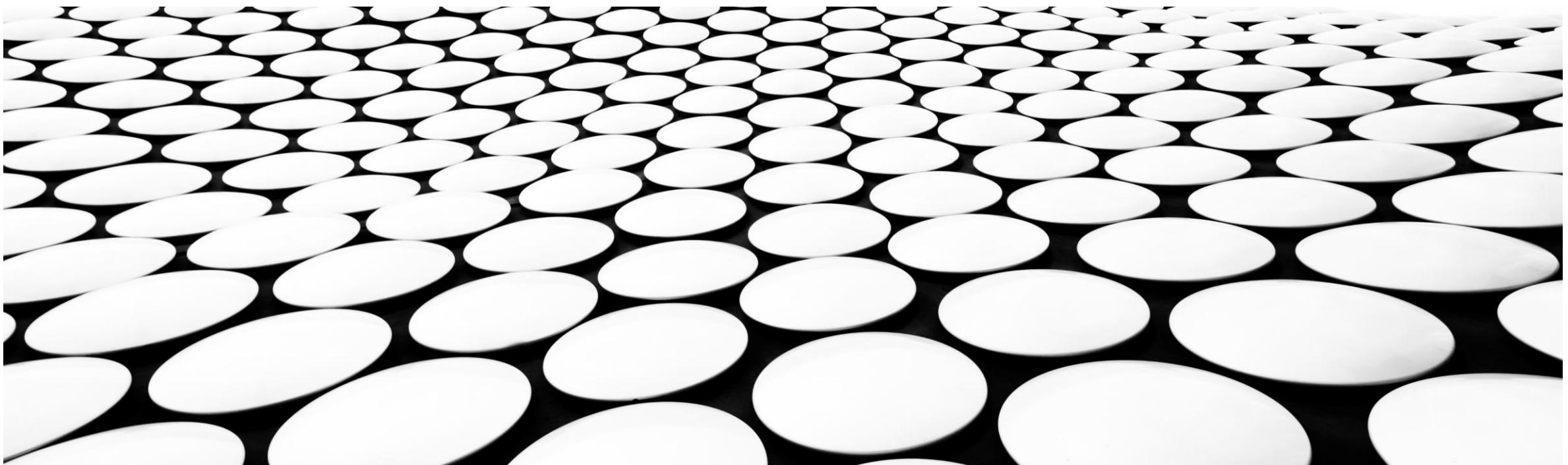


HUMAN COGNITION AND ITS IMPACT ON UI DESIGN





HUMAN COGNITION AND ITS IMPACT ON UI DESIGN

- Introduction
- Memory (short term / long term)
- System Image (organisation)
- System Image (different personas)
- Reasoning processes

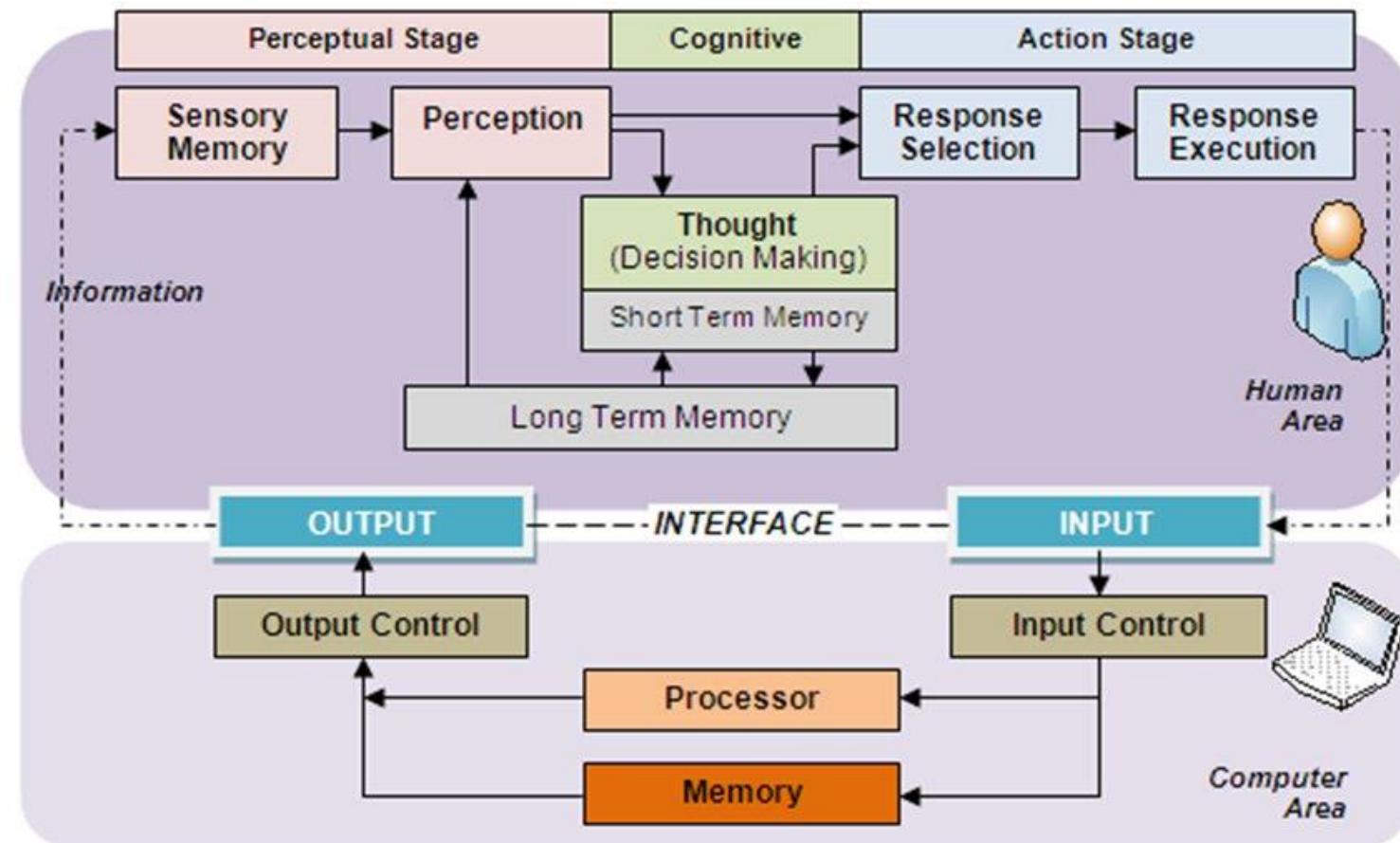
- Attention
- Perception
- Language
- Learning

Week 6

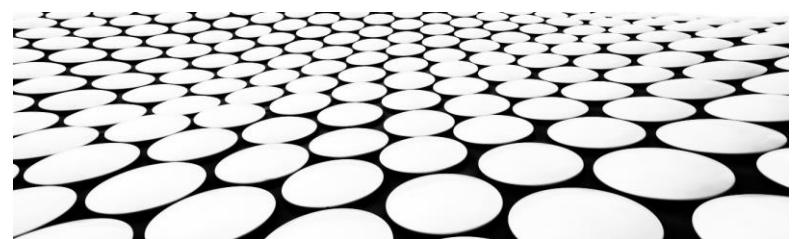
Week 7

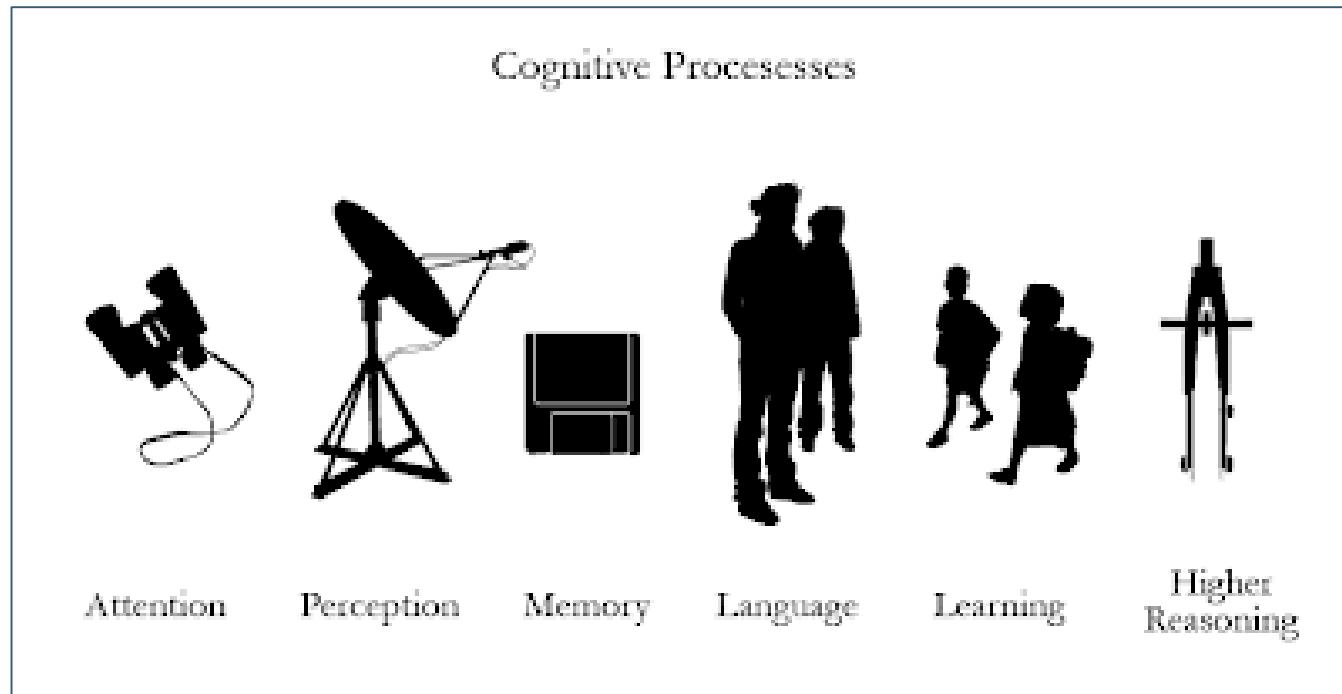
Order is different
from videos

Introduction

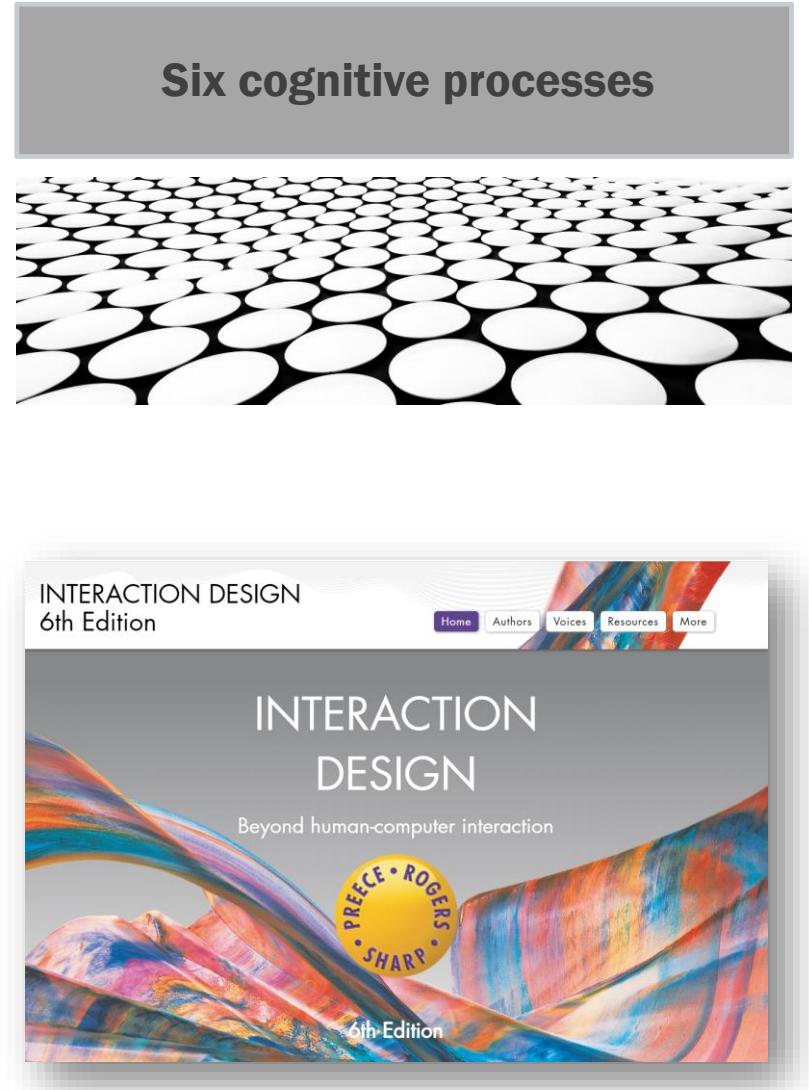


Complex view





Info/Image Source



Back-end data may be in databases with an organization already fixed.

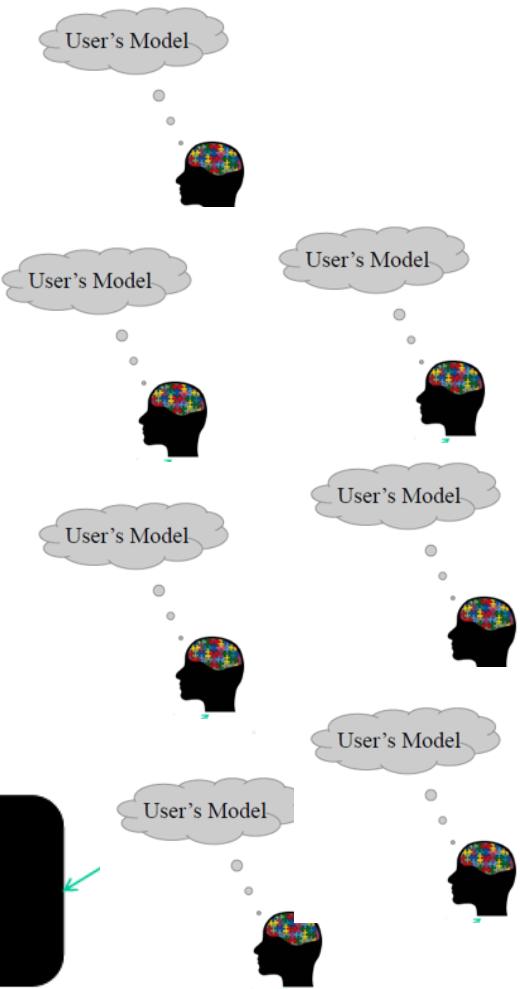
Designer's Model



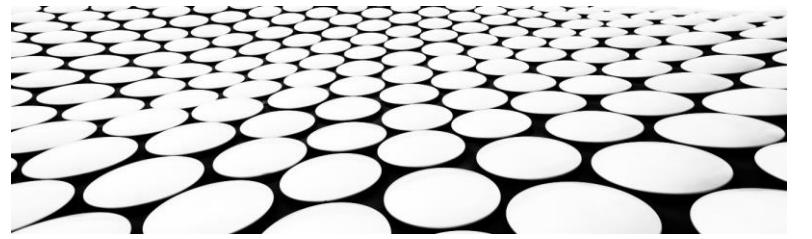
Design

System

System
image



Different Personas = different models



The « users » (at the start of design or even production) must be the defined personas.

Tangerine

Earn some cha-ching

Sign up as a Client using promo code EARNMORE today. You could earn up to \$400 cash back on eligible purchases and a 2.75% Savings rate.¹

[Learn More](#)

Up to \$400 cash back | Earn 10% back* | Great GIC Rate

What can we help you with today?

Saving
Grow your money and save for your goals.

Spending
No-fee direct chequing Money-Back Credit Card

[Learn More](#)

Leons HOT TRENDS EVENT

[VIEW FLYER](#) [FIND YOUR STORE](#)

HOT DEALS ON PATIO FURNITURE!

[SHOP NOW](#)

50% OFF SELECT SOFAS
Discount will be calculated based on regular price of the sofa.

50% OFF SELECT DOUBLE/QUEEN/KING BEDS
When you buy the matching Loveseat and Chair.

SAVE \$1000[†] WHEN YOU SPEND \$6500 OR MORE ON MAJOR APPLIANCE PACKAGES
Excludes American, Maytag and GE Care.

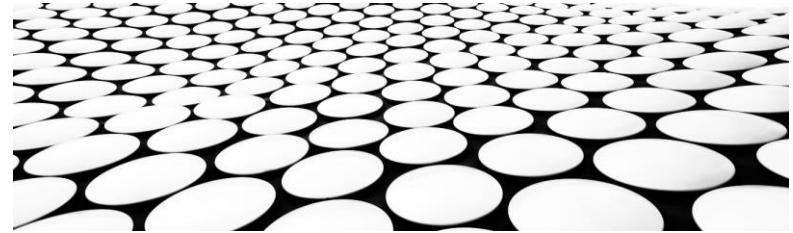
SAVE UP TO \$700 ON SELECT MATTRESSES

SAVE UP TO \$300 ON SELECT TVs

Welcome to Leon's
HOT TREND EVENT Ends Wednesday !!!

