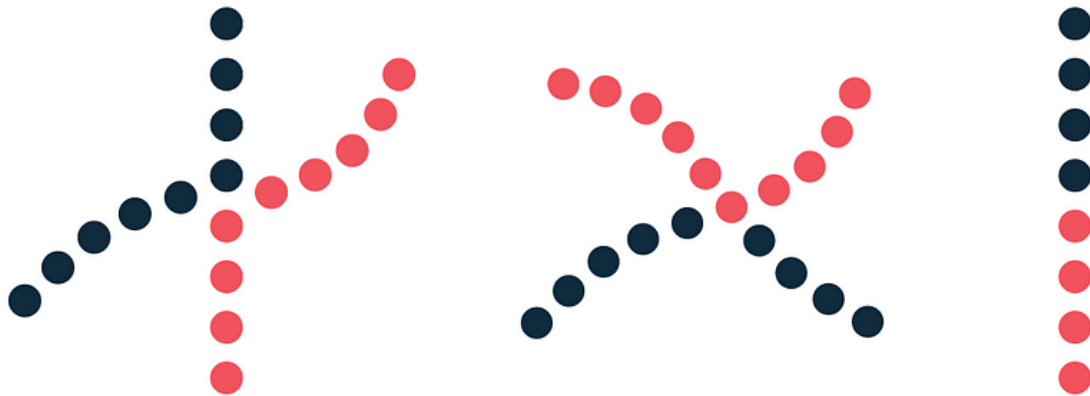
Symmetry

Symmetrical elements are simple, harmonious and visually pleasing. Our eyes seek those attributes along with order and stability, to make sense of the world. For this reason, Symmetry is a useful tool for communicating information quickly and efficiently. Symmetry feels comfortable helping us focus on what's important.

Continuity

Elements that are arranged on a line or as an shape outline, are perceived to be more related than elements placed randomly

Continuity
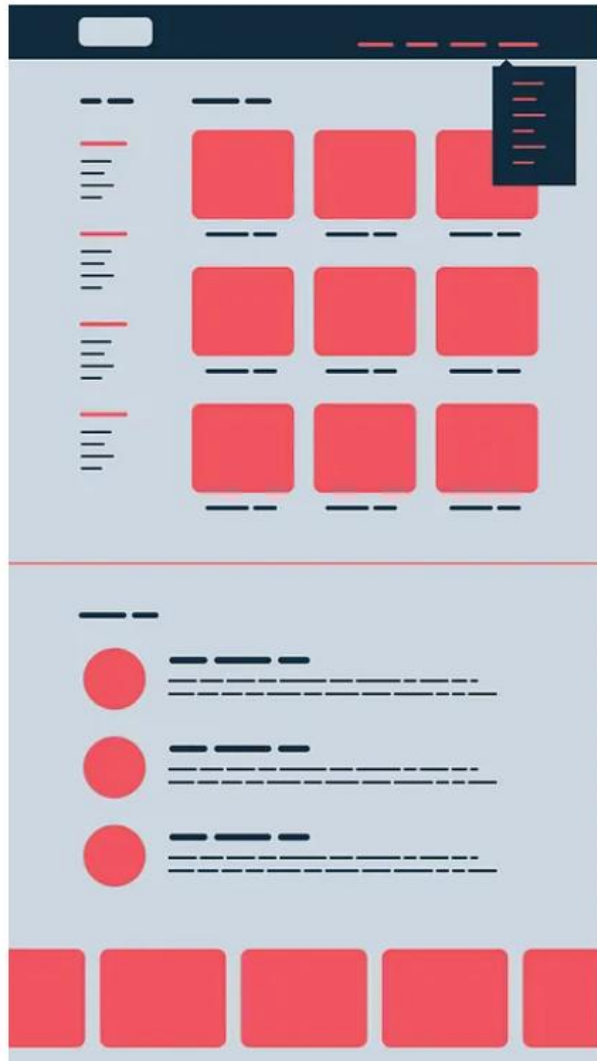
**Use in UX**

Home >

Women >

Men >

Kids >

Decor >

Dropdown menus are best to showcase the law of continuity.

