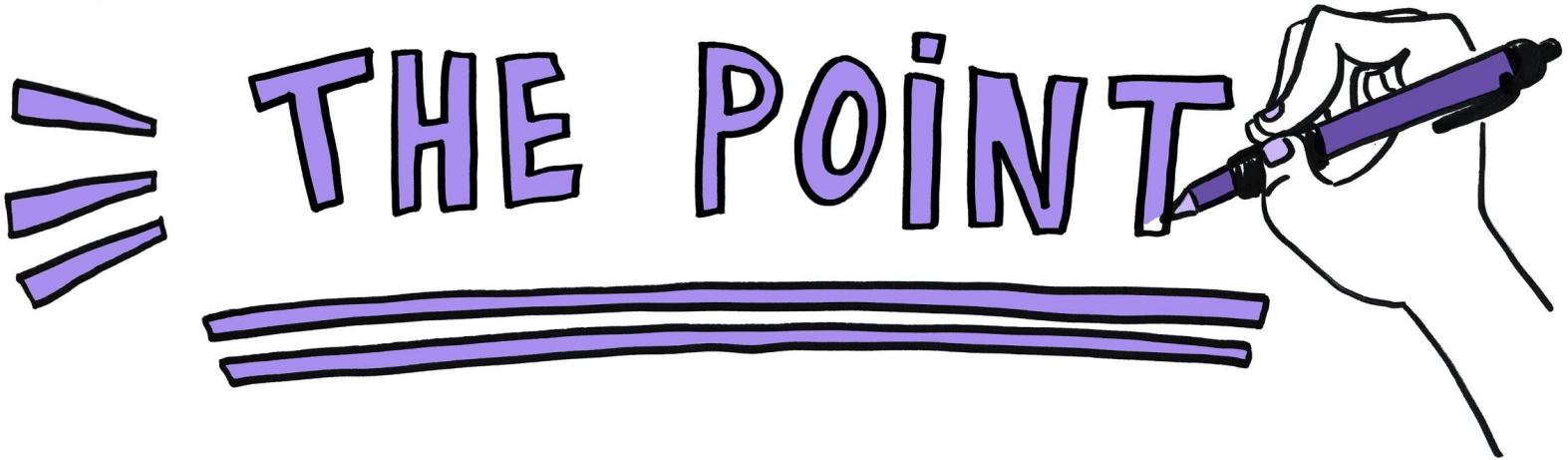
ILLUSTRATING THE POINT



images as effective COMMUNICATION TOOLS

Cordelia McGee-Tubb

Web Accessibility Lead, Dropbox

Master of Comics

@cordeliadillon

Comics School, Day 1:

Comics are about relationships.

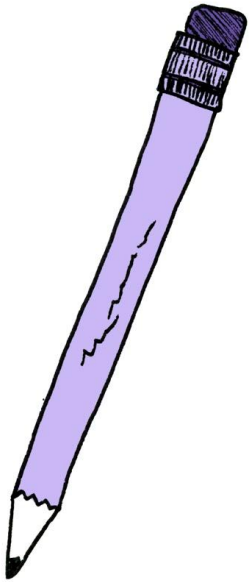


image & image

image & image

image & text

image & image

image & text

image & culture

I believe...

Websites are comics.

Try Dropbox Business

Dropbox

Download the app Sign in

Reinventing teamwork

Introducing Dropbox Paper and Smart Sync — a simpler way to work together.

Full name

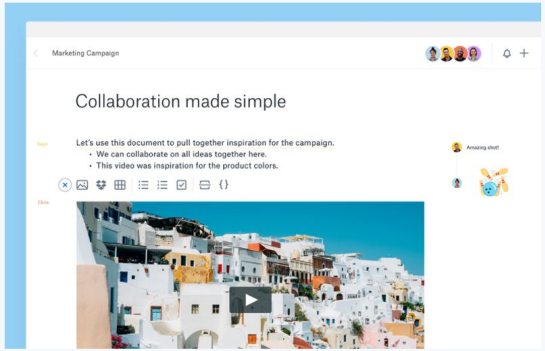
Email Password

I agree to Dropbox terms

Sign up for free

or

Sign up free with Google



Dropbox Paper

Grow bigger, brighter ideas

Explore Dropbox Paper >

Smart Sync

Everything you need, right when you need it

Explore Smart Sync >

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Dropbox works the way you do

Take your docs anywhere

Save files on your computer, then access them on your phone from the road. Everything you keep in Dropbox is synced automatically to all your devices.

Learn more

Send videos quickly

Send your entire wedding video to family with a simple link. It's easy to share large files with anyone — even if they don't have a Dropbox account.

Learn more

Scott McCloud’s word-picture combinations

1. Word-specific
2. Picture-specific
3. Duo-specific
4. Additive
5. Interdependent
6. Parallel
7. Montage

Understanding Comics, Scott McCloud (1993)

Scott McCloud’s word-picture combinations

1. **Word-specific**
2. Picture-specific
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5. **Interdependent**
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7. Montage

Understanding Comics, Scott McCloud (1993)

Word-specific
Words carry complete message, image illustrates some of it

Duo-specific
Words and image both convey same message

Additive
Words elaborate on image, or vice versa

Interdependent
Words and image combine to convey a meaning
neither could convey alone

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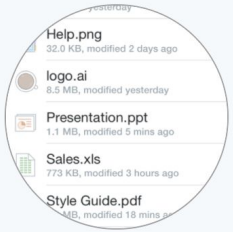
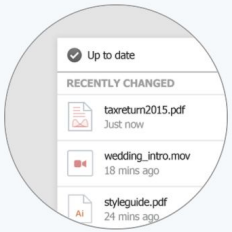
Close

All your files



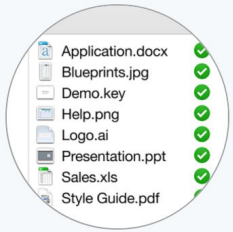
Save any kind of file in Dropbox, from photos, videos, and music to Microsoft Office and Adobe files.

Any device



Sync files across all your devices, whether you use a PC, Mac, Android, iPad, iPhone, or Windows Phone.

Offline access



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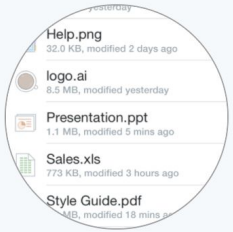
Additive

All your files



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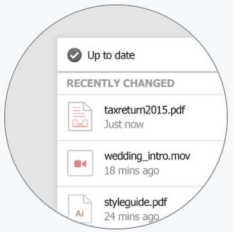

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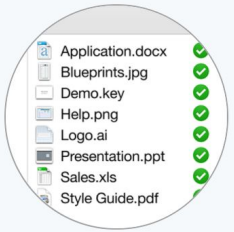

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Duo-specific

Additive

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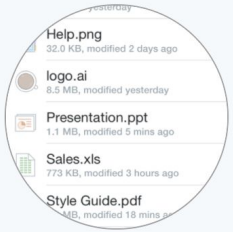

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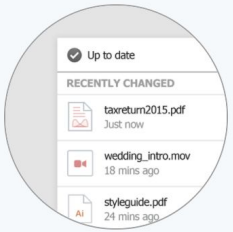

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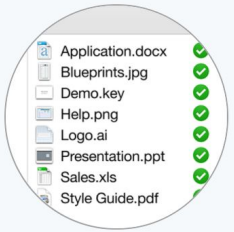

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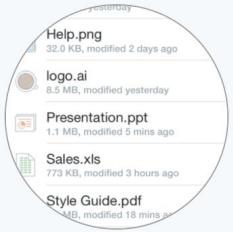
Duo-specific

Additive

Word-specific

All your files



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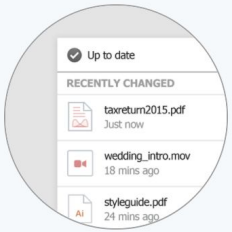

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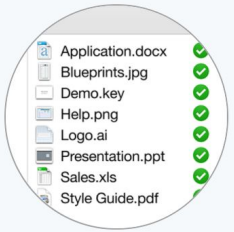


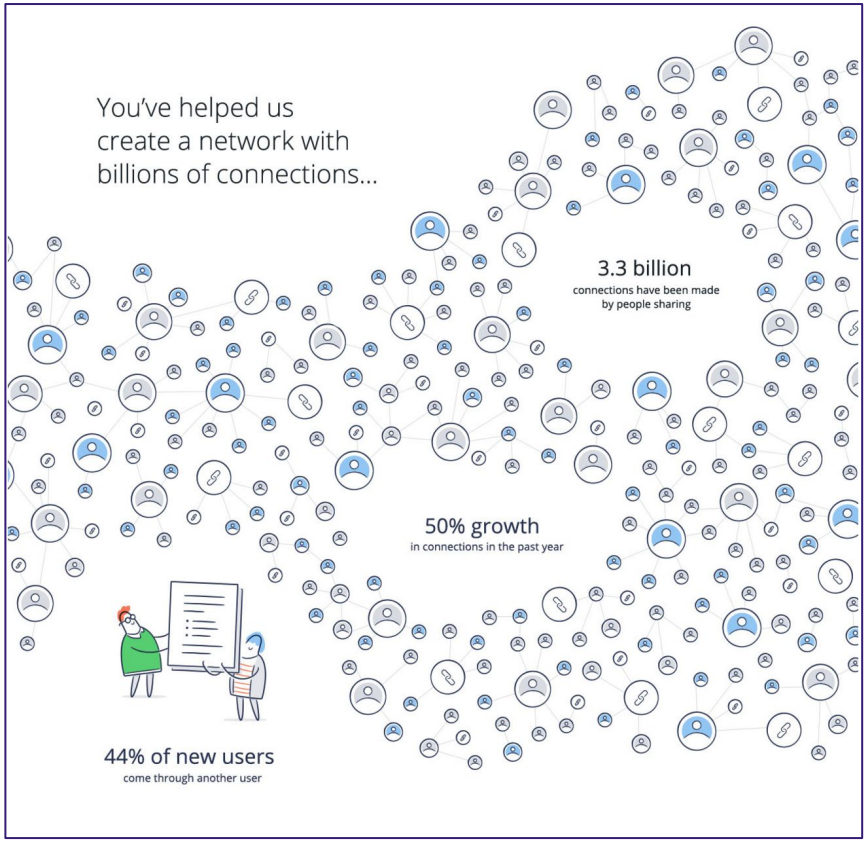
Your files are available on your computer even when you're offline, so you can work from anywhere.