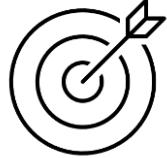
CREDIT AVAILABLE

Case studies



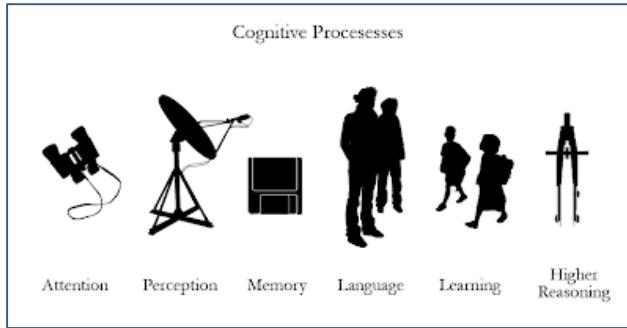


Attention



GOALS OF THE PRESENTATION

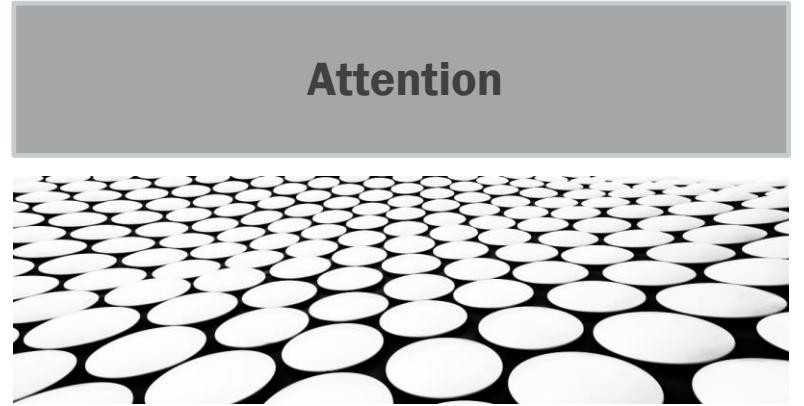
- Process of attention
- Attention and multi-tasking
- Case study - banks

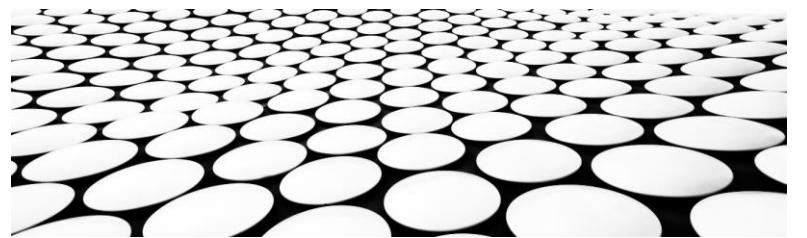


Attention: process for selecting an object on which to concentrate.



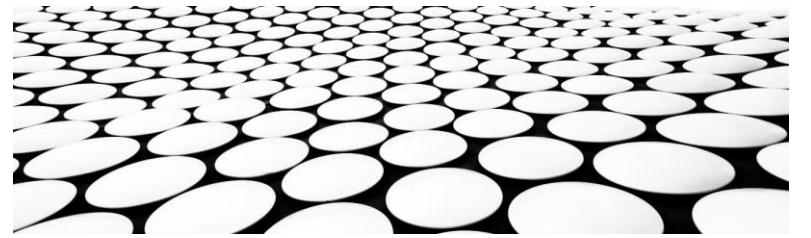
Design implications: make information visible when it needs attending to; avoid cluttering the interface with too much information.



ATTENTION**Attention limitations**

- People can be easily distracted
- People are creatures of habit
 - Very hard to unlearn processes that are done almost automatically
 - People multi-task
 - Make the system's state clear for users going back and forth

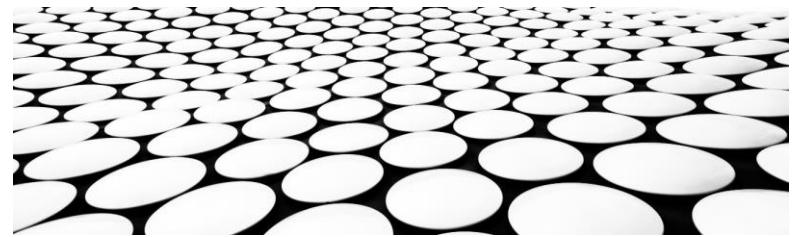
Parallel multitasking



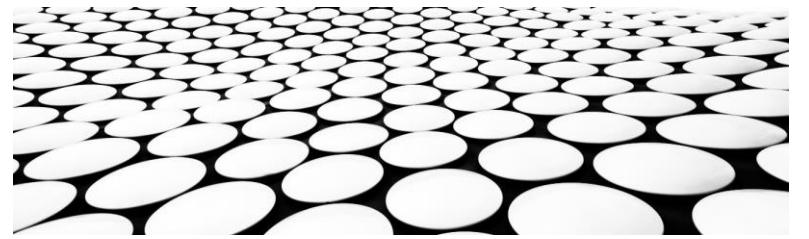
- Carrying multiple tasks out at the same time
 - Real life: Driving while listening to music
 - Laboratory: Draw circle with left hand while drawing a rectangle with the right hand

Sequential multitasking

- Carrying multiple tasks in rapid sequential order (switching)
 - Preparing a meal: Cut vegetables. Put potatoes in pan. Sort the spices. Check the cookbook. Check if potatoes boil. Stir fry the vegetables.
 - Rapidly switching between computer tasks compared to doing only one task.



Attention test



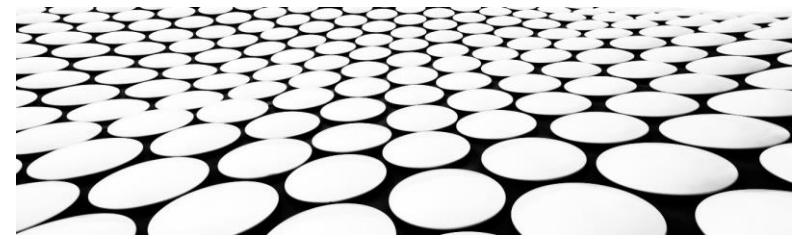
How many passes do you count ?
<https://youtu.be/z-Dg-06nrnc>

Inattentional Blindness-How Many Passes



How many passes do you count ?
<https://youtu.be/z-Dg-06nrnc>

Attention test



10 TIPS FOR DESIGNING EFFECTIVE VISUAL COMMUNICATION

Without good design, even the best, most compelling story is lost. Follow these design best practices to ensure that your visual communication is both beautiful and effective.



1 **COLOR**

Use no more than five colors in a single layout. Color should be used sparingly to highlight important information.



2 **TYPOGRAPHY**

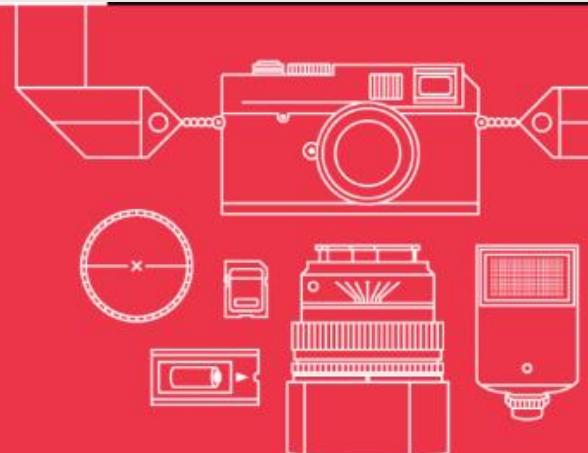
All fonts should be legible and appropriate for the communication style.



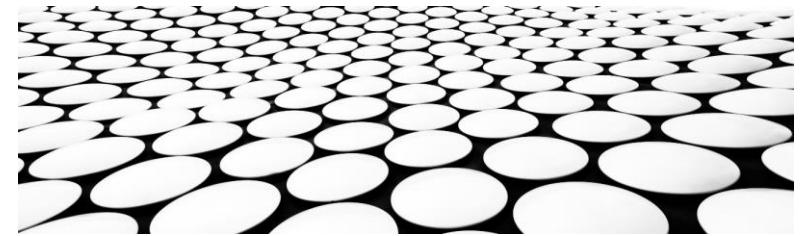
3 **LAYOUT**

Present content in a way that guides readers through in a logical hierarchy.

Aligning the elements in a layout with each other will help maintain consistency.



What are our tools to attract attention?



4

CALLOUTS

Use callouts sparingly to highlight only key information.



5

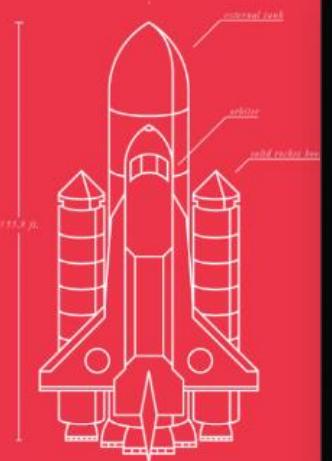
SPACE

Keep significant negative space. When too much information is in a layout, messaging becomes cluttered and incoherent.

6

ILLUSTRATION

Illustration should match tone and subject matter. Only include if it enhances the content.



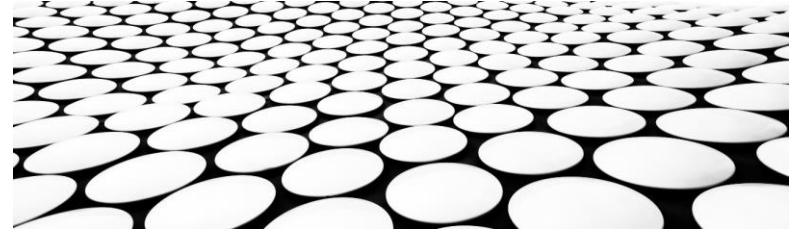
10

SIMPLICITY

Avoid unnecessary design, including 3D charts, ornamental illustration or extraneous elements.



What are our tools to attract attention?



- Where is the site bringing our attention to?
- Is it using fonts/colors to focus our attention?
- What is in the center of the page?
- What images were chosen?



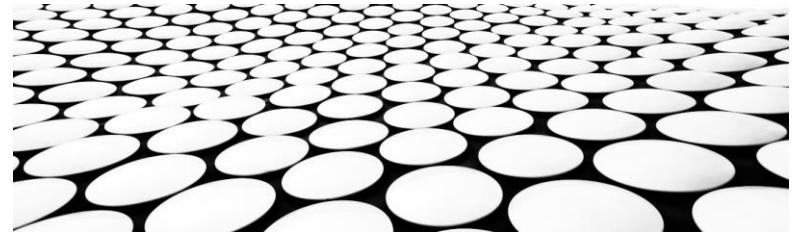
Tangerine

NATIONAL BANK

TD Canada Trust

The image shows three side-by-side screenshots of banking websites. The Tangerine website features a black and orange color scheme with a large orange banner on the left. The National Bank website has a white background with a red header. The TD Canada Trust website has a white background with a green header. All three sites include sections for credit card promotions, savings accounts, and various banking services.

Case study - banks



Earn some cha-ching

Sign up as a Client using promo code EARNMORE today. You could earn up to \$400 cash back on eligible purchases and a 2.75% Savings rate.¹

[Learn More](#)

Up to \$400 cash back

Earn 10% back*

Great GIC Rate

Feedback

What can we help you with today?

Saving
Grow your money and save for your goals.

[Learn More](#)

Spending
No-fee daily chequing. Money-Back Credit Card.

[Learn More](#)

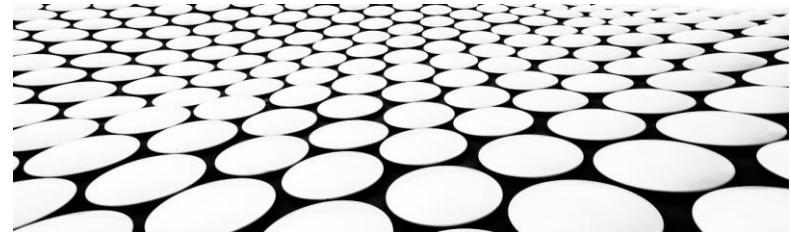
Investing
Do your future a favour.

[Learn More](#)

Borrowing
A smart and affordable way to borrow.

[Learn More](#)

Case study – bank (1)



- What attracts our attention?
- Use of fonts / colors?
- Central element?
- Images?

Personal Business Wealth Management Search Help FR Become a client Sign in

NATIONAL BANK

Bank accounts Credit cards Borrowing Mortgage Savings and investments Insurance Advice

We're here for the Ukrainian community.
Our hearts go out to the Ukrainian community. Learn about what steps we're taking to show our support.
[Learn more](#)

Credit card promotions

Open an account. Get 20,000 points and don't pay annual fees for the first year. It's that simple.

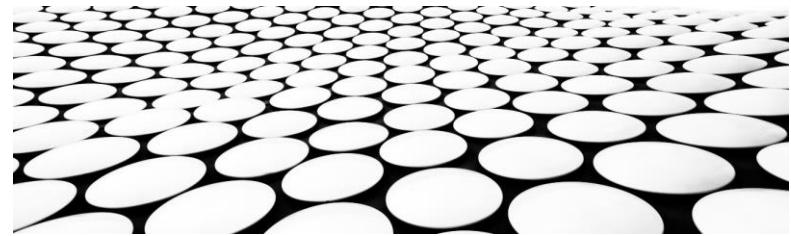
[Discover our cards](#)

Minimum purchase required. Certain conditions apply.*

What are you looking for today?

- Mortgage
- Credit cards
- Accounts
- Borrowing
- Savings and investments

Case study – bank (2)

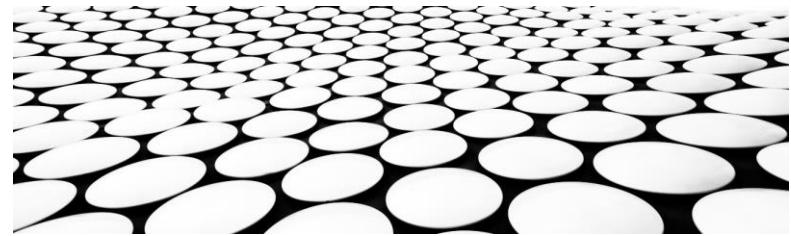


- What attracts our attention?
- Use of fonts / colors?
- Central element?
- Images?

The screenshot shows the TD Canada Trust website's personal banking section. At the top, there's a navigation bar with links for Personal, Small Business, Commercial, Investing, and About TD. On the right, there are language and location settings, as well as a login button. Below the navigation is a main banner featuring a smiling man with a beard and glasses, wearing a beanie and a green shirt, resting his head on his hand. The text in the banner reads: "Discover how flexible a TD Mortgage can be." Below the banner, there's a sub-section for "EasyWeb Online Banking" with a "Login" button and links for "Register" and "Security Guarantee". Another section for "WebBroker Online Trading" also has a "Login" button and similar links. The main content area is titled "Welcome to TD Personal Banking" and features a heading "Explore TD Canada Trust and related products and services". It lists nine categories, each with an icon and a brief description:

- Find a chequing account >** For daily spending, making bill payments and more.
- Find a savings account >** Accounts to help you grow your savings.
- Find a credit card >** TD credit cards offer a host of benefits and features.
- Explore mortgage options >** Get specialized advice to help with your home ownership journey.
- Personal investing >** Registered plans and investments to help you reach your goals.
- Borrowing >** Find a borrowing option that fits your life.
- Invest and trade online >** TD Direct Investing – innovative tools for self-directed investors.
- Personalized wealth advice >** Goals-based planning and advice with a TD Wealth advisor.
- Today's rates >** Current rates for borrowing & investing products.

Case study – bank (3)



- What attracts our attention?
- Use of fonts / colors?
- Central element?
- Images?

Tangerine

Lock in a 1 year GIC at 5.00%** today

Set future you up for success with this simple & secure Saving option.

[Learn More](#)

Great GIC Rate

Free built-in Tools

Learn and discover

Feedback

Watch out for scams. Learn what to look out for, how to protect yourself, and what we're doing to help keep you safe 24/7. [Get Informed](#)

What can we help you with today?

- Savings** Grow your money and save for your goals. [Learn More](#)
- Chequing** No-fee daily chequing. [Learn More](#)
- Investing** Do your future a favour. [Learn More](#)

Earn some cha-ching

Sign up as a Client using promo code EARNMORE today. You could earn up to \$400 cash back on eligible purchases and a 2.75% Savings rate.¹

[Learn More](#)

Up to \$400 cash back **Earn 10% back*** **Great GIC Rate**

Feedback

What can we help you with today?