Law of continuity can be seen in navigation bar, drop down menus etc. From above, user can understand categories like — Home, Men, Women etc. Further going ahead sub groups would be there from each category.

The linear arrangement of rows and columns are good examples of Continuity too. Also we can use them in lists, product arrangements, carousels, services or process/progress displays.

Common fate
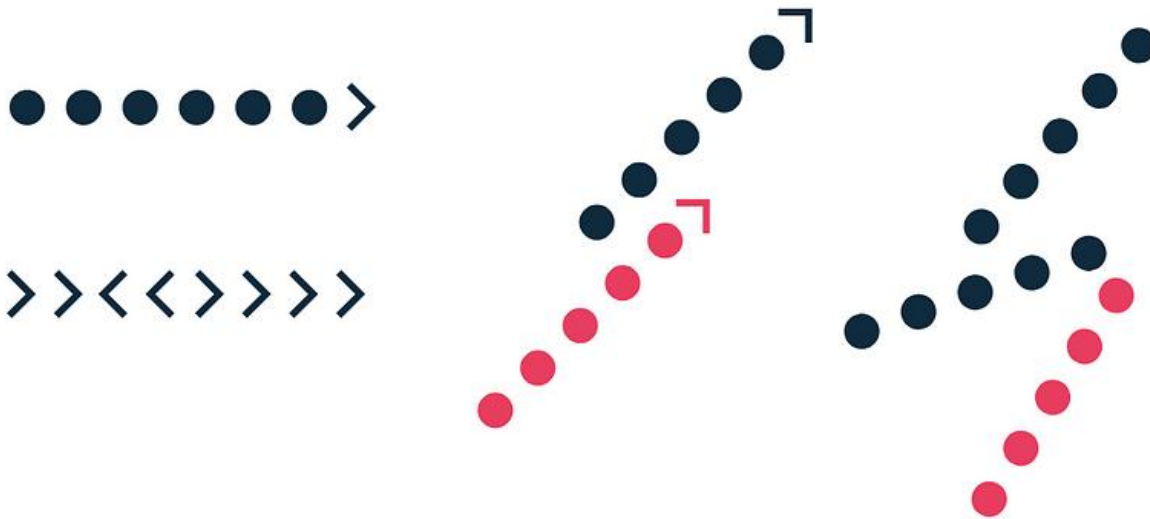
Elements moving towards the same direction are perceived as more related than those moving in different directions, or not moving at all.

Common fate

Regardless of how far apart are the elements or how dissimilar they might appear, if they are moving or changing together, they are perceived as related. This effect can take place even when movement is implied, by other visual elements.