Why are images so important in web design?

Images make pages more dynamic.

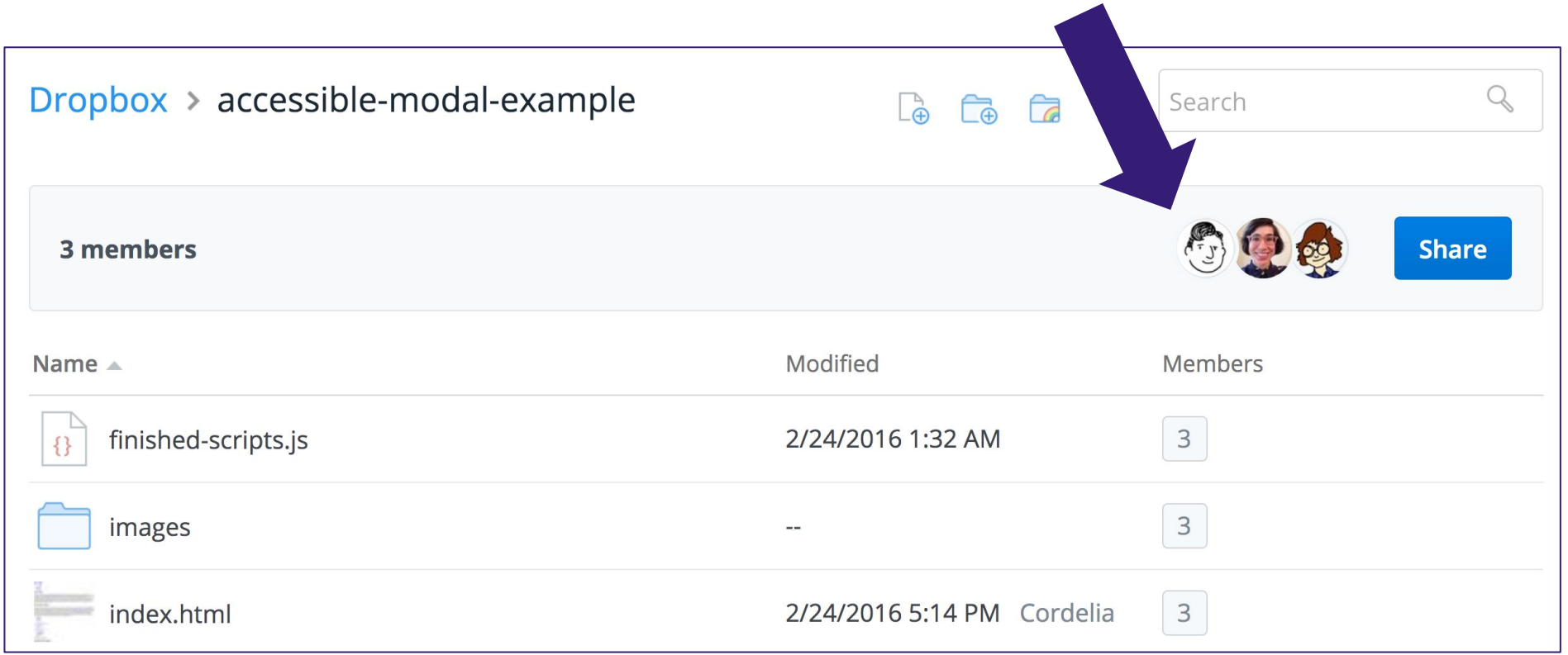
- Control visual pacing and breaks
- Reduce clutter
- Help visual learners
- Reinforce messages conveyed in text
- Illustrate complex topics
- Convey tone and personality

Control visual pacing and breaks



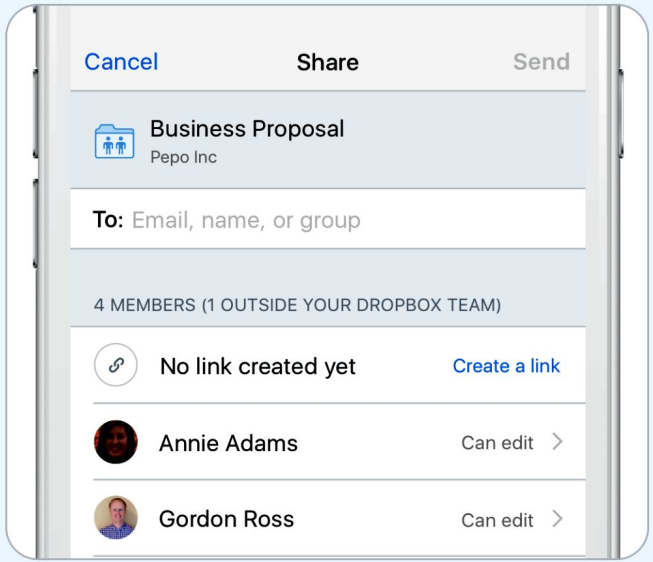
"Celebrating half a billion users," Dropbox blog

Reduce visual clutter



Dropbox.com shared folder

Help visual learners

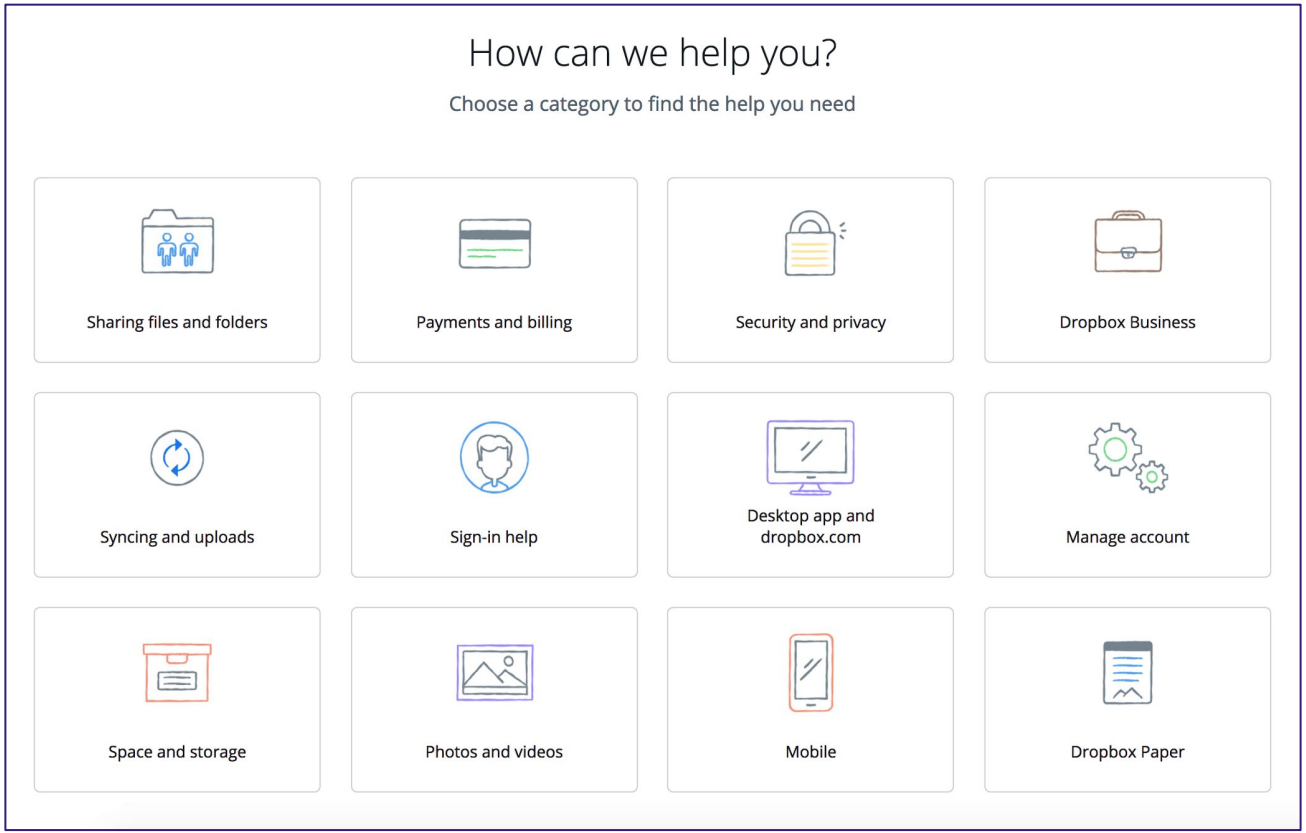


Organization-wide collaboration

Use comments to quickly gather feedback right next to your files. You can also invite your team to shared folders, where they can add and edit files together. Changes sync automatically, giving everyone the most recent version in their Dropbox folders.