- Saving** Grow your money and save for your goals. [Learn More](#)
- Spending** No-fee daily chequing. Money-Back Credit Card. [Learn More](#)
- Investing** Do your future a favour. [Learn More](#)
- Borrowing** A smart and affordable way to borrow. [Learn More](#)

2022 / 2023

Personal Business Wealth Management About Us Search Help FR Become a client Sign in

NATIONAL BANK

Bank accounts Credit cards Borrowing Mortgage Savings and investments Insurance Advice

NEWCOMERS

Need a helping hand?

Immigrating to Canada? Enjoy up to 3 years of no fixed monthly fees on your account and other benefits.

[Discover the offer](#)

* Offer valid for 5 years following your arrival in Canada.

What are you looking for today?



Offer for immigrants Credit cards Mortgage Borrowing Savings and investments

Personal Business Wealth Management Search Help FR Become a client Sign in

NATIONAL BANK

Bank accounts Credit cards Borrowing Mortgage Savings and investments Insurance Advice

We're here for the Ukrainian community. Our hearts go out to the Ukrainian community. Learn about what steps we're taking to show our support. [Learn more](#)

Credit card promotions

Open an account. Get 20,000 points and don't pay annual fees for the first year. It's that simple. [Discover our cards](#)

Minimum purchase required. Certain conditions apply.*



What are you looking for today?



Mortgage Credit cards Accounts Borrowing Savings and investments

2022 / 2023

Personal Small Business Commercial Investing About TD

TD My Accounts Products Ways to Bank Learn

Get top notch support from direct investing professionals.

[Open an account](#)

Welcome to TD Personal Banking

Explore TD Canada Trust and related products and services

Find a chequing account > For daily spending, making bill payments and more	Find a savings account > Accounts to help you grow your savings	Find a credit card > TD credit cards offer a host of benefits and features
Explore mortgage options > Get specialized advice to help with your home ownership journey	Personal investing > Registered plans and investments to help you reach your goals	Borrowing > Find a borrowing option that fits your life
Invest and trade online > TD Direct Investing – innovative tools for self-directed investors	Personalized wealth advice > Goals-based planning and advice with a TD Wealth advisor	Today's rates > Current rates for borrowing & investing products

Personal Small Business Commercial Investing About TD

TD My Accounts Products Solutions Learn

Speed up, slow down or even pause a payment. Embrace the unexpected with a TD Mortgage.

[Learn more](#)

Welcome to TD Personal Banking

Explore TD Canada Trust and related products and services

Find a chequing account > For daily spending, making bill payments and more	Find a savings account > Accounts to help you grow your savings	Find a credit card > TD credit cards offer a host of benefits and features
Explore mortgage options > Get specialized advice to help with your home ownership journey	Personal investing > Registered plans and investments to help you reach your goals	Borrowing > Find a borrowing option that fits your life
Invest and trade online > TD Direct Investing – innovative tools for self-directed investors	Personalized wealth advice > Goals-based planning and advice with a TD Wealth advisor	Today's rates > Current rates for borrowing & investing products

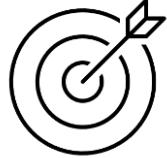
2022 / 2023



SUMMARY

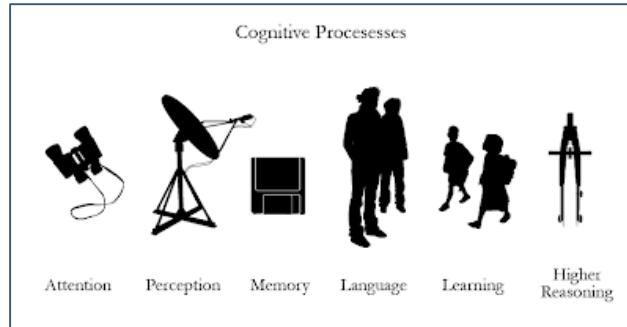
- Brief introduction to the attention process
- Attention and multi-tasking
- Case study of banks

Perception

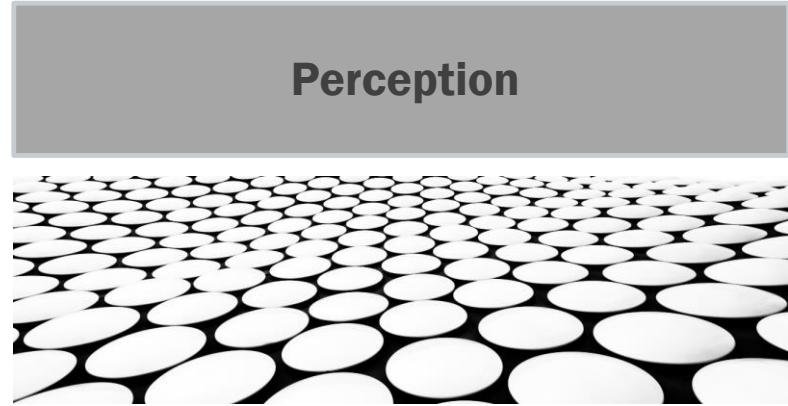


GOALS OF THE PRESENTATION

- Introduction to Gestalt Laws
- Case study – Furniture stores



Perception: process for capturing information from the environment and processing it. Enables people to perceive entities and objects in the world.



Design implications: all representations of actions, events and data (whether visual, graphical, audio, physical, or a combination thereof) should be easily distinguishable by users.

Gestalt psychology

From Wikipedia, the free encyclopedia

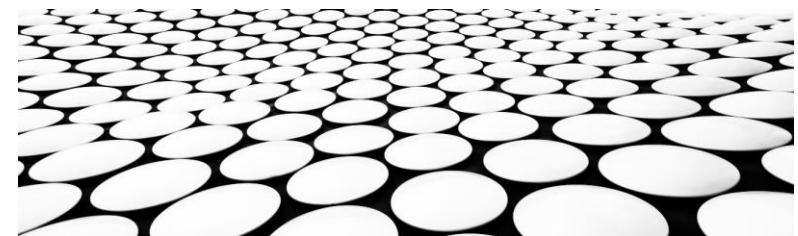


WIKIPEDIA
The Free Encyclopedia

Gestalt psychology or **gestaltism** (*/gə'staɪlt, -ʃtaɪlt, -'staɪlt, -'stɔɪlt/*^[1]) from German:

Gestalt [gə'staɪlt] "shape, form") is a philosophy of mind of the Berlin School of experimental psychology. Gestalt psychology is an attempt to understand the laws behind the ability to acquire and maintain meaningful perceptions in an apparently chaotic world.

What is Gestalt Psychology?

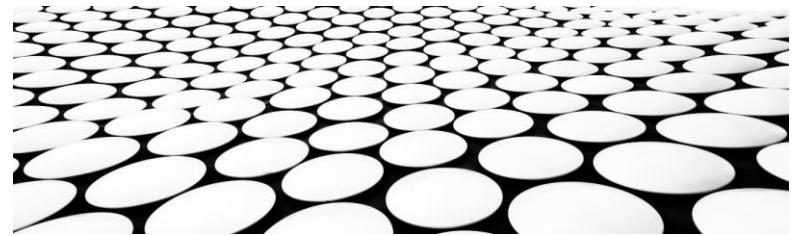


- Gestalt psychology can provide instructional designers with an understanding of “aesthetic perception and cognition” (Lyons, 2001).
- Aesthetic design theory provides an avenue for visual analysis – using the laws and principles of Gestalt psychology (Haupt & Blignaut, 2006).



Or any field, not just education.

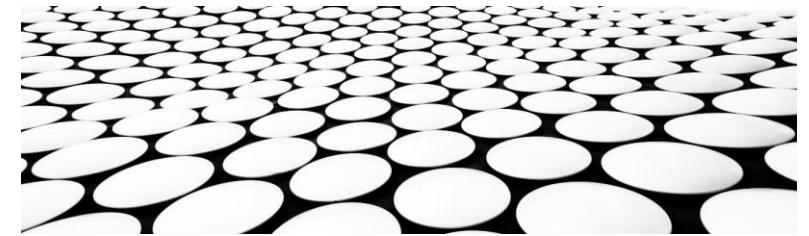
Why study Gestalt Laws?



Simplicity, symmetry and more: Gestalt theory and the design principles it gave birth to

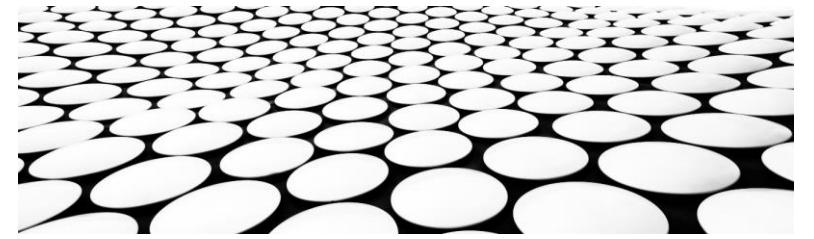


Illustrations of the use of Gestalt Laws in Design

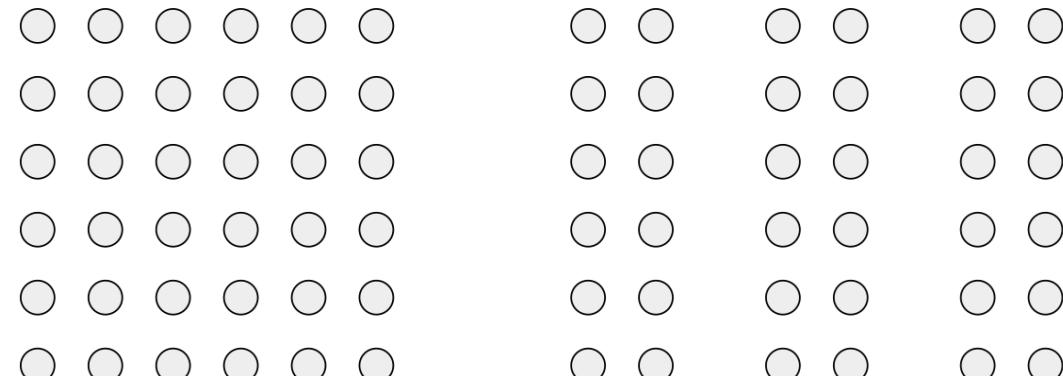


Gestalt Laws

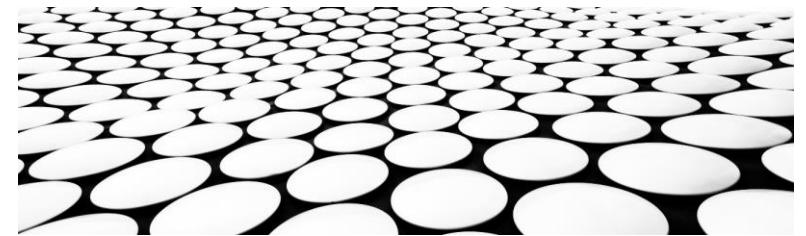
1. Proximity
2. Similarity
3. Invariance
4. Simplicity
5. Closure
6. Focal Point
7. Figure and Ground
8. Symmetry
9. Continuity



Our eyes and mind see objects as belonging together if they are near each other in space.

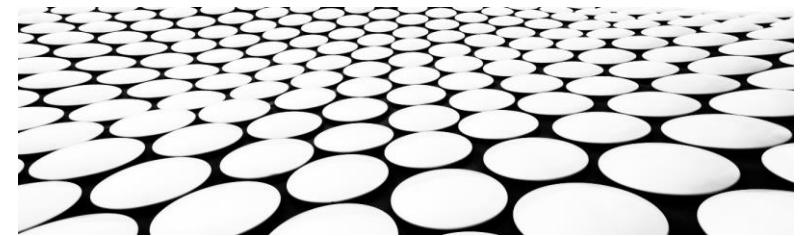
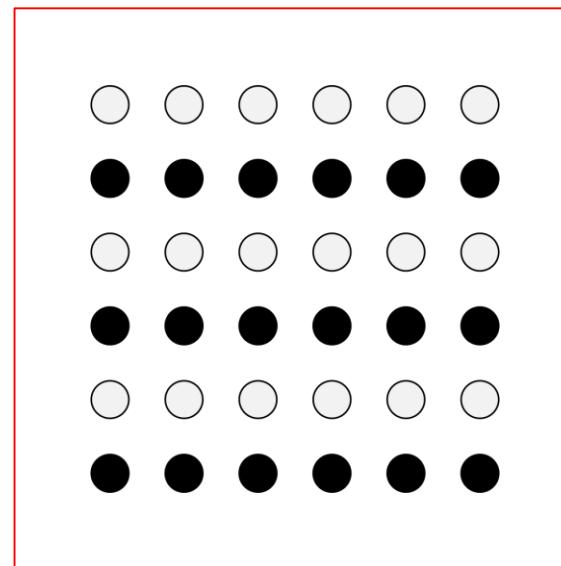
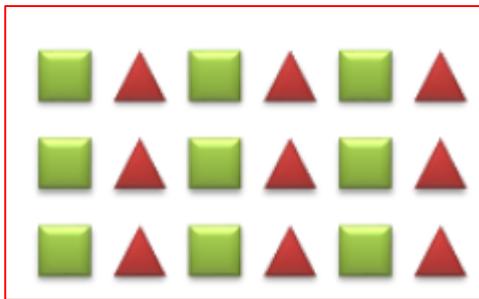


1. Law of proximity



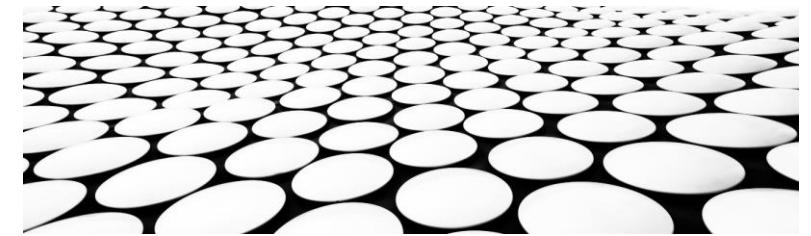
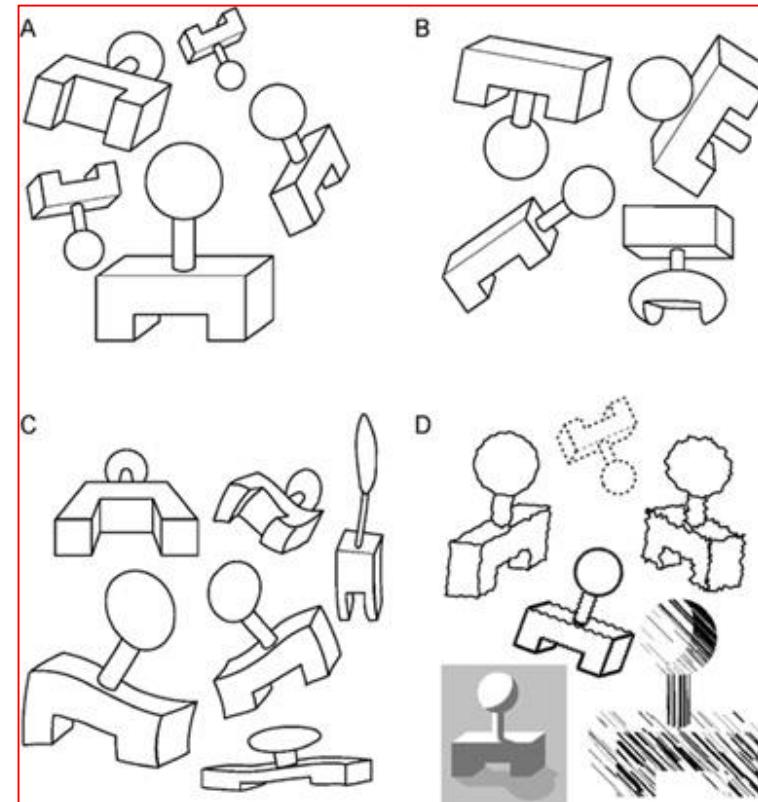
2. Law of Similarity

Our eyes and mind see objects as belonging together if they share a common visual property, such as color, size, shape, brightness or orientation



3. Law of Invariance

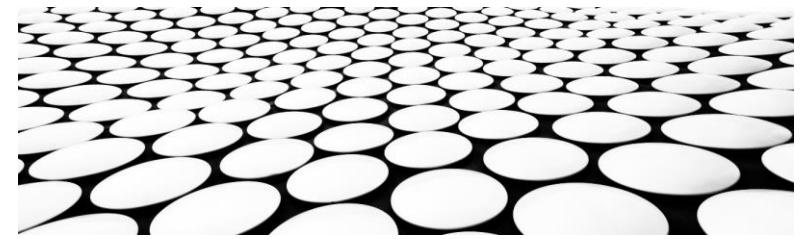
We respond similarly to the same shape in different sizes and orientations.