We can use the Common Fate principle in expandable menus, accordions, tool-tips, product sliders, parallax scrolls and swiping indicators.
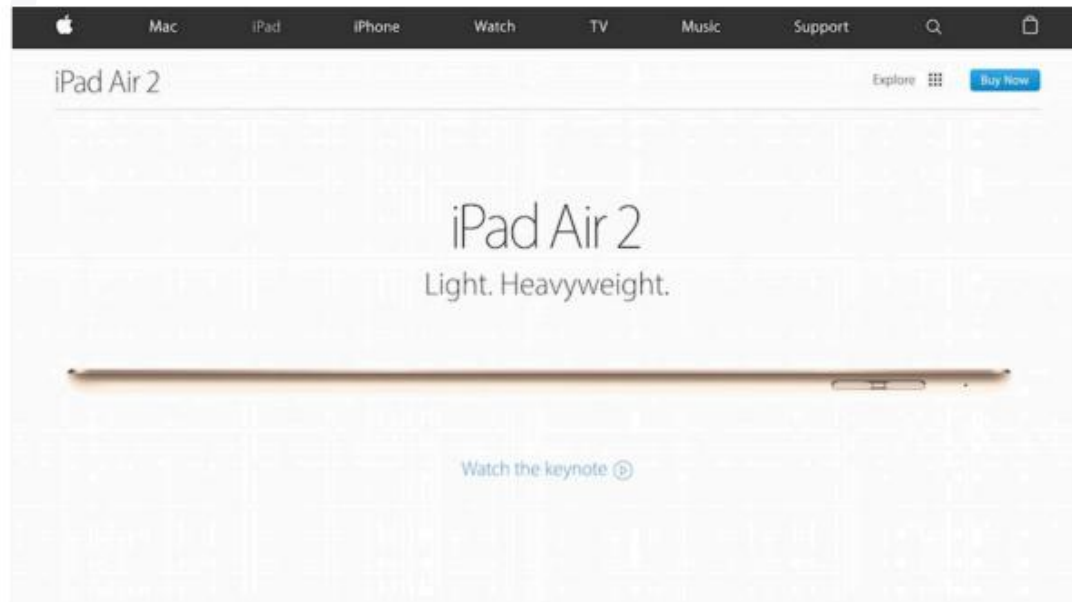