dropbox.com/business/tour

Reinforce messages conveyed in text

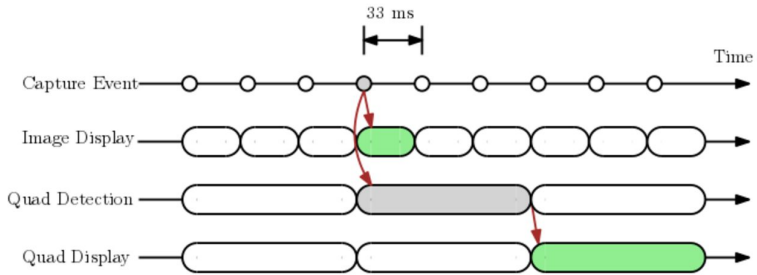


dropbox.com/help

Illustrate complex topics

Approach A: Asynchronous Processing

Let's assume from here on that our document detection algorithm requires 100ms per frame on a particular device, and the camera yields an image every 33 ms (i.e., 30 fps). One straightforward approach is to run the algorithm on a "best effort" basis while displaying all the images, as shown in the diagram below.



The diagram shows the relative timings of various events associated with a particular image from the camera, corresponding to the "Capture Event" marked in gray. As you can see, the image is displayed for 33 ms ("Image Display") until the next image arrives. Once the document boundary quadrilateral is detected ("Quad Detection"), which happens 100 ms after the image is received, the detected quad is displayed for the next 100 ms ("Quad Display") until the next quad is available. Note that in the time the detection algorithm is running, two *more* images are going to be captured and displayed to the user, but their quads are never computed, since the quad-computing thread is busy.

"Improving the Responsiveness of the Document Detector," Dropbox Tech Blog

Convey tone and personality

Dropbox

Dropbox is a technology company that builds simple, powerful products for people and businesses.

dropbox.com/about

Robots

A picture’s worth a thousand words.

A picture’s worth a thousand words.

Are they the same thousand words for every viewer?

(Basically, this whole talk is about <u>context</u>.)

Personal experience

Memory, age, education, gender, race, cognition, vision

Personal experience

Memory, age, education, gender, race, cognition, vision

Regional variations

Language, idioms, humor, customs

Personal experience

Memory, age, education, gender, race, cognition, vision

Regional variations

Language, idioms, humor, customs

Visual conventions

Well-known iconography

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System context

Particular to this interface

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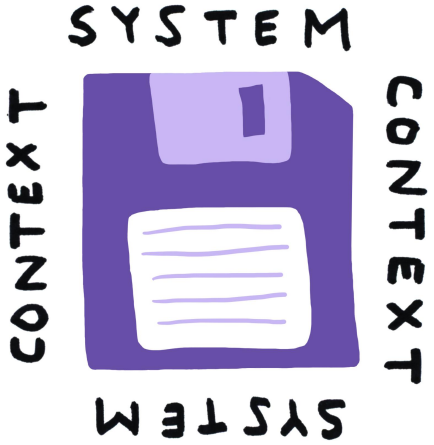
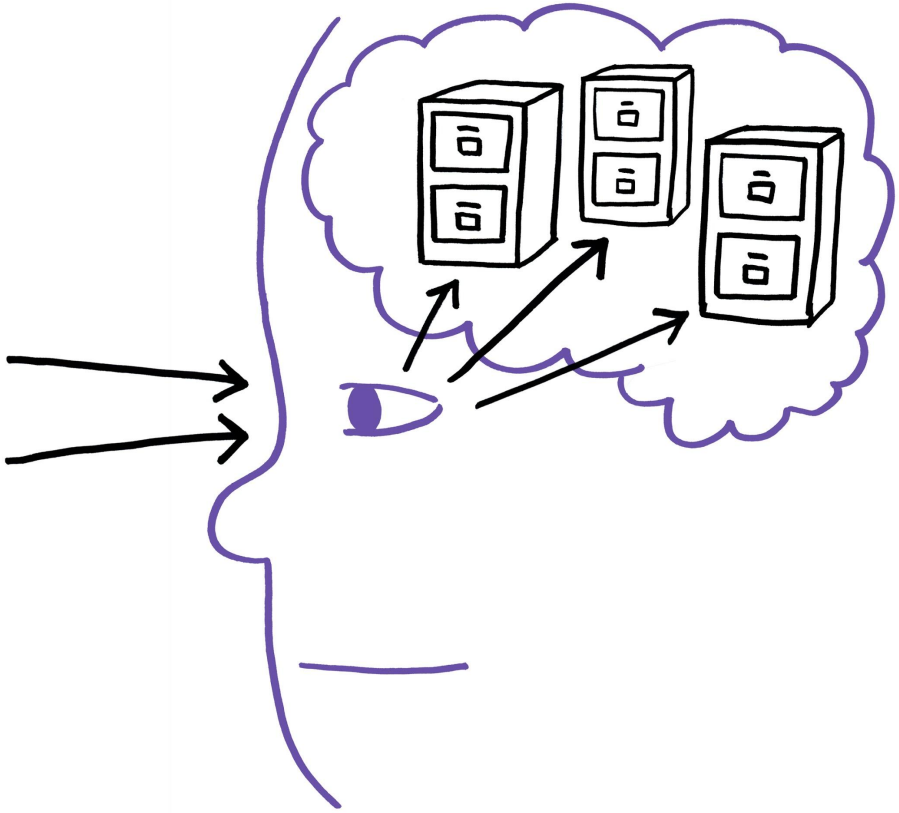
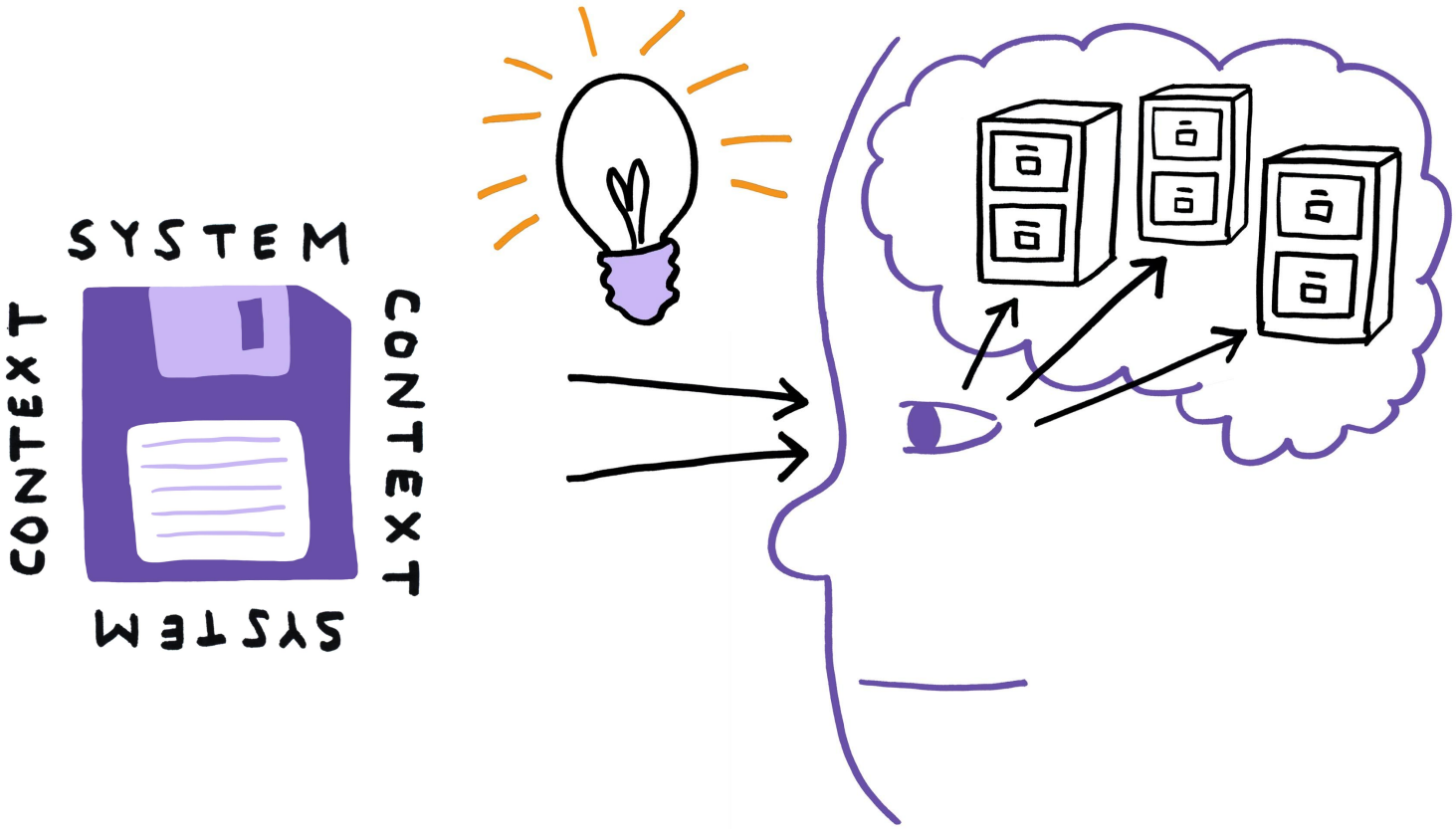
A very scientific diagram