We see an object as having some perfect or simple shape because perfection or simplicity is easier to remember.

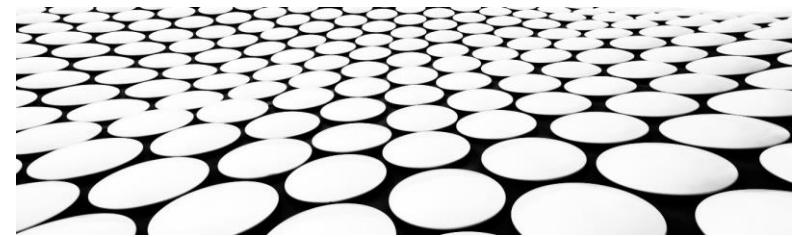
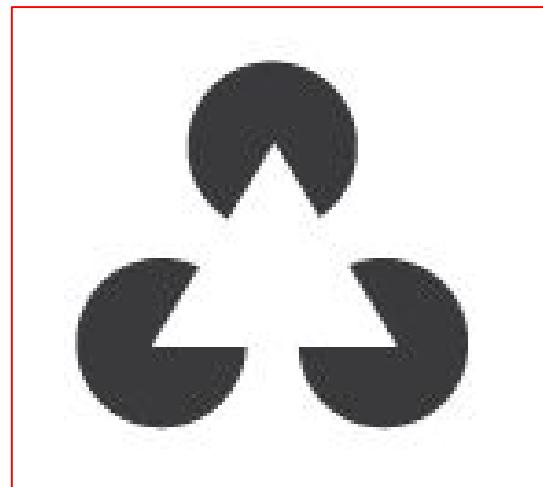


4. Law of Simplicity

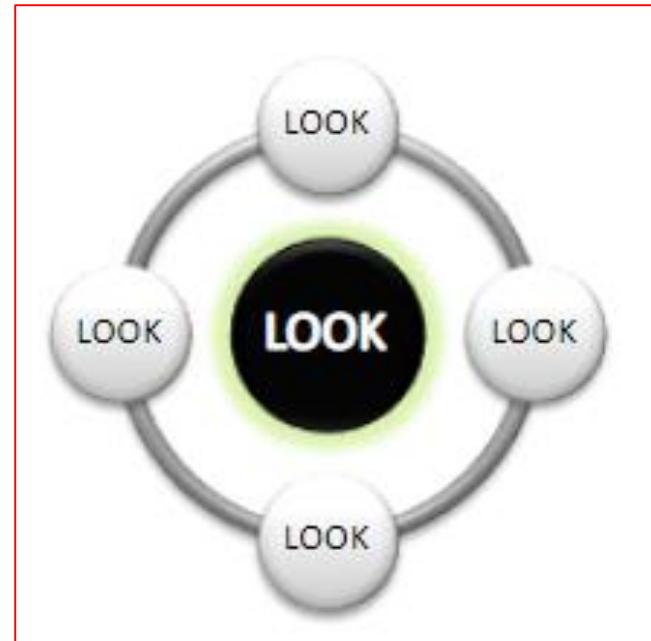


5. Law of Closure

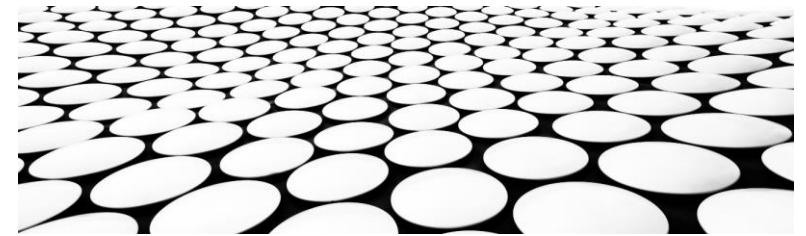
If something does not quite close itself, such as a circle, triangle, or word, we see it closed anyway

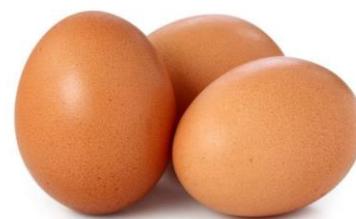


A point of interest,
emphasized or different
from the others will draw
attention.



6. Law of Focal Point



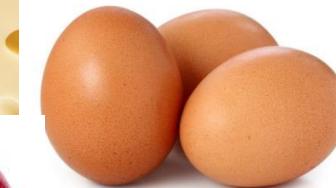




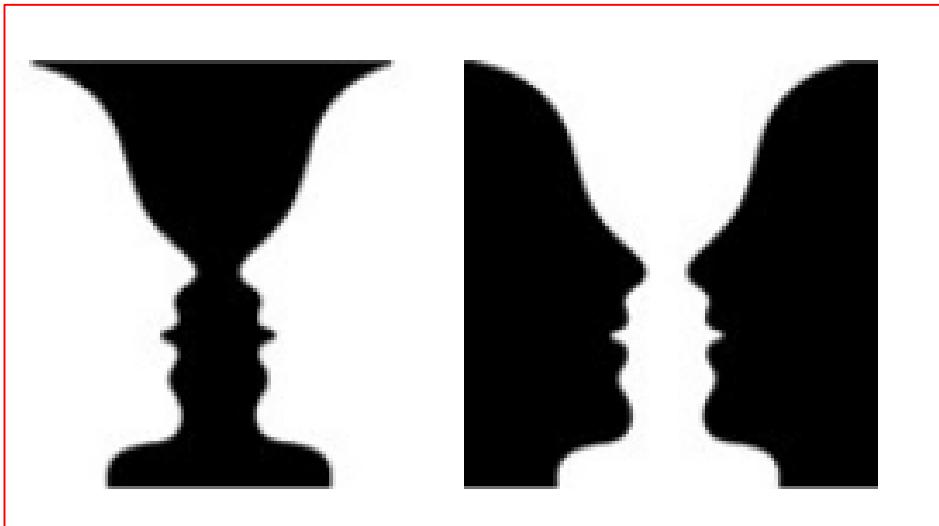


GÂTEAU

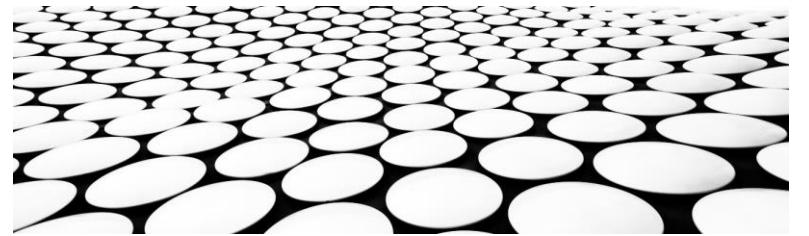


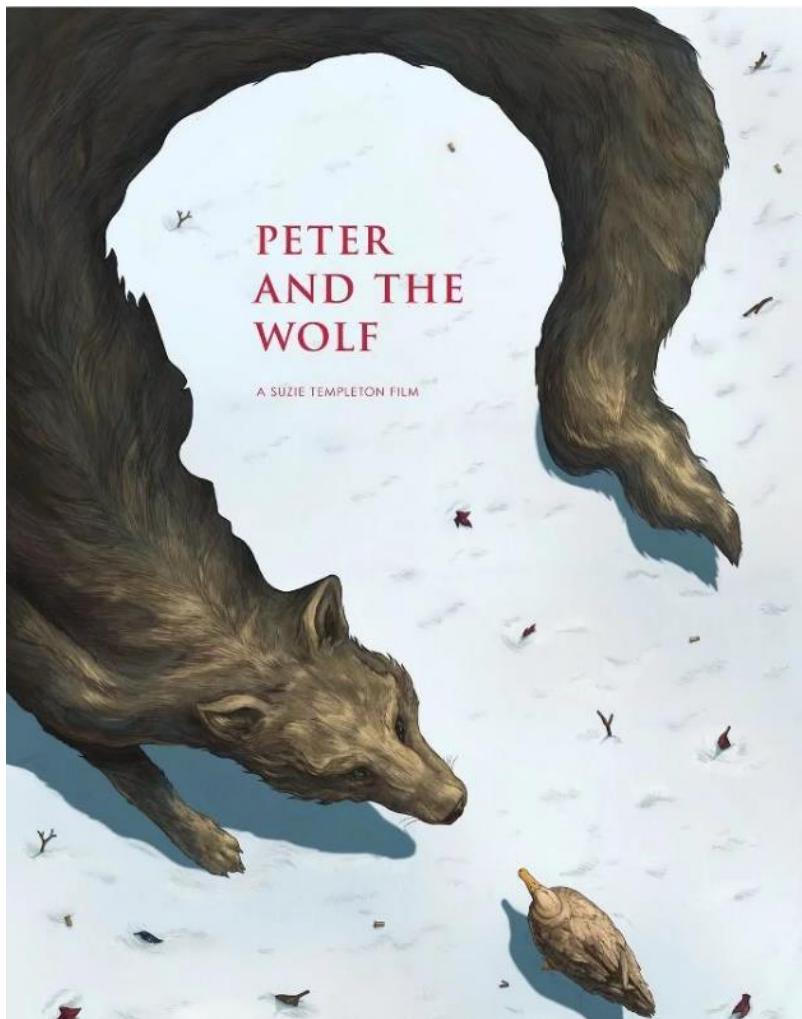


Eyes tries to interpret an image in terms of a figure and a background.

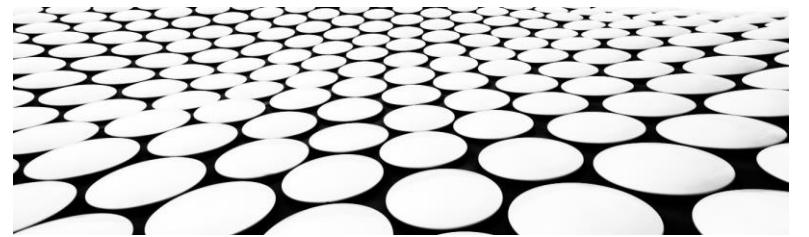


7. Law of Figure and Ground





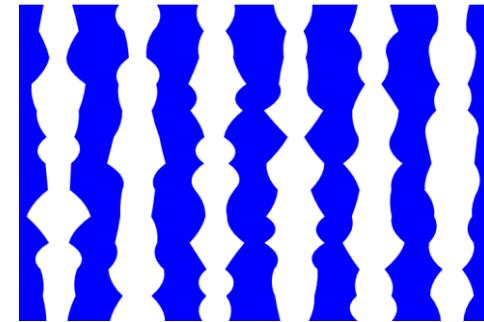
7. Law of Figure and Ground



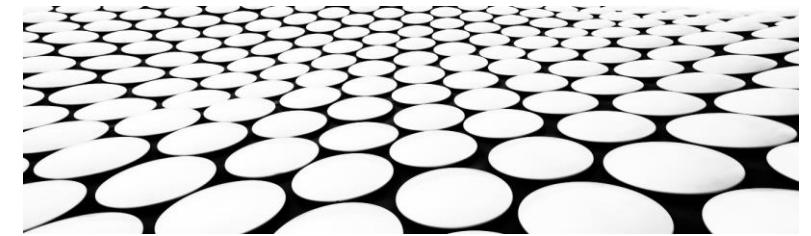
8. Law of Symmetry

Symmetrical elements tend to be interpreted as a unified group.

[] { } []

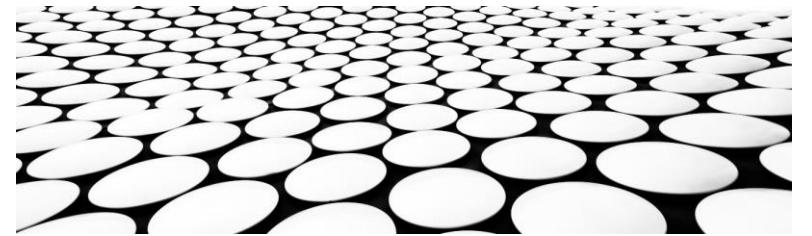
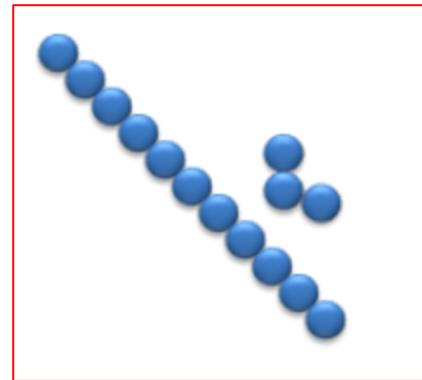
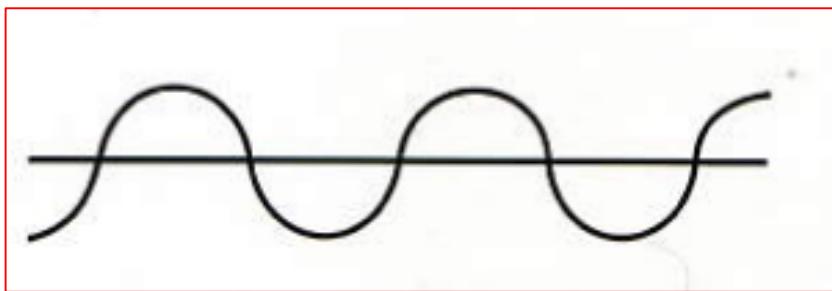


[Visual Effects](#)



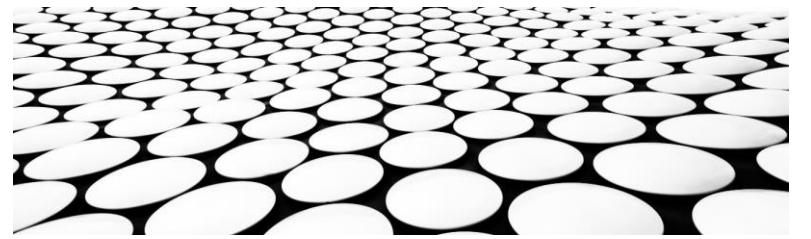
9. Law of Continuity

Shortened lines may be automatically extended.



1. Proximity
2. Similarity
3. Invariance
4. Simplicity
5. Closure
6. Focal Point
7. Figure and Ground
8. Symmetry
9. Continuity

Gestalt Laws



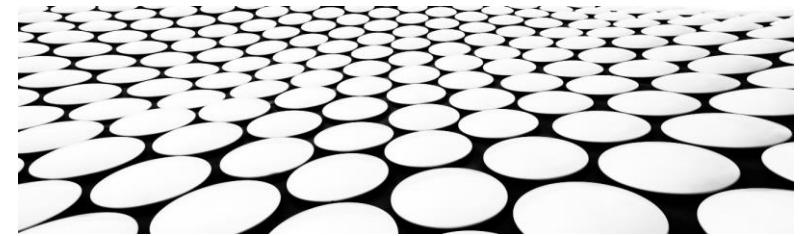
Gestalt law applied?

- Proximity (grouping)
- Similarity (grouping)
- Figure and ground
- Symmetry
- Focus (attention)

The collage includes:

- Legs Furniture:** A screenshot showing a 'HOT TRENDS EVENT' banner with a grey sectional sofa, a 'VIEW FLYER' button, and a 'FIND YOUR STORE' button.
- Braith & Martineau:** A screenshot showing a 'Brath & Martineau' logo, a 'VIEW FLYER' button, and a 'FURNITURE' menu item.
- IKEA Canada:** A screenshot showing a 'Welcome to IKEA Canada' message, a 'How to organize your garage' article, and a 'BRYGGJA Plant pot' product image.
- LG Electronics:** A screenshot showing an 'LG UHD TV' advertisement with a 'Buy a TV, get a speaker free' offer.

Case study - furniture



Need advice? Starting at 9am every day, our experts are available by chat or by phone (1 833 333-0345)

Find a store Help FR

Brault & Martineau
A vow to quality and price

FURNITURE APPLIANCES ELECTRONICS BEDS & MATTRESSES HOME DECOR OUTDOOR INSPIRATION

Patio furniture or barbecue?
Find the missing pieces
for your yard.

Shop

événement patio

In Store Visit us

Talk to a specialist 1 833 333-0345

Chat online Click on "We're here to help"

LG UHD TV

With the purchase of a television,
get a
FREE
649\$ gaming speaker

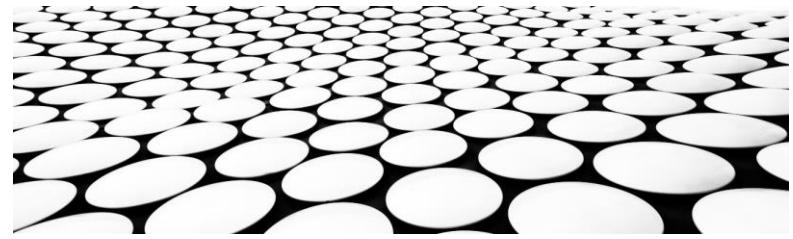
*Selected brands and models

The best of sound, for free!