Serial position effect
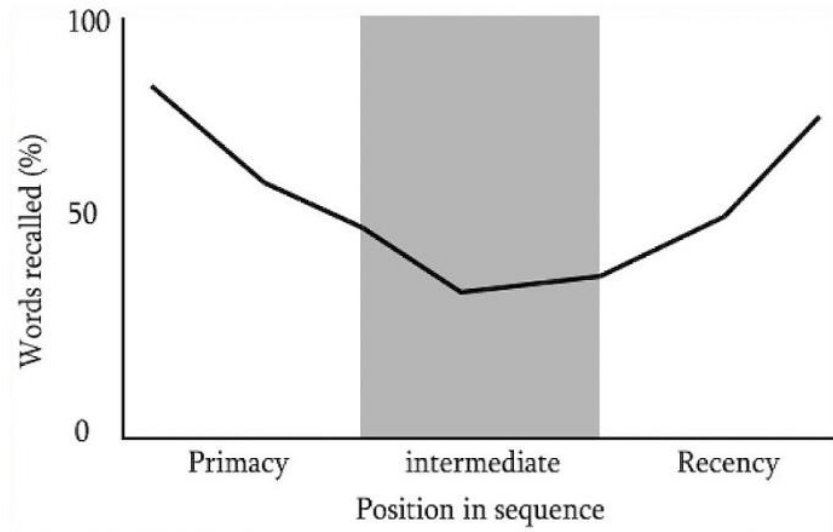
The edge effect is a phenomenon that shows that information that was at the beginning and at the end is best remembered.