A very scientific diagram



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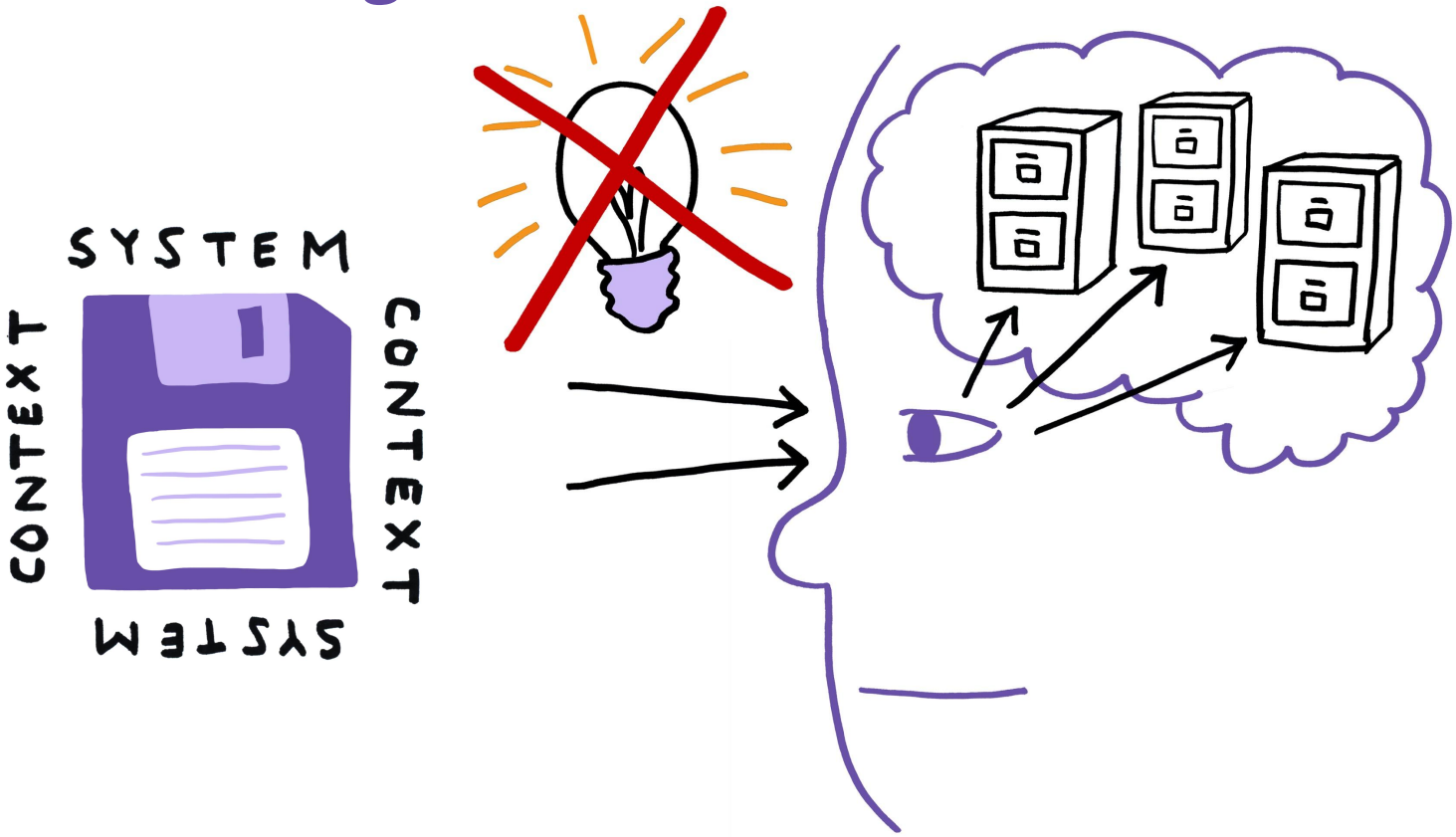


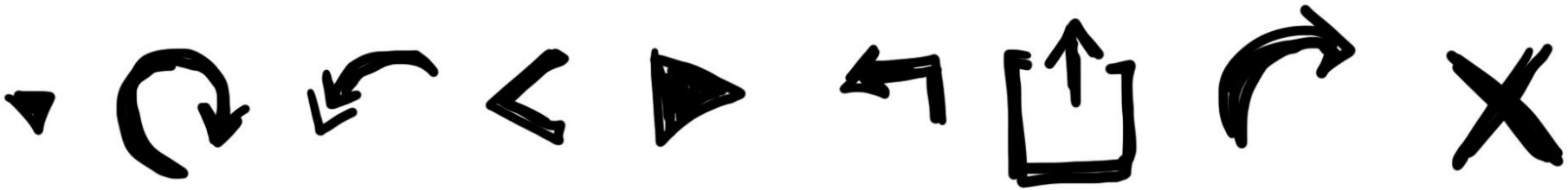
Everyone has a different context.

Image meaning gets muddled when we make too many assumptions about users.

Icons

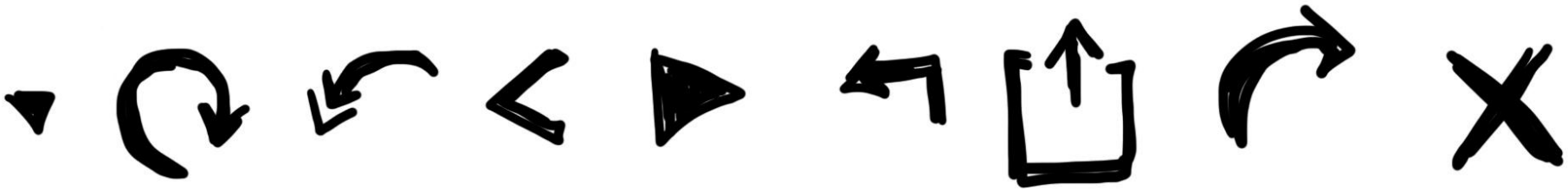
- Convey state or action
- Designed to have clear, intentional purpose
- Audiences don’t always understand them

Ambiguity and frustration



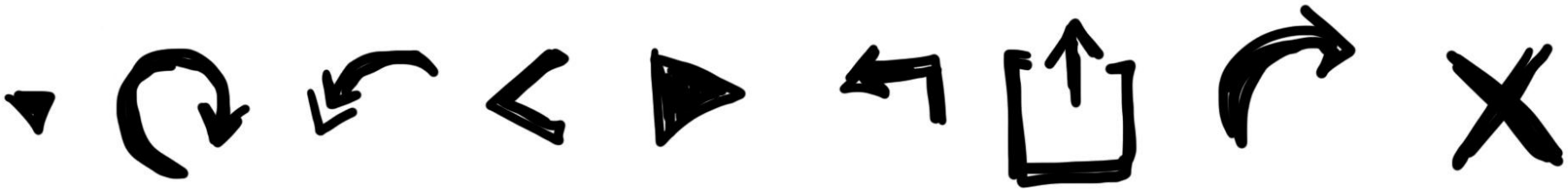
Ambiguity and frustration

- Especially confusing for new or elderly users



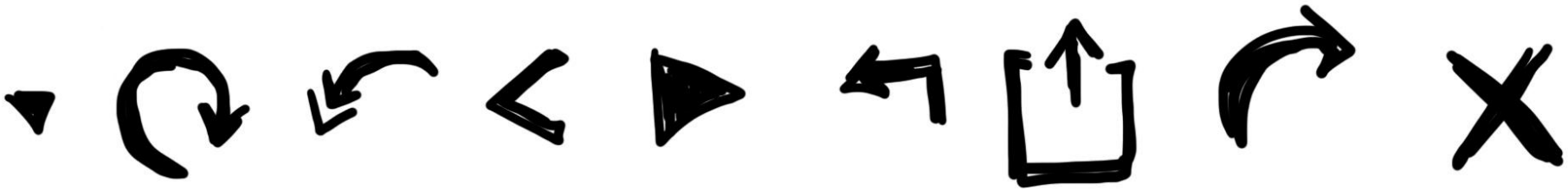
Ambiguity and frustration

- Especially confusing for new or elderly users
- Don’t want to click on something you don’t understand



Ambiguity and frustration

- Especially confusing for new or elderly users
- Don’t want to click on something you don’t understand
- Screen reader users have **advantage** when icons are properly coded, extreme **disadvantage** when not



Resolving icon ambiguity

- Get feedback from people **outside** your team.
  - What does this icon represent by itself?
  - Is the icon’s meaning clear in this interface?