Buying a mattress made easy

Don't wait until you sw... Chat onli...

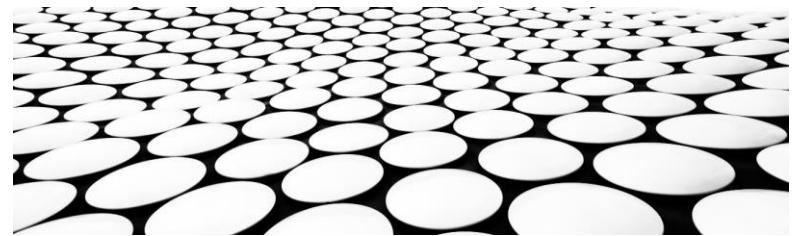
Case study – Furniture (1)



- Proximity (grouping)
- Similarity (grouping)
- Figure and ground (liability)
- Symmetry (layout / negative space)
- Focus (attention)

The screenshot shows the Leon's website homepage. At the top, there is a yellow banner with the text "ENDS TODAY". Below it, a large "HOT TRENDS EVENT" banner features the Leon's logo and a "SAVE \$400" offer for the "Jupiter 4-Piece Sectional". A couple is shown sitting on the sofa. Below this, a green banner promotes "HOT DEALS ON PATIO FURNITURE!" with a "SHOP NOW" button. Further down, there are three promotional boxes: one for "SELECT SOFAS" with a 50% off offer, another for "SELECT DOUBLE/QUEEN/KING BEDS" with a 50% off offer, and a third for "MAJOR APPLIANCE PACKAGES" offering up to \$1000 savings. At the bottom, a large orange banner says "CREDIT AVAILABLE". The website includes a navigation bar with a menu icon, location pin, search icon, and shopping cart icon.

Case study – Furniture (2)



- Proximity (grouping)
- Similarity (grouping)
- Figure and ground (liability)
- Symmetry (layout / negative space)
- Focus (attention)

We're experiencing supply issues Join IKEA Family for free | Get member-only discounts, benefits and more Personalized planning services

IKEA Search for products and inspiration for a better everyday life at home Hej! Log in or sign up Enter postal code Select store

Products Rooms Offers Outdoor

Welcome to IKEA Canada

How to organize your garage

It only takes storage shelves, hooks, and boxes to create your dream garage! Try our easy garage organization ideas for a tidy space.

[BROR utility cart, black/pine plywood, \\$159.00](#)

[Explore garage organization tips](#)



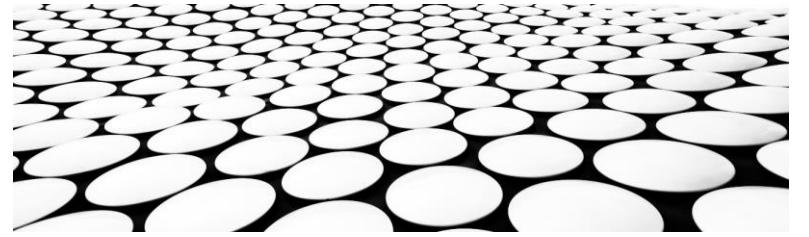
BINTJE Plant pot \$0.79

New SOLVINDEN LED string light with 12 lights \$17.99

Discover our lowest price products to create a better everyday life at home.

Make your space brighter with our range of light fixtures and lamps, including energy-saving solutions.

Case study – Furniture (4)



- Proximity (grouping)
- Similarity (grouping)
- Figure and ground (liability)
- Symmetry (layout / negative space)
- Focus (attention)

tanguay

1-800-TANGUAY Customer Service Find a store Make an appointment FR | EN

Search all departments

Shop by department ◉ Shop luxury furniture **Shop clearance deals** Tanguay L'Entrepôt Exclusive offers

You can now experience Tanguay all across Quebec ▾

See you at home.

YOU CAN NOW EXPERIENCE TANGUAY ACROSS QUEBEC, WITH 11 NEW STORES, INCLUDING LOCATIONS IN MONTREAL, GATINEAU AND SHERBROOKE.

LEARN MORE

We pay both taxes.
On mattresses*
SHOP NOW
*Some restrictions apply.

We offer up to \$1000 off.
On selected furniture*
SHOP NOW
*Some restrictions apply. Model for reference only.

We offer up to \$1000 off.
With the purchase of 2 or more appliances*
SHOP NOW
*Some restrictions apply. Photo for reference only.

Up to 40% off
on outdoor furniture*
SHOP NOW
*Some restrictions apply.

Need advice? Starting at 8am every day, our experts are available by chat or by phone (1 833 333-0345)

Brault & Martineau A vow to quality and price

Find a store Flyer My Account

FURNITURE APPLIANCES ELECTRONICS BEDS & MATTRESSES HOME DECOR OUTDOOR INSPIRATION

Patio furniture or barbecue?
Find the missing pieces for your yard.
Shop

In Store Visit us Talk to a specialist 1 833 333-0345 Chat online Click on "We're here to help"

LG UHD TV
With the purchase of a television, get a **FREE** 44" gaming speaker
Selected brands and models

The best of sound, for free!
With the purchase of a TV of selected brand and model

Buying a mattress made easy
Buying a mattress shouldn't keep you up at night. Find the perfect air conditioner

Don't wait until you sweat! Chat on...

2022 / 2023

4 DAYS ONLY! - JUNE 12 - 15

FLASH SALE
SAVE 20%
ON ALL BLACK TAG BEDROOM FURNITURE

WE PAY THE TAXES⁺
ON ALL BBQs & ACCESSORIES

Priceless style. **50% OFF** **\$699** Kelleher Microsuede Sofa **SAVE \$700** **BUY NOW**

SPECIAL OFFERS!

JUNE 3 - 30 **LEON'S PAYS YOUR RENT FOR A YEAR CONTEST** *UP TO \$24,000 **CLICK HERE FOR DETAILS**

Leon's Shop Now Find Your Store

ENDS TODAY

HOT TRENDS
EVENT

VIEW FLYER **FIND YOUR STORE** **SAVE \$400** Jupiter 4-Piece Sectional

HOT DEALS ON PATIO FURNITURE! **SHOP NOW**

50% OFF SELECT SOFAS What you buy the matching Loveseat and Chair. Discount will be calculated based on regular price of the sofa. **50% OFF** SELECT DOUBLE/QUEEN/KING BEDS What you buy the matching Loveseat and Chair. Discount will be calculated based on regular price of the sofa.

SAVE \$1000[†] WHEN YOU SPEND \$6500 OR MORE ON MAJOR APPLIANCE PACKAGES Excludes Amana, Maytag and GE Cafe. **SAVE UP TO \$700** ON SELECT MATTRESSES **SAVE UP TO \$300** ON SELECT TVs

CREDIT AVAILABLE

Welcome to Leon's
HOT TREND EVENT
Ends Wednesday!!!
Ask one of our associates

2022 / 2023

High standards. Lower prices. Join IKEA Family Order by phone

IKEA Find what you need to Bring Home to Life

Enter postal code Select store

Welcome to IKEA Canada

Hey there, grill friend!

Fresh air, sunshine and great flavours are on the menu! With GRILLSKÄR you can easily create a complete outdoor kitchen that fits your space. Combined with the perfect dining set, outdoor lighting and your favourite people—you'll relish these long summer nights.

[Shop outdoors](#)

GRILLSKÄR
Gas grill
\$595.00

We're experiencing supply issues Join IKEA Family for free | Get member-only discounts, benefits and more Personalized planning services

Hej! Log in or sign up Enter postal code Select store

Welcome to IKEA Canada

How to organize your garage

It only takes storage shelves, hooks, and boxes to create your dream garage! Try our easy garage organization ideas for a tidy space.

BBOR utility cart black/white plywood \$159.00

[Explore garage organization tips](#)

BINTJE Plant pot \$0.79

Discover our lowest price products to create a better everyday life at home.

New SOLVINDEN LED string light with 12 lights \$17.99

Make your space brighter with our range of light fixtures and lamps, including energy-saving solutions.

2022 / 2023



SUMMARY

- 9 Gestalt Laws of Perception
- Case study - Furniture



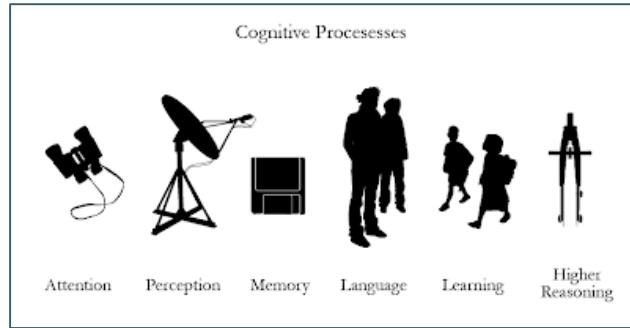


Language



GOALS OF THE PRESENTATION

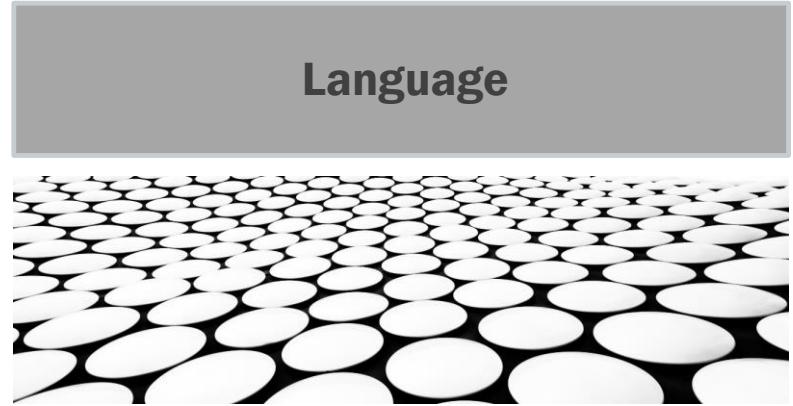
- Review of elements in verbal communication
- Presentation of other aspects related to language (communication purpose, style, etc)
- Case study – banking, furniture, universities to illustrate various use of language



Language: processes for understanding and communicating through language via reading, writing, speaking, and listening.



Design implications: minimize length of speech-based menus; accentuate intonation used in speech-based systems; ensure that font size and type allow for easy reading.

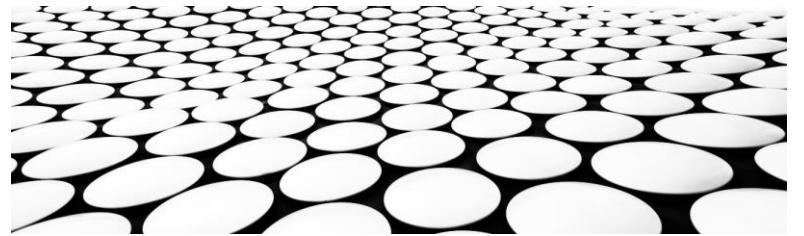


Importance of language

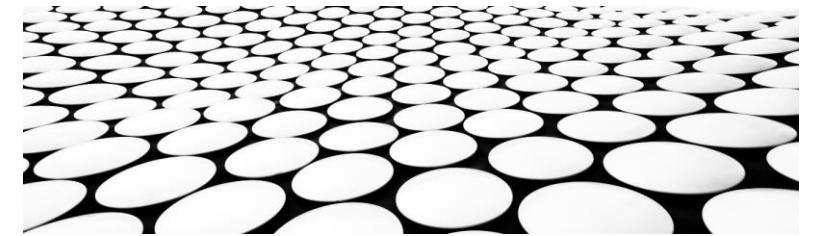
- Synonyms
- Part-of-Speech
- Language level
- Language length (word sizes)
- Promotional language

Themes covered in
Verbal communication

Language



Language



Importance of language

- Synonyms
- Part-of-Speech
- Language level
- Language length (word sizes)
- Promotional language

Other variations to observe

- Communicative purpose
- Sentence type
- Person used to refer to the user and the company
- The personality (mood)

Other themes

Communicative purpose

Expert to expert

- Scientific articles

Expert to novice

- Tutorials

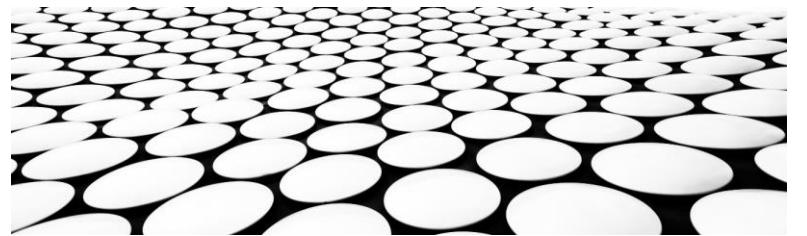
Novice to expert

- Questions in StackOverflow

Novice to novice

- Sharing experiences on social networks

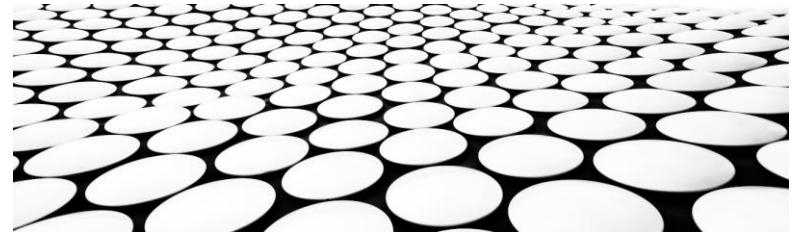
Communicative goal



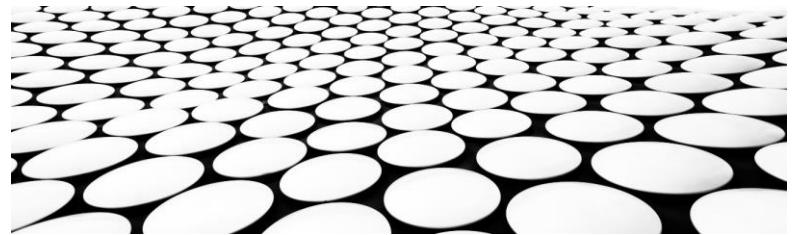
Language

Sentence type

- Interrogative (questions)
- Declarative (statements)
- Exclamatory (exclamations)
- Imperative (commands)



Language



Person chosen

- I (me, mine)
- You (your, yours)
- We (us, our, ours)

Other languages have more variations

- You = Tu (more familiar) / Vous (more polite)
- We = Nous (slightly more formal) / On (more used in speech)

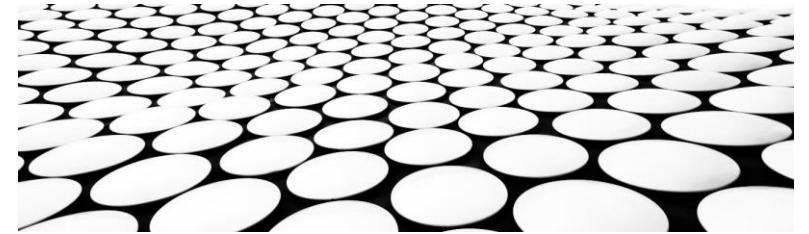
Language

Sentence type

- Interrogative (questions)
- Declarative (statements)
- Exclamatory (exclamations)
- Imperative (commands)

Person chosen

- I (me, mine)
- You (your, yours)
- We (us, our, ours)

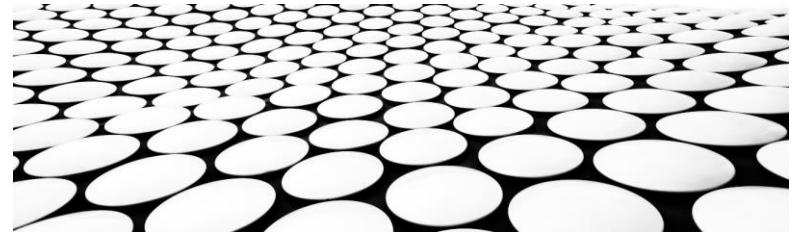


We're here for you! We will help your headache disappear.
I'll solve your headache problem.
Cannot stand your headache anymore?
Get rid of that headache that ruins your life.

The « personality » in the language used

- Friendly
- Informative
- Helpful
- Assertive
- Directive
- Engaging
- ...

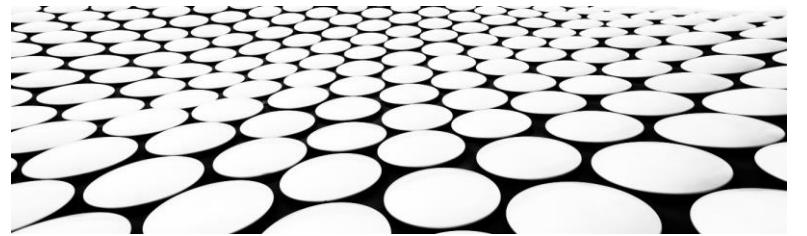
Language



The « personality » in the language use

- Friendly
- Informative
- Helpful
- Assertive
- Directive
- Engaging
- ...