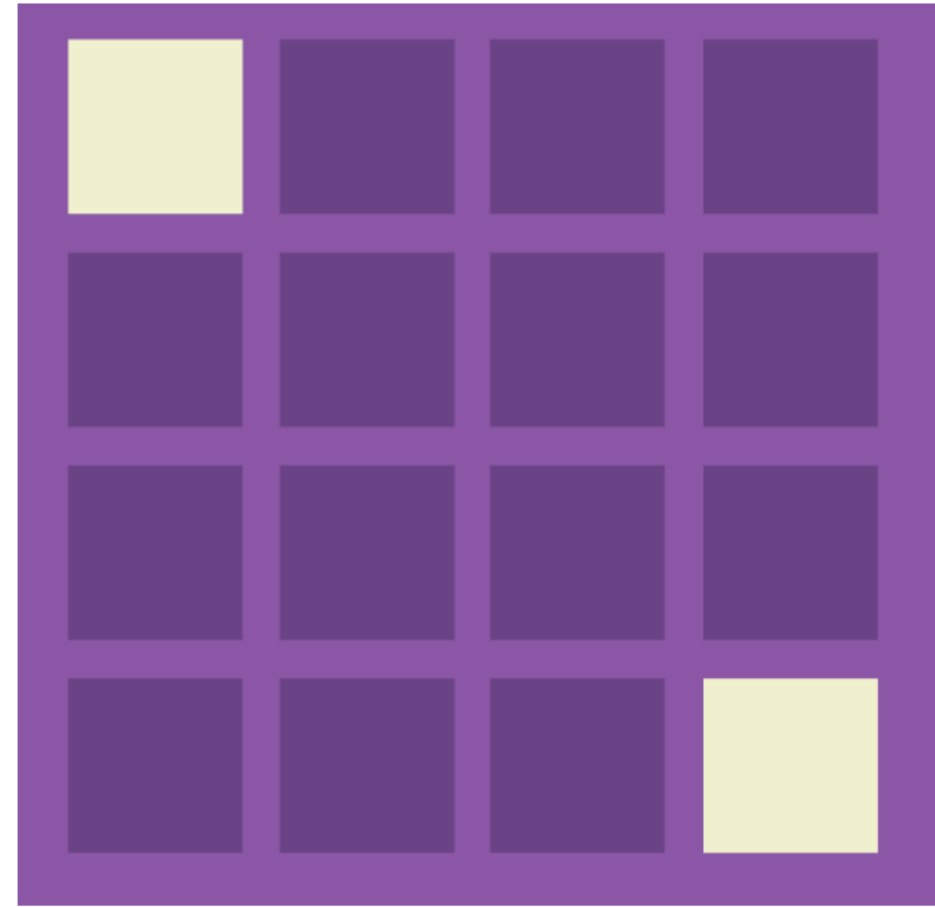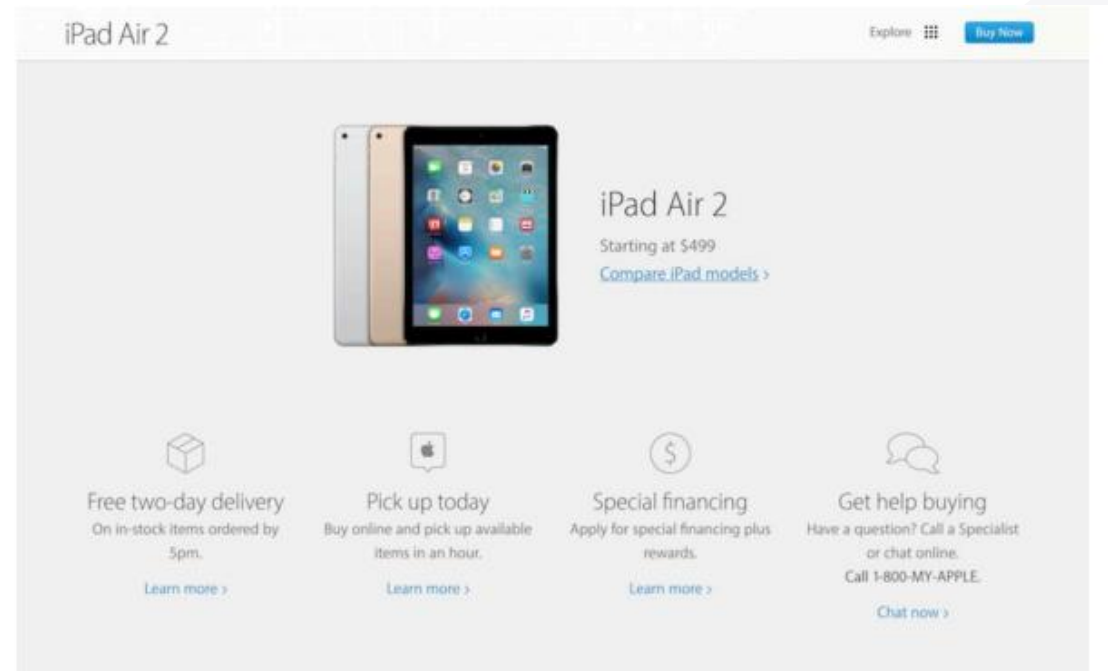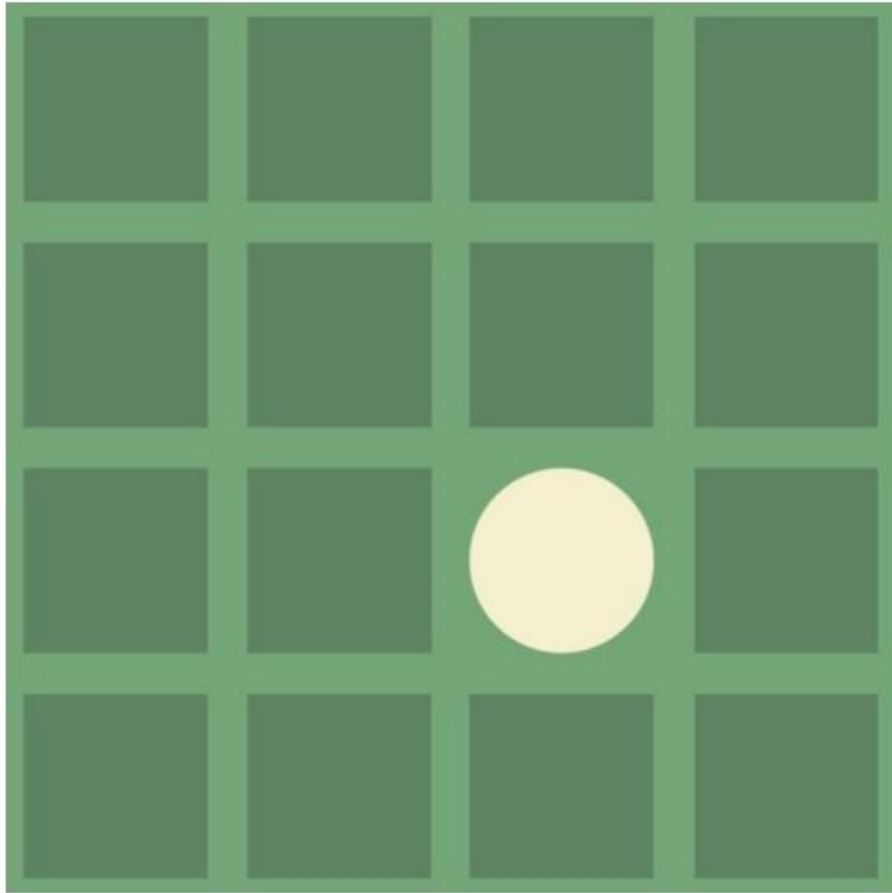
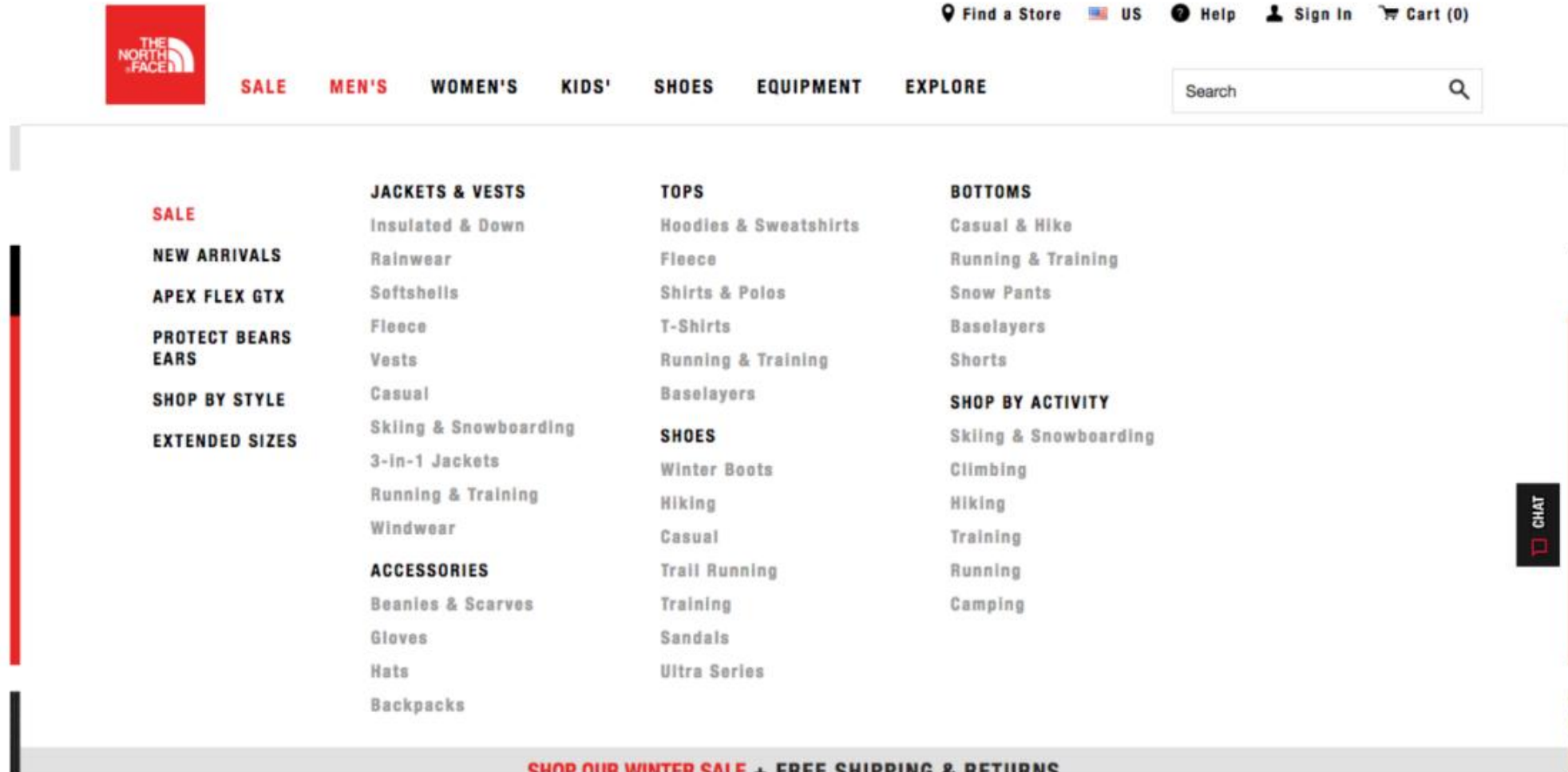# Serial position effect