Resolving icon ambiguity

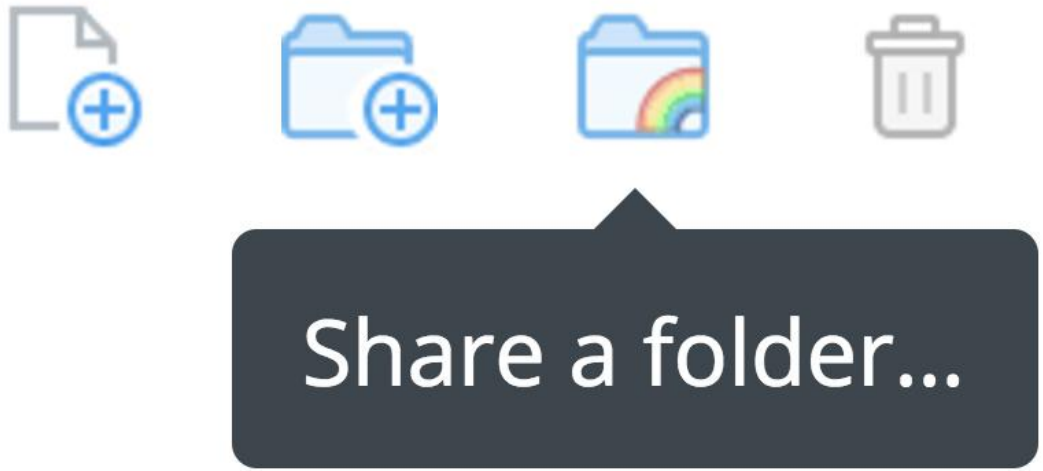
- Get feedback from people **outside** your team.
  - What does this icon represent by itself?
  - Is the icon’s meaning clear in this interface?

Resolving icon ambiguity

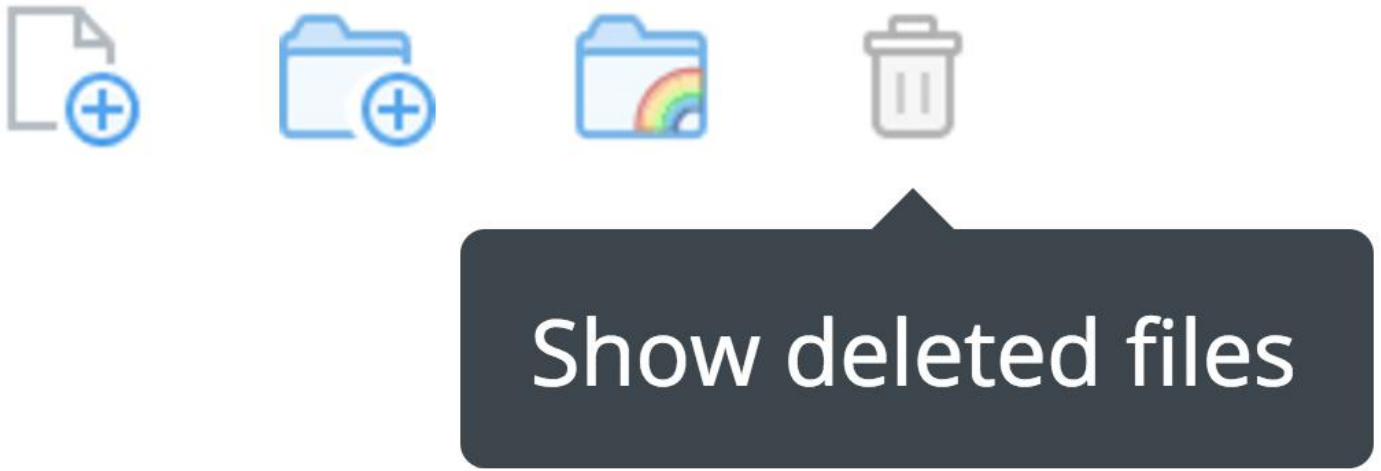
- Build in more context:
  - Accessible name for assistive technology
  - Also try one of these:
    - text adjacent to icon (**duo-specific**, **word-specific**)
    - mouse & keyboard-accessible tooltip (**duo-specific**)
    - other page content (**interdependent**)

Dropbox file list actions

Dropbox file list actions



Dropbox file list actions



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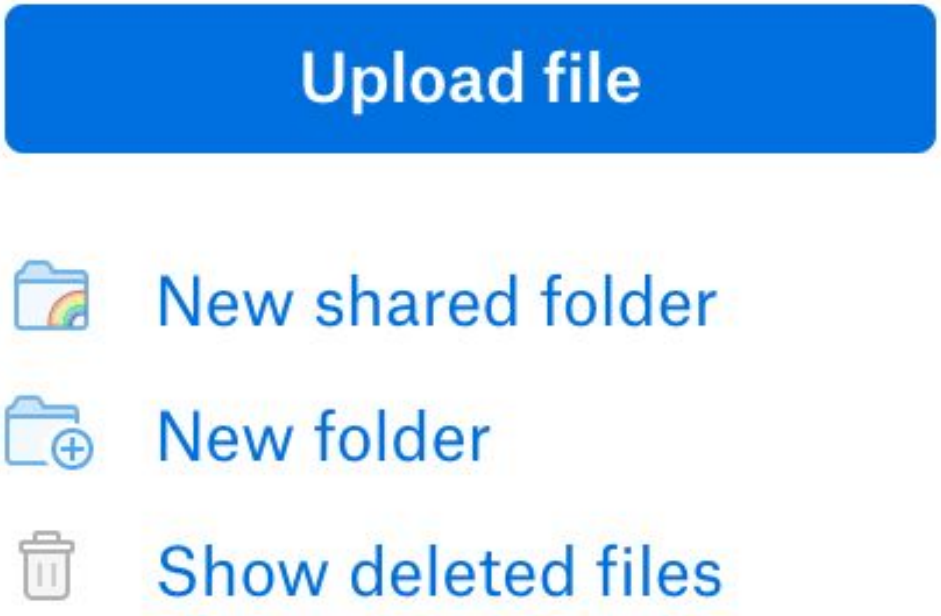


Gmail message actions

Gmail message actions

Gmail message actions

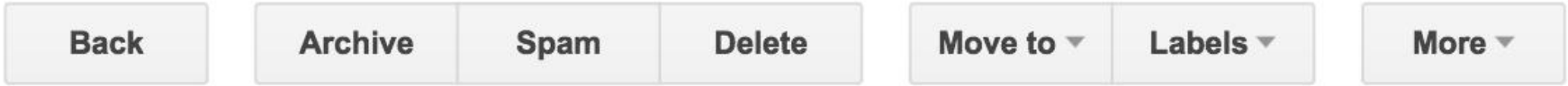
Button labels:
Learn more

Icons
Text

Gmail message actions

Button labels:
Learn more

Icons
Text



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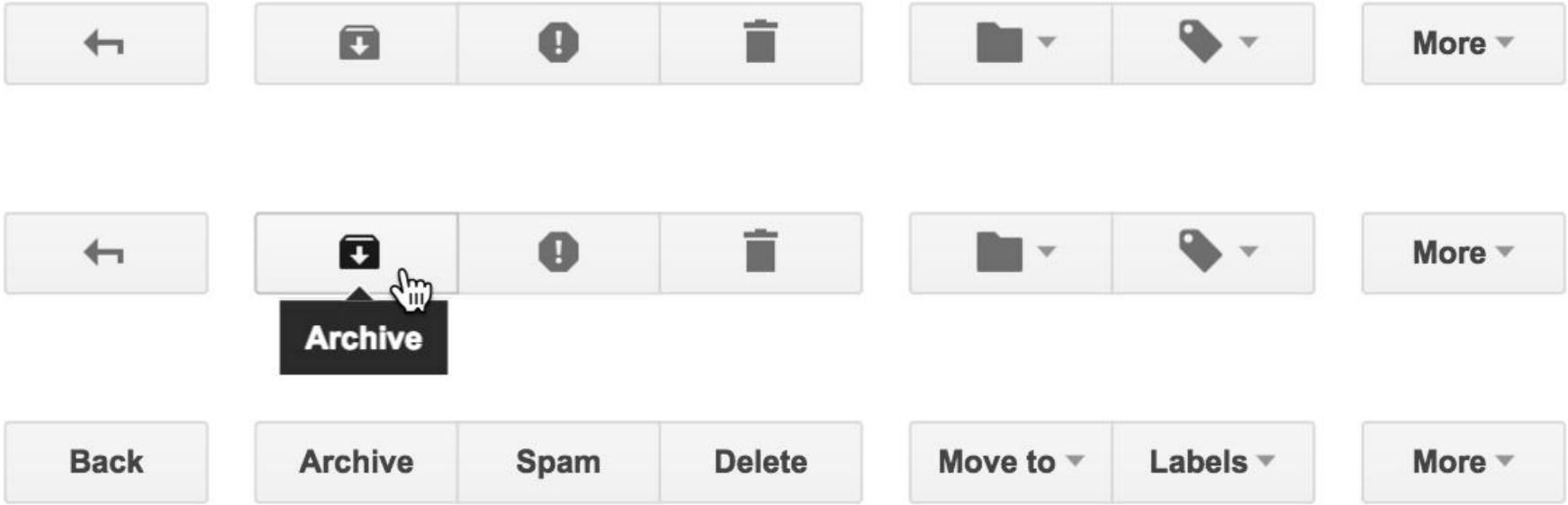

Stickers and emoji

- Use images to convey information, reactions, and emotions in a more playful and engaging way
- Flexible expression
- Highly subjective

Mark as unread

Cordelia McGee-Tubb 10 seconds ago (edited)

Do you think I need to change this slide?