Language

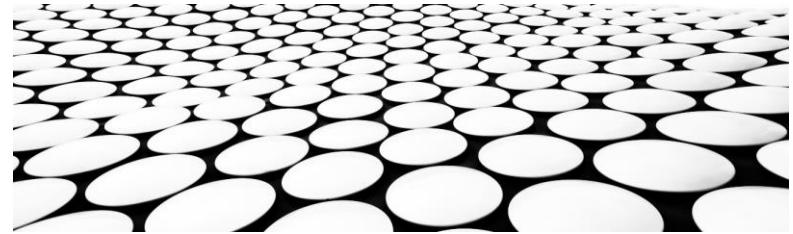


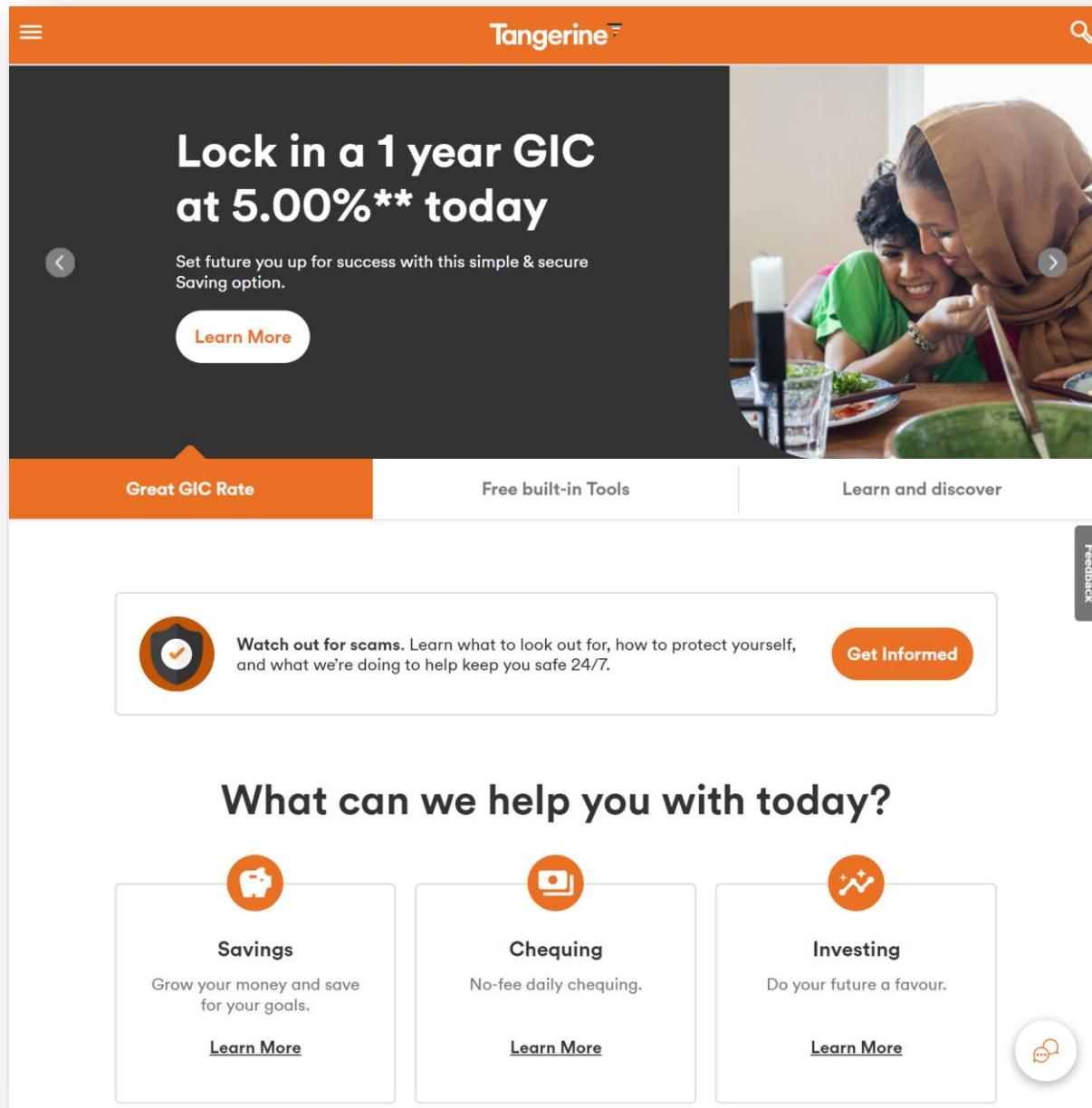
- Would you like to order a nice meal?
- There is food here to order.
- Here is what you need to do to order food.
- We will make sure you get your food.
- Order food.
- Why not order some good food?

- What is the communicative purpose?
- What types of sentences are used?
- How does the site refer to the company?
- How does the site refer to the user?
- Does the language reflect a personality?

The image displays two web pages side-by-side. The left page is for Tangerine, a financial services company. It features a dark header with 'Tangerine' and a main section with 'Earn some cha-ching'. Below this are promotional banners for Legos furniture and patio furniture deals. The right page is for uOttawa, a university. It shows a 'Study' page with a large image of students studying outdoors.

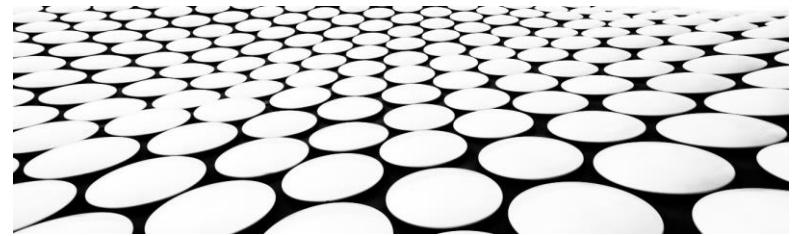
Case studies





The image shows a screenshot of the Tangerine mobile banking application. At the top, there's an orange header bar with the Tangerine logo. Below it, a large promotional banner features a woman and a child smiling over a meal, with the text "Lock in a 1 year GIC at 5.00%** today". A subtext below says "Set future you up for success with this simple & secure Saving option." An orange "Learn More" button is present. The main content area has three tabs: "Great GIC Rate" (highlighted), "Free built-in Tools", and "Learn and discover". A sidebar on the right contains a "Feedback" button. A callout box in the center-left says "Watch out for scams. Learn what to look out for, how to protect yourself, and what we're doing to help keep you safe 24/7." with a "Get Informed" button. The bottom section is titled "What can we help you with today?" and lists three categories: "Savings" (with a piggy bank icon), "Chequing" (with a camera icon), and "Investing" (with a chart icon). Each category has a brief description and an "Learn More" button.

Case study – Bank (1)



- Communicative goal?
- Sentence types?
- Person(s) chosen?
- Personality?

Personal Business Wealth Management About Us Search Help FR Become a client Sign in

NATIONAL BANK

Bank accounts Credit cards Borrowing Mortgage Savings and investments Insurance Advice

NEWCOMERS

Need a helping hand?

Immigrating to Canada? Enjoy up to 3 years of no fixed monthly fees on your account and other benefits.

[Discover the offer](#)

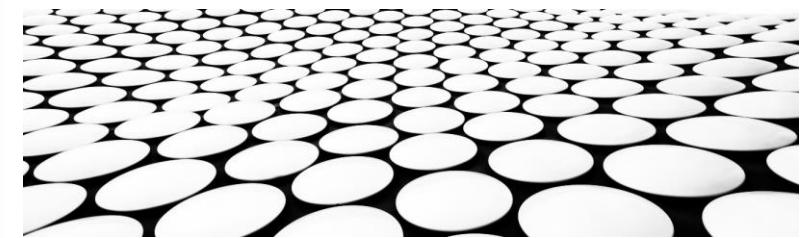
* Offer valid for 5 years following your arrival in Canada.

What are you looking for today?



				
Offer for immigrants	Credit cards	Mortgage	Borrowing	Savings and investments

Case study – Bank (2)



- Communicative goal?
- Sentence types?
- Person(s) chosen?
- Personality?

Personal Business Wealth Management About Us Search Help FR Become a client Sign in

NATIONAL BANK

Bank accounts Credit cards Borrowing Mortgage Savings and investments Insurance Advice

NEWCOMERS

Need a helping hand?

Immigrating to Canada? Enjoy up to 3 years of no fixed monthly fees on your account and other benefits.

[Discover the offer](#)

* Offer valid for 5 years following your arrival in Canada.

What are you looking for today?



Personal / Business
Does the language change?

Personal Business Wealth Management Search Find us FR Become a client Sign in

NATIONAL BANK

Banking Solutions Credit Cards Financing Investing International Going Further Tips and Tools

We're here for entrepreneurs

With our banking solutions and expert advice, you're in business



Banking solutions for businesses

Grow your business with our banking solutions and expert advice for SMEs from National Bank Business Central

[See our banking solutions](#)

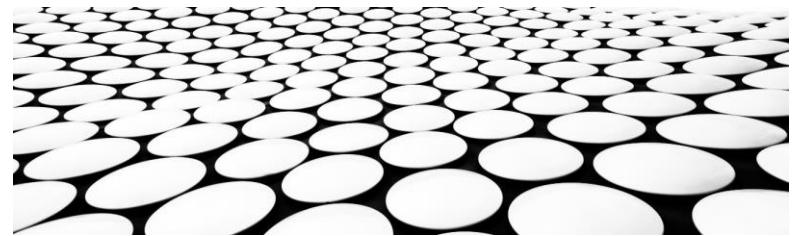


How can we help guide you?



FAQ Find an answer to ..

Case study – Bank (3)



- Communicative goal?
- Sentence types?
- Person(s) chosen?
- Personality?

1-800-TANGUAY Customer Service Find a store Make an appointment FR | EN

tanguay Search all departments

Shop by department Shop luxury furniture **Shop clearance deals** Tanguay L'Entrepôt Exclusive offers

You can now experience Tanguay all across Quebec ▾

See you at home.

YOU CAN NOW EXPERIENCE TANGUAY ACROSS QUEBEC, WITH 11 NEW STORES, INCLUDING LOCATIONS IN MONTREAL, GATINEAU AND SHERBROOKE.

[LEARN MORE](#)

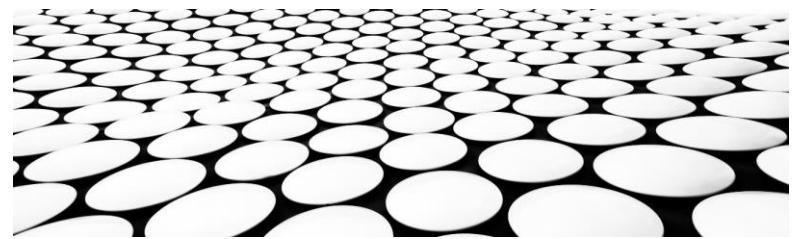
We pay both taxes.
On mattresses*
[SHOP NOW](#)
*Some restrictions apply.

We offer up to \$1000 off.
On selected furniture*
[SHOP NOW](#)
*Some restrictions apply. Photo for reference only.

We offer up to \$1000 off.
With the purchase of 2 or more appliances*
[SHOP NOW](#)
*Some restrictions apply. Photo for reference only.

Up to 40% off on outdoor furniture*
[SHOP NOW](#)
*Some restrictions apply.

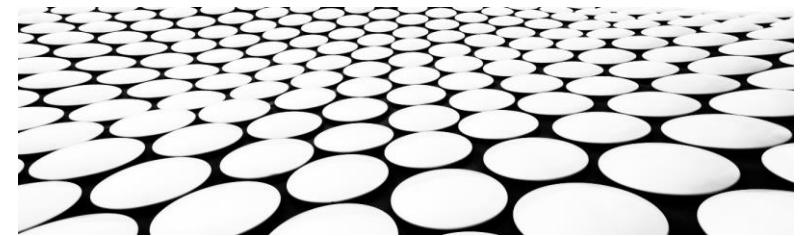
Case study – Furniture (1)



- Communicative goal?
- Sentence types?
- Person chosen?
- Personality?

The screenshot shows the homepage of Leon's furniture website. At the top, there are navigation icons for menu, location, search, and cart. The Leon's logo is in the top left. A yellow banner at the top says "4 DAYS ONLY! - JUNE 12 - 15". Below it, a large blue banner for a "FLASH SALE" offers "SAVE 20% ON ALL BLACK TAG BEDROOM FURNITURE". It features a black bed with white bedding and a nightstand, with a "50% OFF" badge. To the right, a "Flair 3-Piece Queen Bed" is listed for "\$499" with a "SAVE \$500" badge, a "BUY NOW" button, and a note that it's "Also available in beige". Below this, another section for "WE PAY THE TAXES" on all BBQs & Accessories is shown, featuring a large image of a barbecue and a "SHOP NOW" button. The bottom section highlights a "Kelleher Microsuede Sofa" for "\$699" with a "SAVE \$700" badge, a "BUY NOW" button, and a "VIEW FLYER" and "FIND YOUR STORE" buttons. A contest banner for "LEON'S PAYS YOUR RENT FOR A YEAR CONTEST" from June 3-30 (up to \$24,000) is also visible. The bottom of the page features a "SPECIAL OFFERS!" section.

Case study – Furniture (2)



- Communicative goal?
- Sentence types?
- Person chosen?
- Personality?

High standards. Lower prices. Join IKEA Family Order by phone

IKEA Find what you need to Bring Home to Life

Enter postal code Select store

Welcome to IKEA Canada

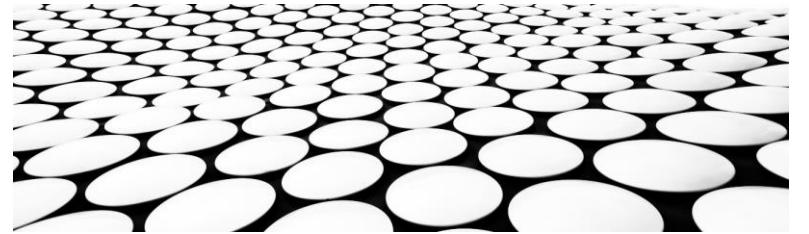
Hey there, grill friend!

Fresh air, sunshine and great flavours are on the menu! With GRILLSKÄR you can easily create a complete outdoor kitchen that fits your space. Combined with the perfect dining set, outdoor lighting and your favourite people—you'll relish these long summer nights.