First screen

Last screen

The law of focal point (Restorff effect)

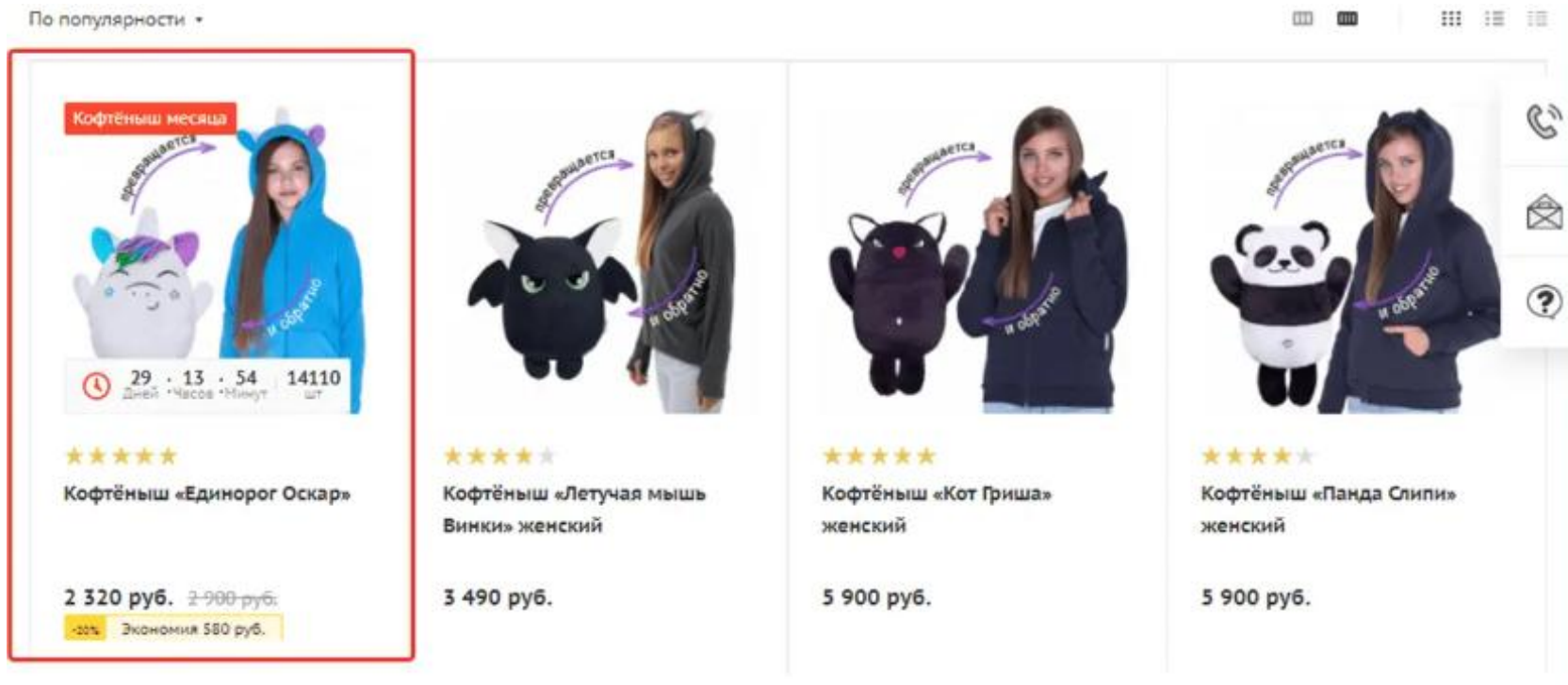An object that stands out from several homogeneous objects is remembered better.