AT Reply

Mark as unread

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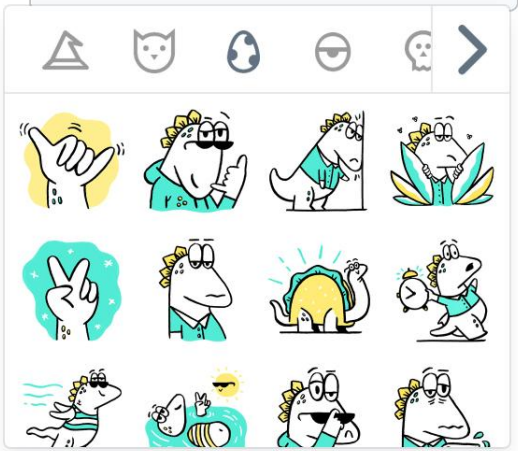
Do you think I need to change this slide?

AT Reply



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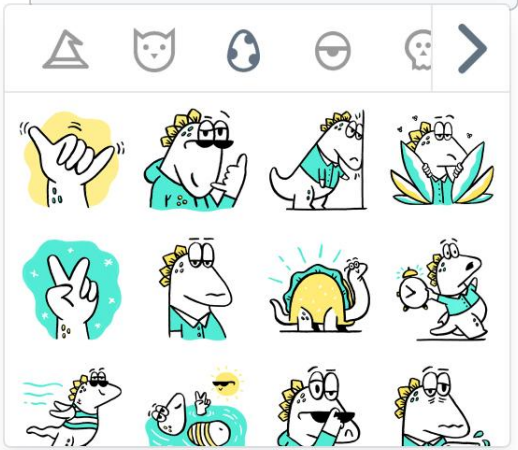

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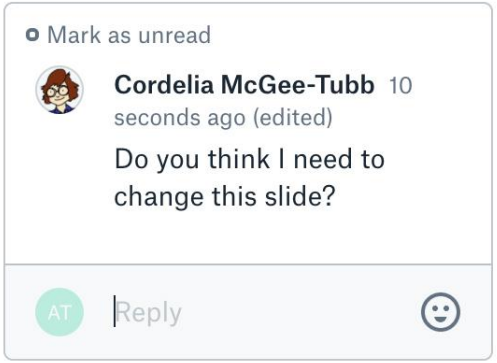
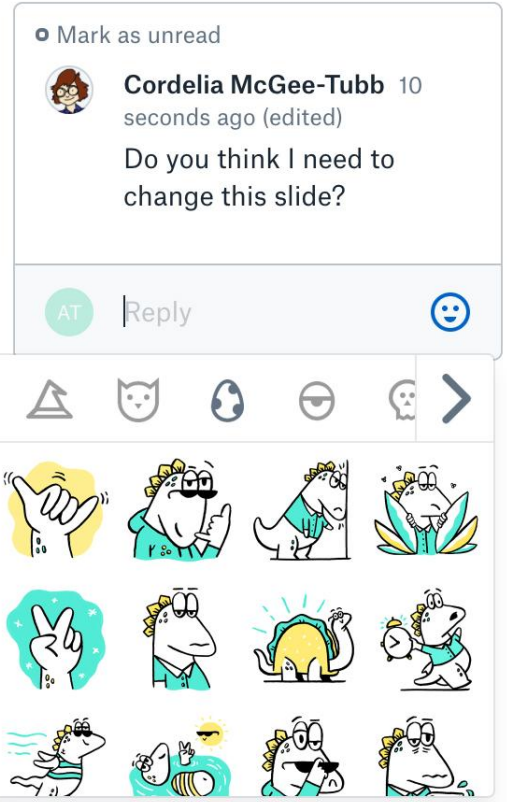
Do you think I need to change this slide?

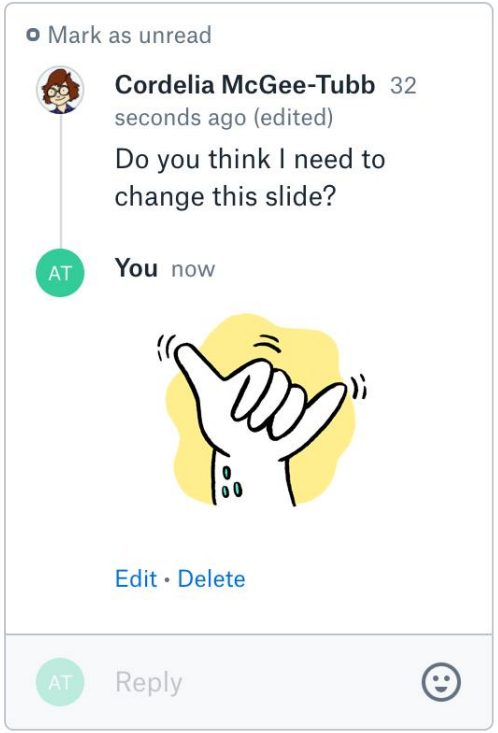
AT **You** now

Edit • Delete

AT Reply







US English:
Hang-loose hand sign

For other languages:
“Stay cool” hand sign

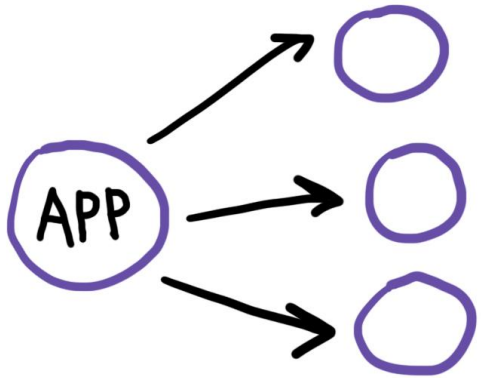
Backup definitions:
Dinosaur hang-loose hand sign
Dinosaur shaka gesture