[Shop outdoors](#)

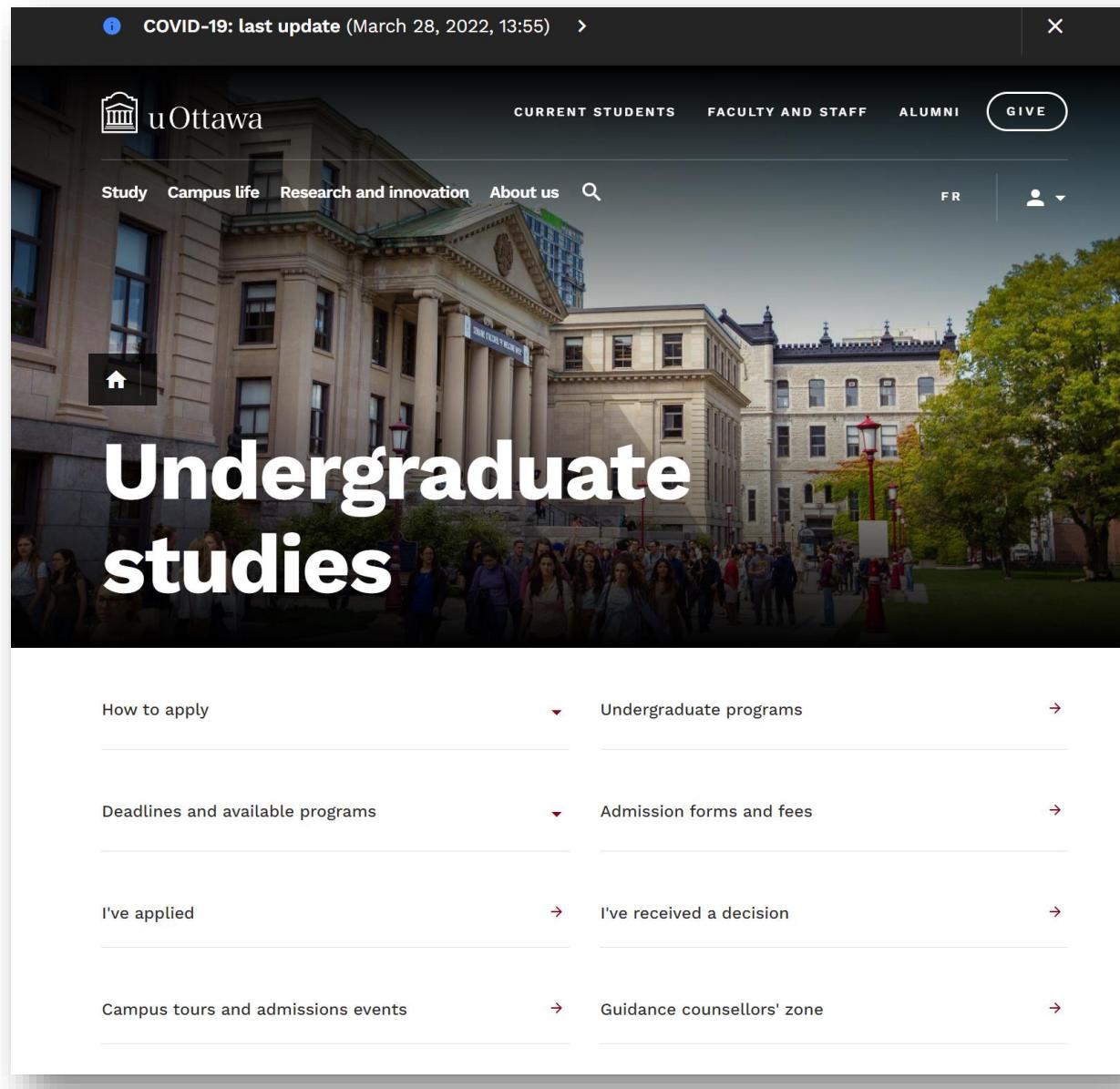
GRILLSKÄR
Gas grill
\$595.00

Case study – Furniture (3)



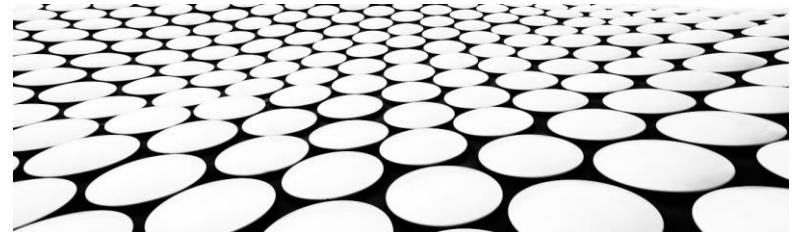
- Communicative goal?
- Sentence types?
- Person chosen?
- Personality?

COVID-19: last update (March 28, 2022, 13:55) > X



The screenshot shows the uOttawa Undergraduate studies landing page. At the top, there's a dark header with the university logo, navigation links for CURRENT STUDENTS, FACULTY AND STAFF, ALUMNI, and GIVE, and a COVID-19 update. Below the header is a large banner featuring a photograph of a university building and students. Overlaid on the banner is the text "Undergraduate studies". The main content area has several sections with arrows pointing right: "How to apply", "Undergraduate programs", "Deadlines and available programs", "Admission forms and fees", "I've applied", "I've received a decision", "Campus tours and admissions events", and "Guidance counsellors' zone".

Case study – University (1)



- Communicative goal?
- Sentence types?
- Person chosen?
- Personality?

SFU.CA [f](#) [t](#) [i](#) [y](#) [l](#) GIVE TO SFU

STUDENTS FACULTY + STAFF ALUMNI PARENTS + PUBLIC EMPLOYERS CAREERS MEDIA

CAMPUSES A-Z DIRECTORY SIGN IN SEARCH

SFU SIMON FRASER UNIVERSITY

ADMISSION PROGRAMS LEARNING COMMUNITY RESEARCH ABOUT

SFU and Coronavirus (COVID-19): Find the latest updates here for students, faculty and staff.

SFU: WHAT'S NEXT?

We're asking big questions—questions about the future of SFU, our priorities and how we want to define ourselves as a university. Join the conversation and tell us what should come next for SFU.

[LEARN MORE](#)

LIBRARY EVENTS CALENDAR GIVE TO SFU CAMPUSES

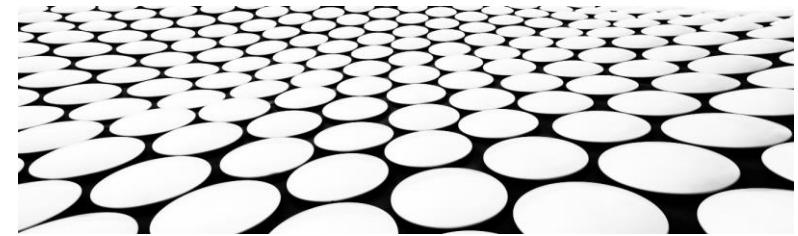
SFU NEWS

As Canada's engaged university we improve lives using the power of knowledge, advocacy and engagement.

[SEE ALL NEWS](#)



Case study – University (2)



- Communicative goal?
- Sentence types?
- Person chosen?
- Personality?

Université de Montréal

UdeM STUDIES FACULTIES AND SCHOOLS RESEARCH ACTIVITIES AND SERVICES OUR CAMPUSES

WE CAN MAKE A DIFFERENCE
NEW RELIEF FUND
LEARN MORE

UdeM STUDIES FACULTIES AND SCHOOLS RESEARCH ACTIVITIES AND SERVICES OUR CAMPUSES

UdeM

- Facts and figures >
- Profile >
- Working at UdeM >
- Famous alumni >
- Alumni: stay in touch >
- Administration and governance >
- History >

STUDIES

- NEWS > >
- GRADUATION CEREMONIES
- AWARDS
- RECTOR'S WEBSITE

INTERNATIONAL AFFAIRS > >

SUSTAINABLE DEVELOPMENT

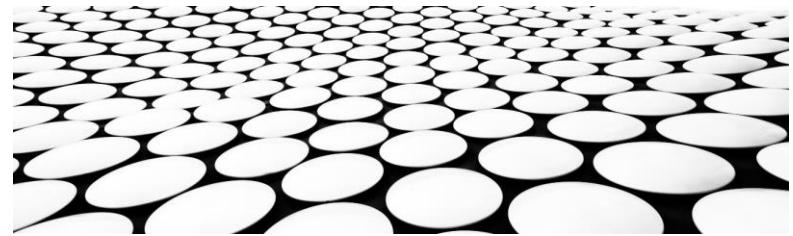
FRENCH LANGUAGE AND FRENCH-SPEAKING COMMUNITIES

PROMOTING QUALITY >

VIEW WHOLE SECTION >

EXPERIENCE

Case study – University (3)



- Communicative goal?
- Sentence types?
- Person chosen?
- Personality?

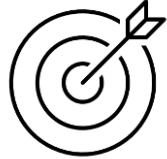


SUMMARY

- Presentation of 4 aspects of language
 - Communication goal
 - Sentence style
 - Person chosen
 - Personality through language
- Exploration of those aspects through case studies

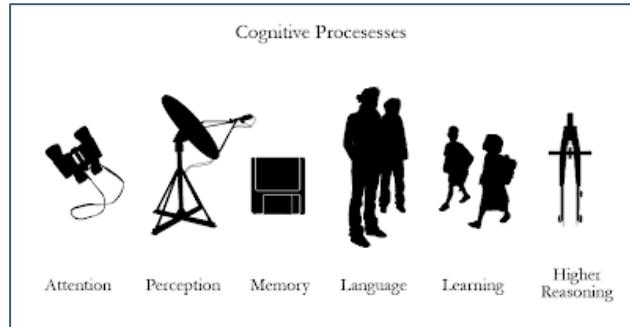


Learning



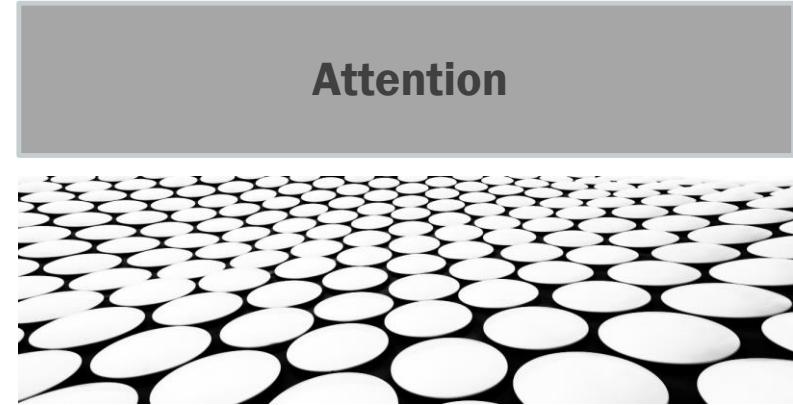
GOALS OF THE PRESENTATION

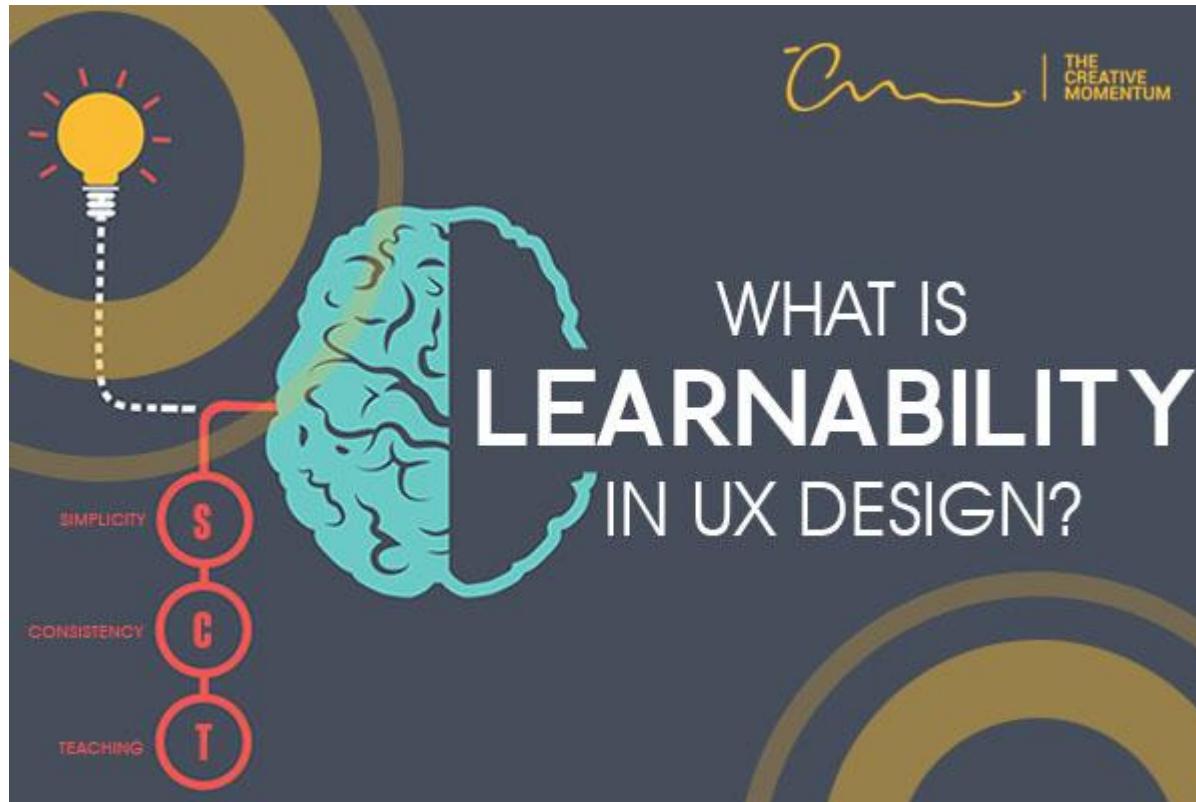
- Introduction to the notion of Learnability
- Case study – banks, furniture stores, universities



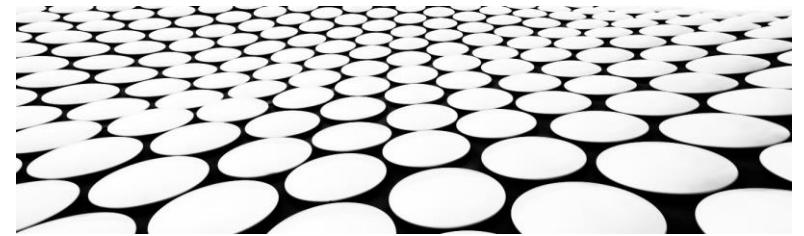
Learning: process for synthesizing new knowledge and know-how.
Involves connecting new information and experiences with existing knowledge.

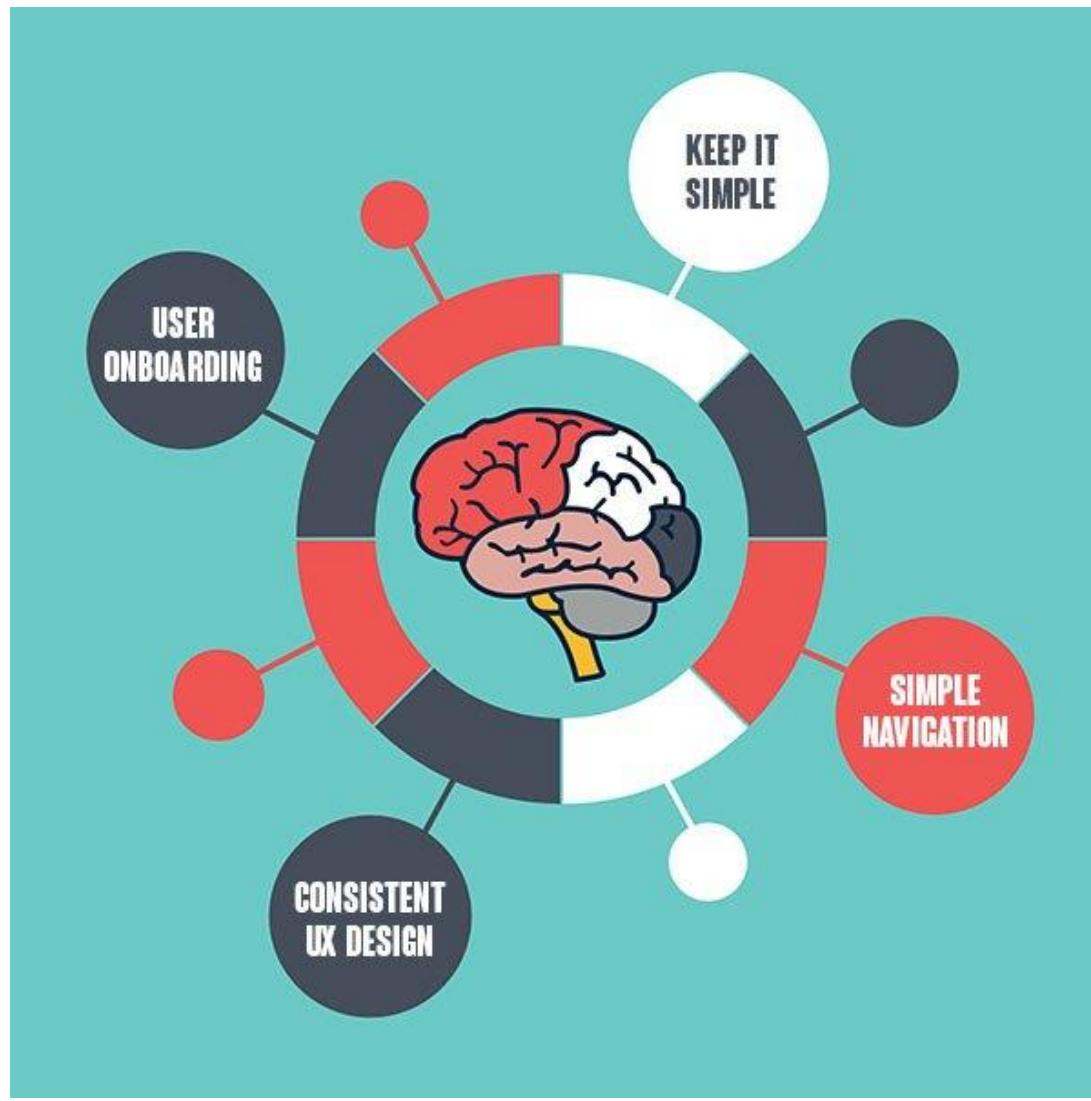
Design implications: leverage constraints to guide new users; encourage exploration by new users.