The law of focal point (Restorff effect)

The law of focal point (Restorff effect)

The law of focal point (Restorff effect)

User persona

USER PERSONA
Beckie

"I care deeply about price transparency upfront when I use food delivery app"

BEHAVIOR
Beckie is creative director living in Seattle with her husband and a sweet little dog named Luke. She rarely eats out since she enjoys cooking at home. When Beckie orders food via online, she usually goes with Poke, Thai or Vietnamese dishes. Also she always uses Postmates when she expenses food delivery for her business.

AGE	32
GENDER	Female
JOB	Creative Director
STATUS	Married
LOCATION	Seattle
INTERESTS	Cooking, Fitness, Travel
POSTMATES	Has Experience

NEEDS
- Know the final cost including delivery fee + surcharges before checkout
- Offered a great order customizability
- Be able to afford delivery fee

FRUSTRATIONS
- It charges higher delivery fees compared to other apps
- I had to cancel my order several times because the final price was double the cost in my cart

FAVORITE APP
Uber Eats GRUBHUB POSTMATES

DINING PATTERN

PRIORITY
Food Type
Restaurant
Delivery Fee
Delivery Time
Promo
Ratings
Design
Others

USER PERSONA
John

"I feel negative about food delivery whenever I have to request for a refund because of not showing drivers"

BEHAVIOR
John uses food delivery services occasionally about 1 time per month in the evening around dinner time. Usually it's just for him and his girlfriend but sometimes he uses it to order primarily Indian, pizza or BBQ for his house party. Recently he not showing up for the paid dish so he had to request for a refund.

AGE	29
GENDER	Male
JOB	Web Developer
STATUS	Single
LOCATION	Seattle
INTERESTS	
POSTMATES	No Experience

NEEDS
- Easy UI design that shows everything simply and intuitively
- Contact drivers or customer service center to track down my order

FRUSTRATIONS
- It's a little tedious to sign up because of no federated sign up / log in with SNS or email account
- Sometimes drivers don't show up or have a hard time finding my house but I cannot contact them directly
- I don't know how much to tip

FAVORITE APP
Uber Eats

DINING PATTERN

PRIORITY
Food Type
Restaurant
Delivery Fee
Delivery Time
Promo
Ratings
Design
Others

THANK YOU!