Areas of ambiguity

- A new layer of context: user-generated content

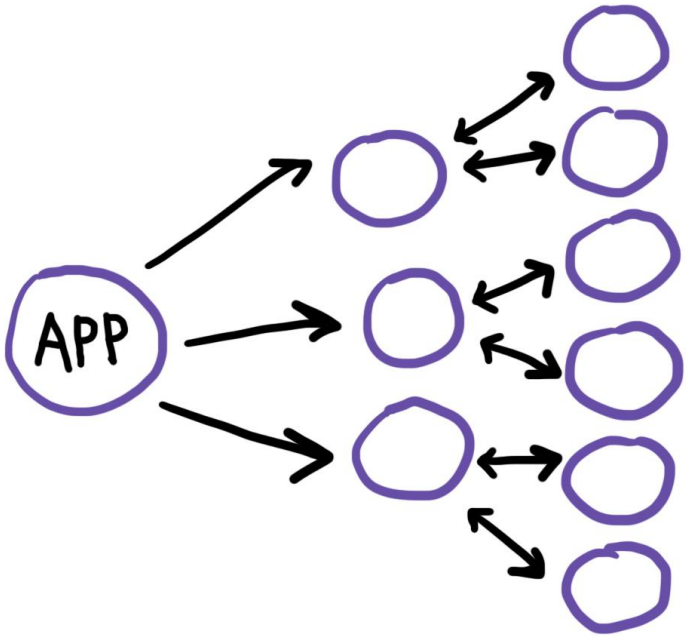
Areas of ambiguity

- A new layer of context: user-generated content



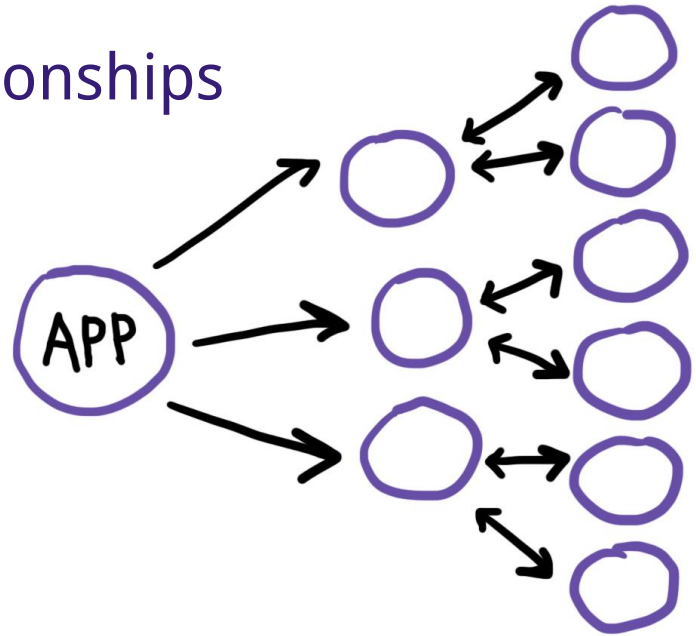
Areas of ambiguity

- A new layer of context: user-generated content



Areas of ambiguity

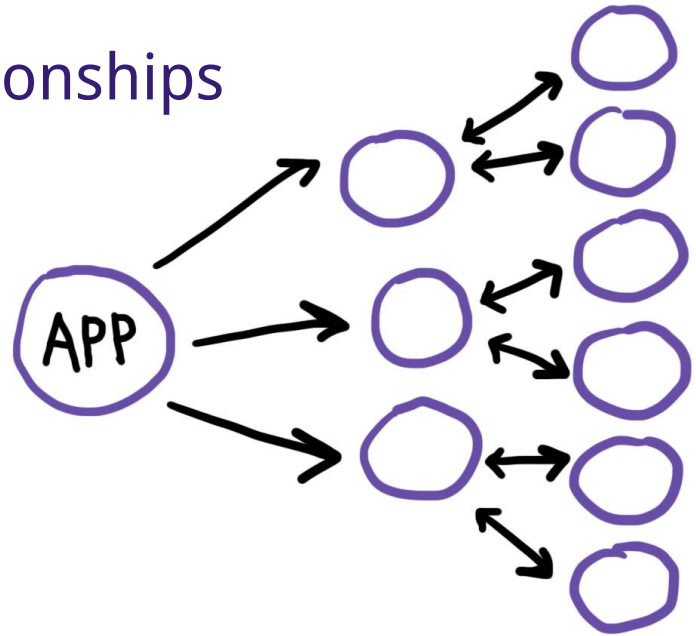
- A new layer of context: user-generated content
- Many potential text-to-image relationships



Areas of ambiguity

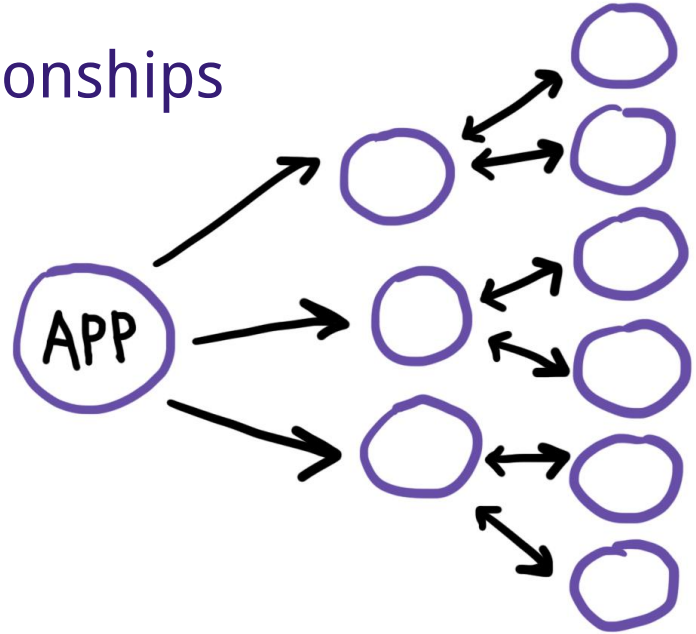
- A new layer of context: user-generated content
- Many potential text-to-image relationships

- Do you try to encourage a single definition for an image?

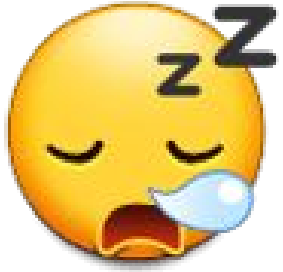


Areas of ambiguity

- A new layer of context: user-generated content
- Many potential text-to-image relationships



- Do you try to encourage a single definition for an image?
- If not, what definition do you supply for screen reader users?



Images from http://emojipedia.org/

Ouch: Disability Talk

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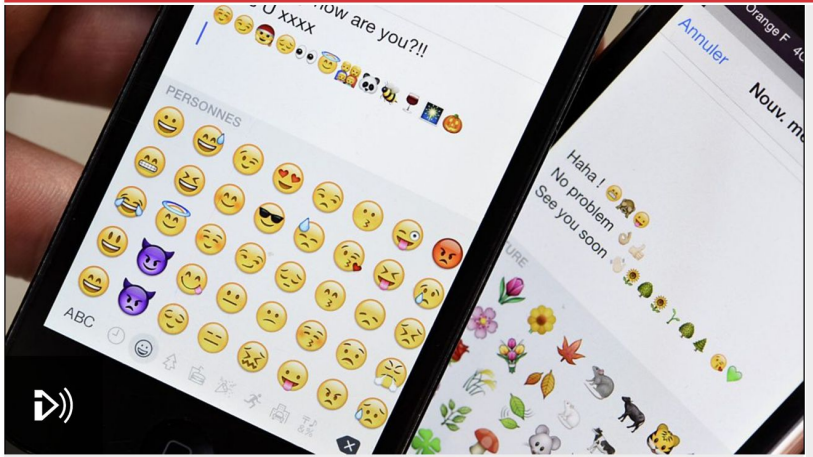


How do blind people interpret emoji's? - Repeat

The internet is becoming increasingly visual. How do blind people experience emoji's and is digital communication becoming more inaccessible? This episode was originally podcast in October 2015.

Available now

16 minutes

More episodes

See all episodes from Ouch: Disability Talk

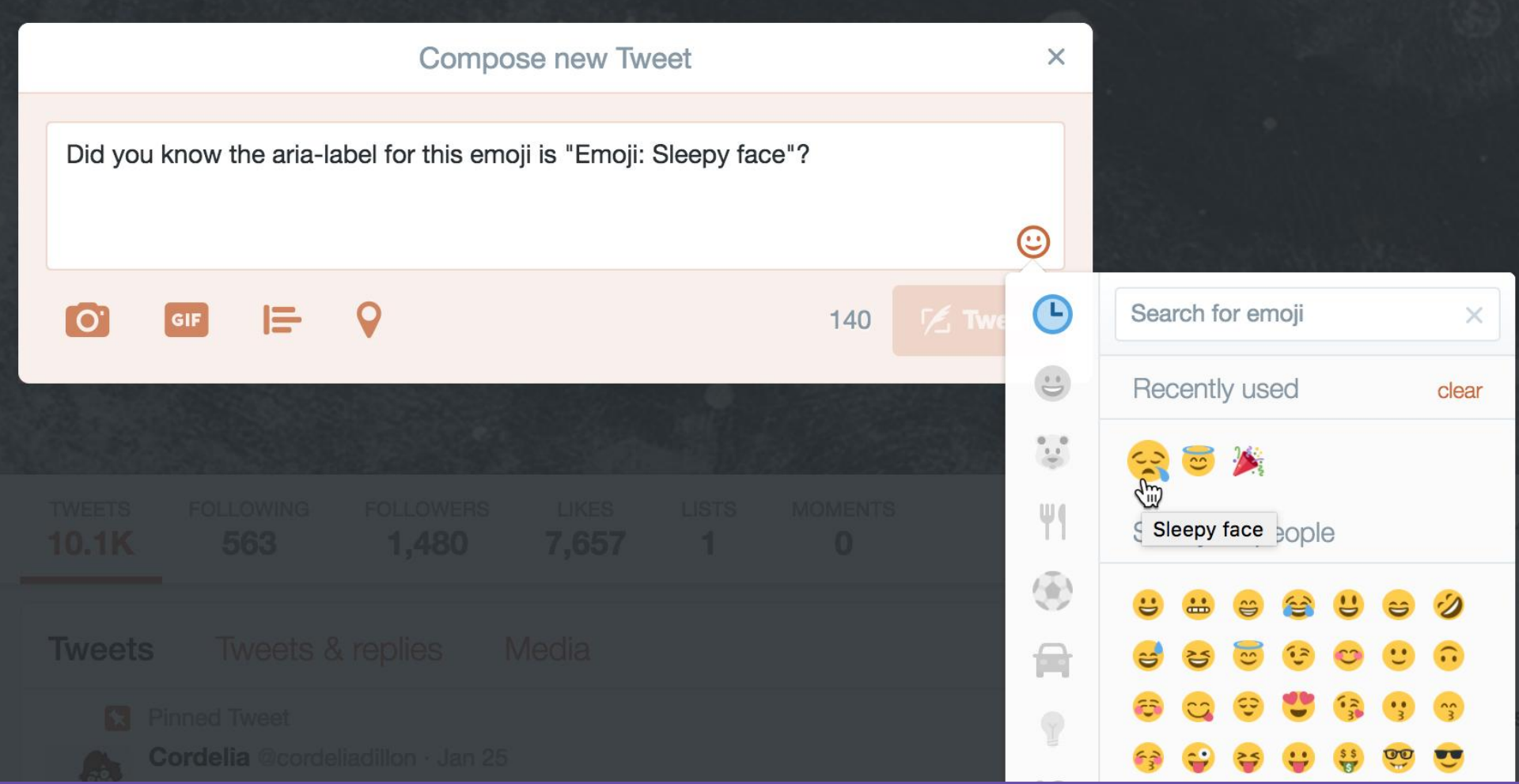
“How do blind people interpret emojis?” Ouch: Disability Talk

Providing clarity and flexibility

- When designing new expressive symbols, consider:
  - Subtleties of facial expression
  - Regional variations
  - Color contrast

Providing clarity and flexibility

- When designing new expressive symbols, consider:
  - Subtleties of facial expression
  - Regional variations
  - Color contrast
- When displaying these symbols, consider:
  - Text tooltips
  - Contextual translation