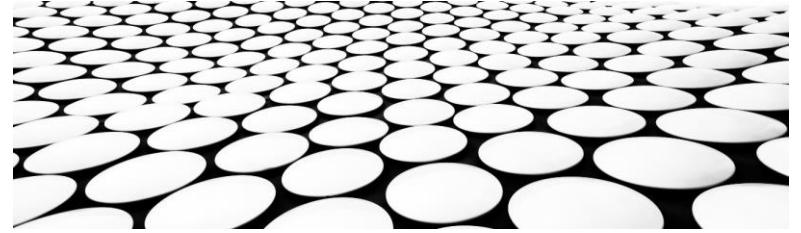


Learnability





Learning





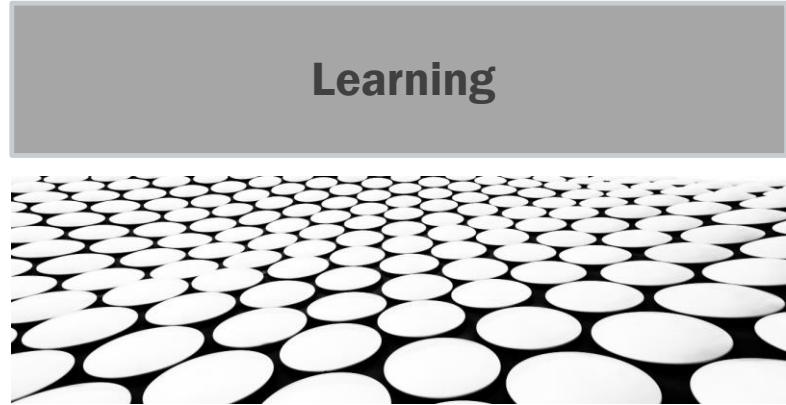
The diagram features a red rounded rectangle containing the words "COMPREHENSIBILITY" and "LEARNABILITY". A yellow dashed arrow curves from the bottom right towards the top left, connecting the two words.

Interaction Design is *Learnable*.
In good interaction design, our ideal hope is that the user who uses the app, site or system for the first time will use it once, learn it quickly, and then use it forever.

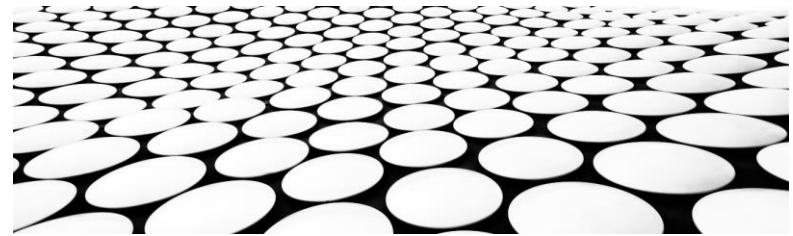
It's a little more practical. What usually happens is that they use it a few times, learn it, and hope they *remember* it for next time. Our job, as designers, developers and UX professionals of all stripes, is to make that learning and remembering possible. How do we do that? By making our interfaces **intuitive**.

What “Intuitive” *really* means

While there are lots of opinions here, what the term intuitive truly means is “single trial learning.” Hogue explains that once we run through something, we’ve got enough of a handle on it that we’ll be able to do it again. That doesn’t mean we automatically remember everything the next time around, though. It simply means the interaction design is clear, consistent and visible enough that we’ll be able to easily infer what to do first second, third, etc.



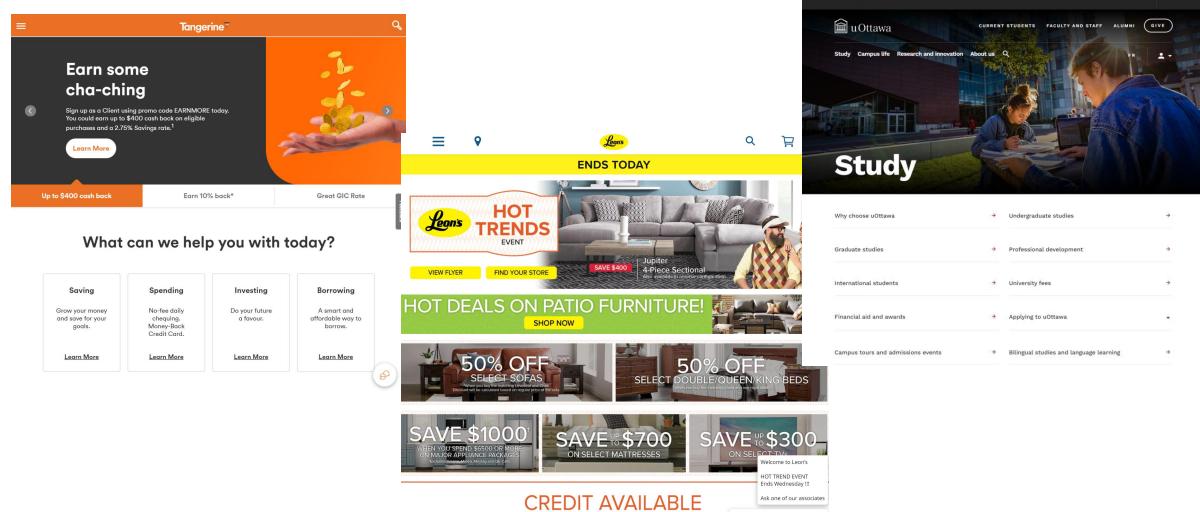
- Simplicity
 - Memory – menu sizes (Miller's law)
 - Perception – Gestalt laws
 - Simple navigation
- Coherence
 - Color, fonts
- Prior Knowledge transferability
 - Use of standards
- User adaptability
 - Language / Mental model
- Access to help
 - FAQ section
 - Tutorials/walkthrough for beginners



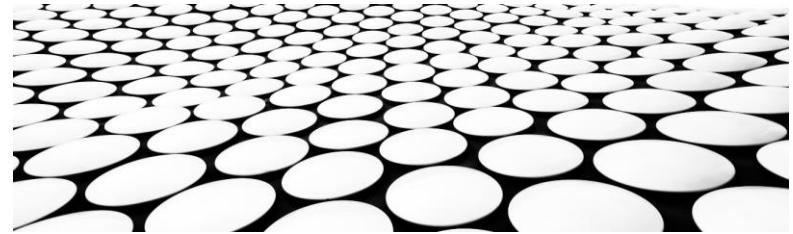
UI elements for learnability

Case studies on those aspects

- Exploring different UI éléments for learnability
 - Knowledge transfer (Icons – standards)
 - Adaptability (language, entry points)
 - Access to help

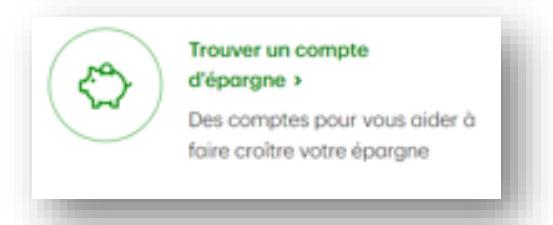
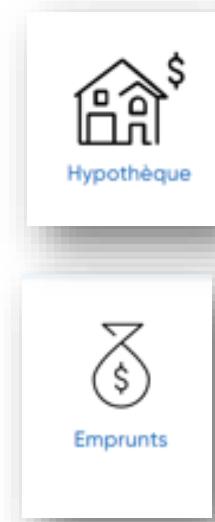
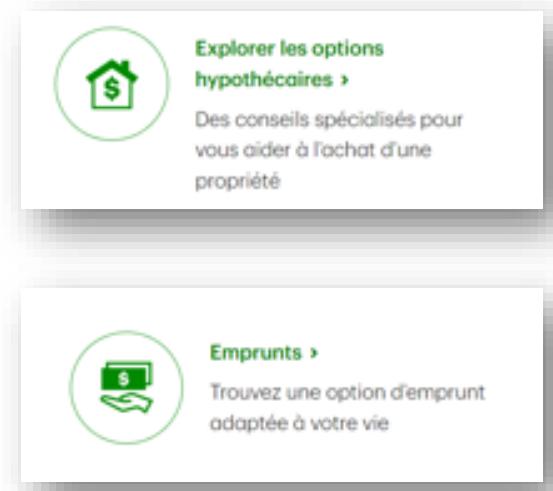


Case studies

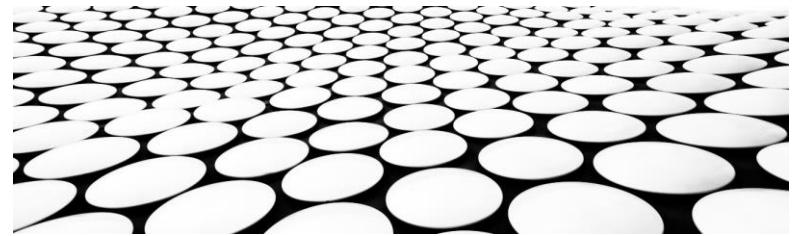


The screenshot shows the Tanguay website. At the top, there is a navigation bar with links to "1-800-TANGUAY", "Customer Service", "Find a store", "Make an appointment", and language options "FR | EN". Below the navigation bar is the Tanguay logo and a search bar labeled "Search all departments". To the right of the search bar are icons for camera, user profile, heart, and shopping cart. A red button labeled "Shop clearance deals" is prominently displayed. Below the navigation bar are five categories: "Shop by department", "Shop luxury furniture", "Shop clearance deals", "Tanguay L'Entrepôt", and "Exclusive offers".

The screenshot shows the Leon's website. At the top, there is a navigation bar with a menu icon, a location pin icon, the Leon's logo, a search icon, and a shopping cart icon. A yellow banner across the middle of the page reads "4 DAYS ONLY! - JUNE 12 - 15". Below the banner is a black bar with links to "High standards. Lower prices.", "Join IKEA Family", and "Order by phone". The main content area features the IKEA logo, a search bar with the placeholder "Find what you need to Bring Home to Life", and user icons for profile, heart, and shopping cart. At the bottom, there are fields for "Enter postal code" and "Select store".



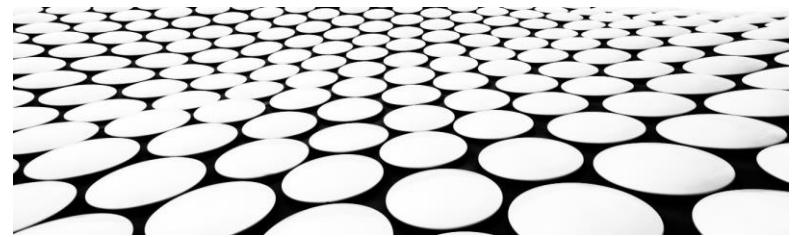
Case study - icons



When you don't speak the language, are the icons indicative?

The screenshot shows the Tangerine website's header in French. It includes links for "Devenir Client" and "Accès Clients". A language dropdown menu is open, showing "English" selected. Other options include "Français", "简体中文" (Simplified Chinese), and "繁體中文" (Traditional Chinese). The TD logo is visible on the left.

Case study - Adaptability

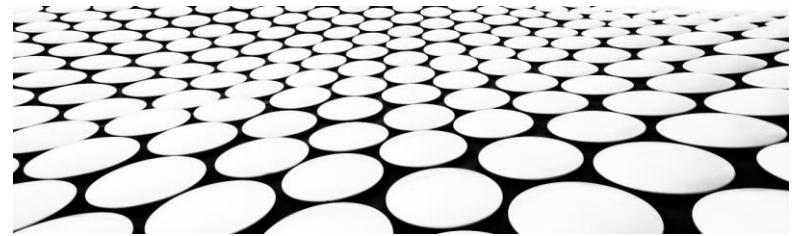


Language
Adaptability

The screenshot shows the Banque Nationale website's header in French. It includes links for "Rechercher", "Nous trouver", and "EN". A language dropdown menu is open, showing "EN" selected. Other options include "Devenir client" and "Se connecter". The BANQUE NATIONALE logo is visible on the left.

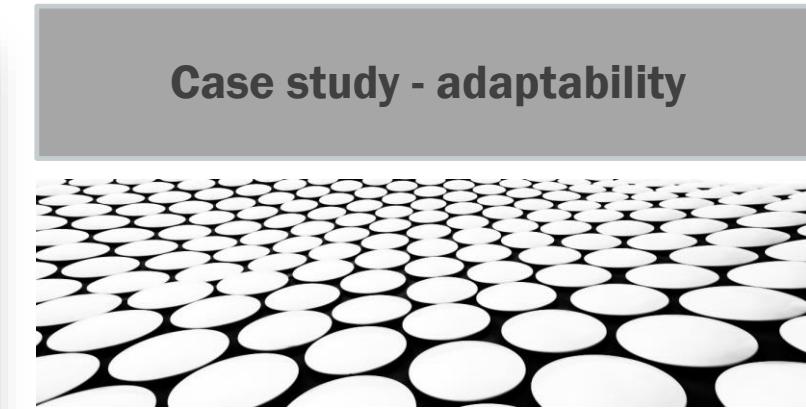
A screenshot of the TD.com personal banking website. The top navigation bar includes links for Personal, Small Business, Commercial, Investing, and About TD. Below the navigation is a main menu with TD logo, My Accounts, Products, and Solutions. A large image of a smiling man wearing a beanie and glasses is on the left. To his right, text reads "Discover how flexible a TD Mortgage can be." A dropdown menu titled "Learn" is open, listing Advice Hub, Students, New to Canada, and Seniors (60+). A blue arrow points from the word "Learn" in the title to the "Seniors (60+)" option. A "Learn more" button and a small note about conditions apply are also visible.

Case study – Adaptability



The term « learn » is a bit misleading.

The screenshot shows the TD Canada Trust website at td.com/ca/en/personal-banking/. The main banner features a smiling man and the text "Banking for newcomers to Canada". Below the banner, a sub-section titled "We speak your language" offers language options in English, Français, 简体中文, and 繁體中文. It also lists other languages: Espanol, العربية, தமிழ், ਪੰਜਾਬੀ, and Pla ହିନ୍ଦୀ. A "Plan your move to Canada" section is visible on the left.



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Adaptability with different entry points.

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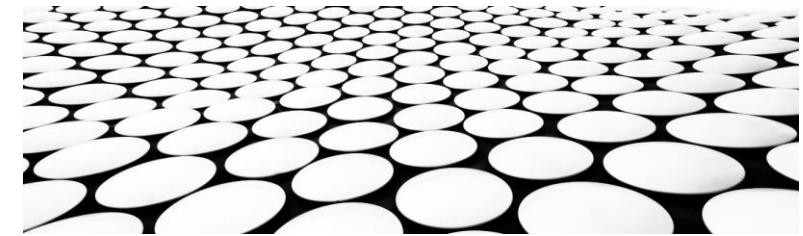
Personal Small Business Commercial Investing About TD English

TD My Accounts Products Ways to Bank Learn Location Help Search Login

Quick help with your everyday activities

Login help  Login screen help > How do I change or reset my password? > What is Two-Step Verification and how does it work? > How do I update my security settings for Two-Step Verification? > How do I add another Access Card to the EasyWeb login screen? >	Account rates and fees  Where can I find a full list of fees and service charges related to my Chequing or Savings Account? > Why does an account incur Transaction or Withdrawal Fees? > What are the interest rates on your personal bank accounts? >	Managing my accounts  How do I find my transit number, institution number and account number? > How do I access my account history? > Have a question about Account Activity? > How can I identify transactions I don't recognize? > How do I dispute a transaction? >
Pay a bill  How do I set up a Pre-Authorized Debit (PAD) payment? > How do I customize my Canadian payee list? > When will TD Canada Trust process my bill payment? >	Wire transfer  How do I receive a wire transfer to my account? > How do I send a wire transfer? > How long does a wire transfer take to be processed? > What is TD's Swift Code? >	Interac e-Transfer  What are the fees and limits to send or request an Interac e-Transfer? > How do I send money using Interac e-Transfer? > How do I receive money using Interac e-Transfer? > How do I cancel a pending Interac e-Transfer for either Send Money or Request Money? > How do I set up Autodeposit for Interac e-Transfer? >

Case study - Help



Example of access to help

The screenshot shows the TD Canada Trust website interface. At the top, there is a green navigation bar with links for Personal, Small Business, Commercial, Investing, and About TD. On the right side of the top bar are icons for a Canadian flag, English language selection, and user login. Below this, a main menu bar also includes links for Personal, Small Business, Commercial, Investing, and About TD. A large search bar is positioned at the top of the main content area. A blue arrow points from the text "Example of access to help" down towards the search bar. A dropdown menu is open over the search bar, containing the following questions:

- What mortgages do you offer?
- Is it better to refinance my existing mortgage or get a TD Home Equity FlexLine?
- Can I move my mortgage to another property?
- How do I apply for a mortgage with TD Canada Trust?
- For a new mortgage application, how long can the interest rate be held?

A blurred background image of a man's face is visible behind the search bar.



Example of access to help



SUMMARY

- Learning and learnability
- « Intuitive » interface – single trial learning
- Case study for 3 aspects of learnability
 - Use of standards (icons)
 - Adaptability to the user (language, entry points)
 - Access to help



HUMAN COGNITION AND ITS IMPACT ON UI DESIGN

- Introduction
- Memory (short term / long term)
- System Image (organisation)
- System Image (different personas)
- Reasoning processes

- Attention
- Perception
- Language
- Learning

Week 6

Order is different
from videos

Week 7