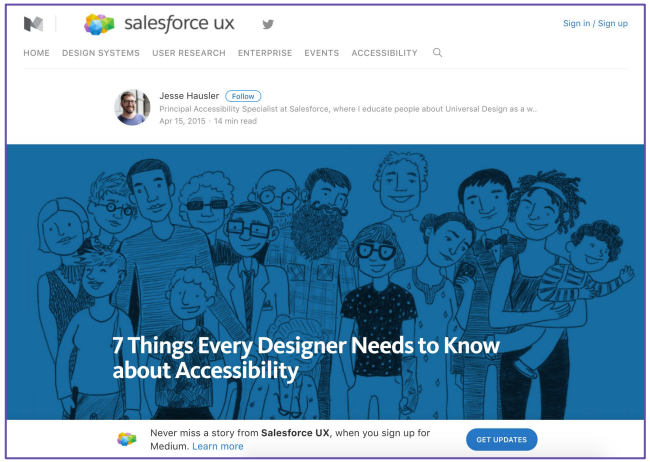

Compose new Tweet
Did you know the aria-label for this emoji is "Emoji: Sleepy face"?
GIF
140
Search for emoji
Recently used
clear
Sleepy face
TWEETS
10.1K
FOLLOWING
563
FOLLOWERS
1,480
LIKES
7,657
LISTS
1
MOMENTS
0
Tweets
Tweets & replies
Media
Pinned Tweet
Cordelia @cordeliadillon · Jan 25

Twitter

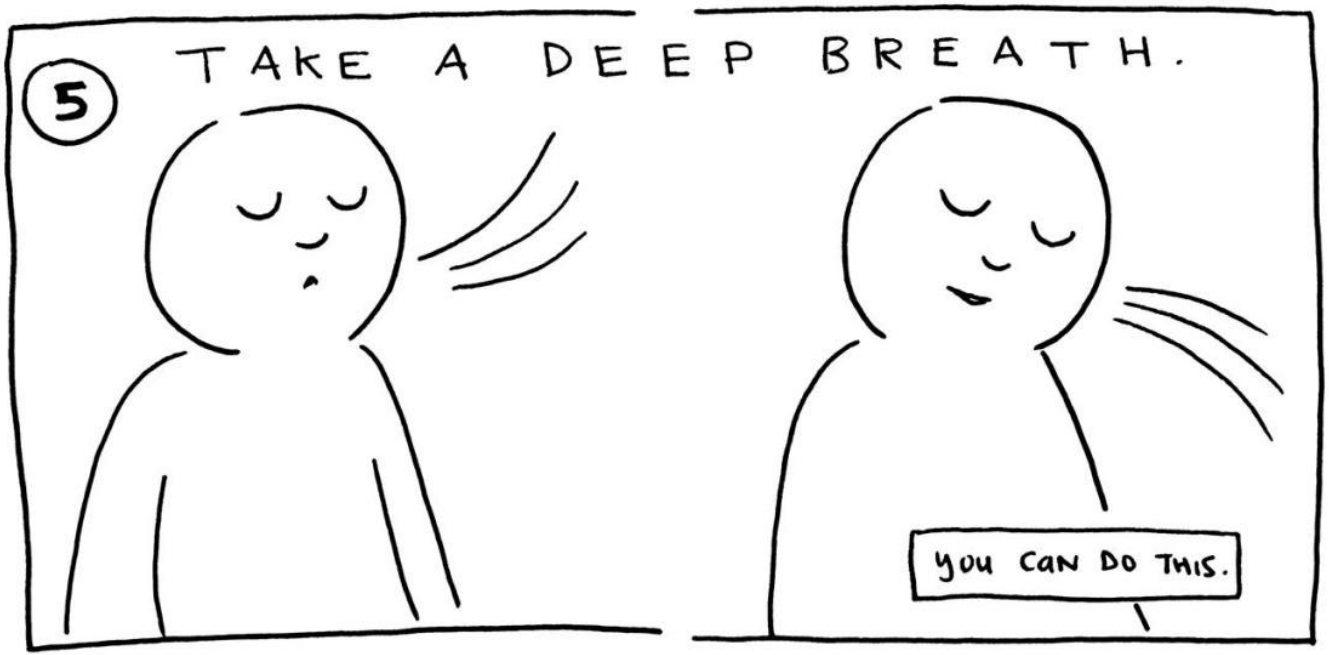
“Decorative” images

- Great visual separators
- Amplify surrounding content
- Set mood or tone
- Potentially inviting or distancing

Am I represented?

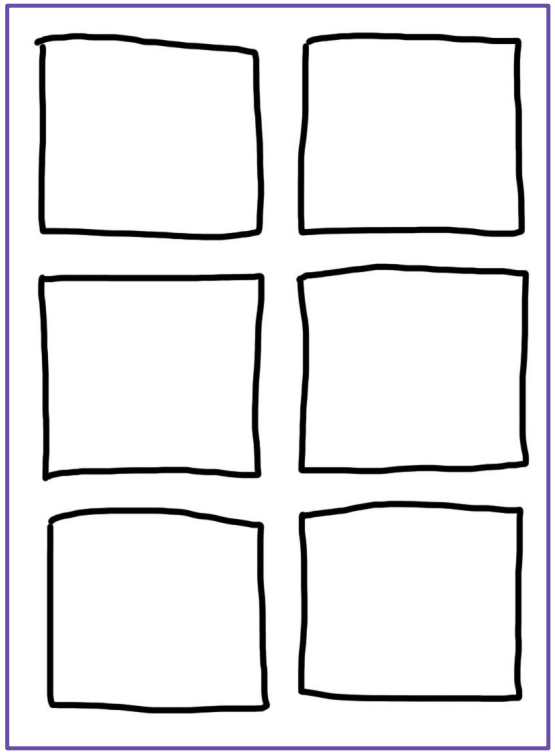


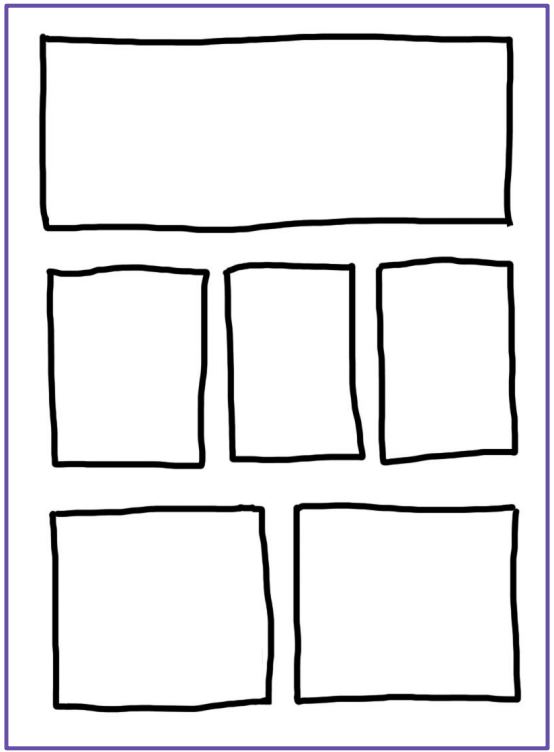
"7 Things Every Designer Needs to Know about Accessibility," Jesse Hausler (author), Cordelia (illustrator)

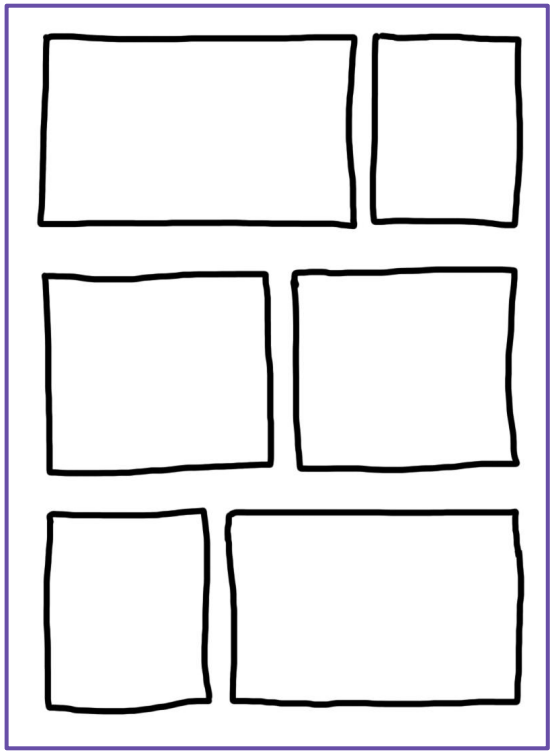

5
TAKE A DEEP BREATH.
YOU CAN DO THIS.

Websites and comics:
relationships between images, words, and cultural context.

Page and panel layouts







Scott McCloud’s word-picture combinations

1. **Word-specific**
2. Picture-specific
3. **Duo-specific**
4. **Additive**
5. **Interdependent**
6. Parallel
7. Montage

Understanding Comics, Scott McCloud (1993)

Remember your audience’s varied experiences.

Don’t assume context.

Do provide context.

(words & other page elements)

MAKE iT
ViBRANT

Thanks!

@cordeliadillon