

SCIENCE COMMUNICATION



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June 1-2, 2020 @ 1-2:30PM EST



Welcome !

While everyone settles in,
please answer the check-in question in the etherpad!

<https://pad.mozilla.org/p/BIOS2-IGNITE-SciComm-1>



Part 1

The basics



[Today's objectives]

- What is SciComm?
 - What can I expect it to achieve?
 - How can I do effective SciComm?
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Part 1

The basics



[The basics]

1. What is SciComm?
 2. Equity, diversity & inclusion
 3. Golden Circle
 4. Personas
 5. Storytelling
-

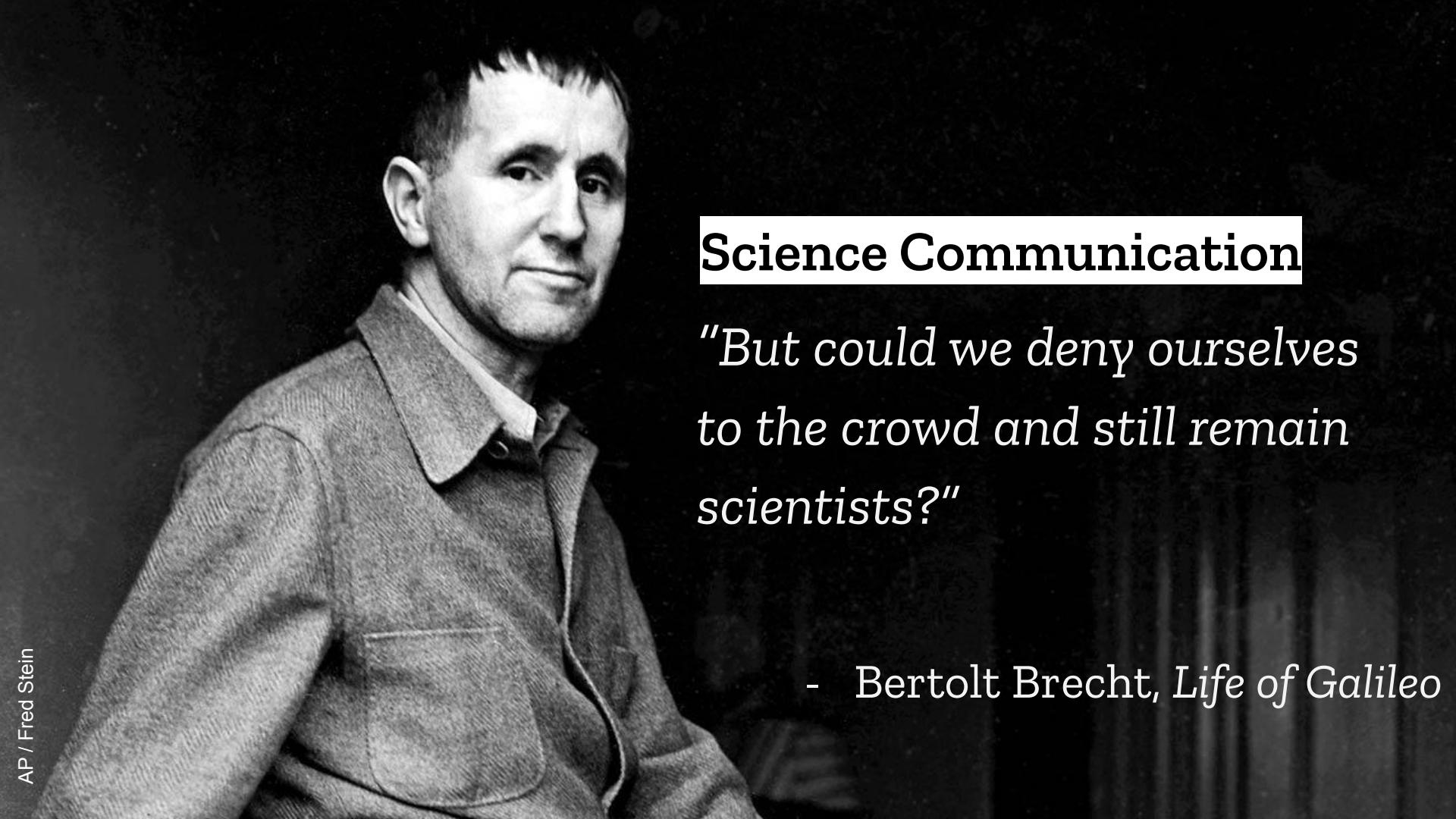
- 1 -

What is SciComm?



A photograph of a woman with voluminous, curly blonde hair whispering into the ear of a young girl. The woman is wearing a white cable-knit sweater and dark jeans. The girl has curly brown hair and is wearing a black leather jacket over a patterned top. They are outdoors, with a stone wall and a window frame visible in the background.

Why learn the basics?

A black and white portrait of Bertolt Brecht, looking slightly to his right. He has short, dark hair and is wearing a dark, textured jacket over a light-colored collared shirt.

Science Communication

*“But could we deny ourselves
to the crowd and still remain
scientists?”*

- Bertolt Brecht, *Life of Galileo*

A photograph of two young women sitting on a bench against a teal wooden wall. The woman on the left is gesturing while speaking, and the woman on the right is listening attentively.

what is Science Communication?

**Exchange of
information about
topics related to science.**

2. Equity, diversity, and inclusion



Science communication isn't perfect.
What are some potential pitfalls in SciComm?

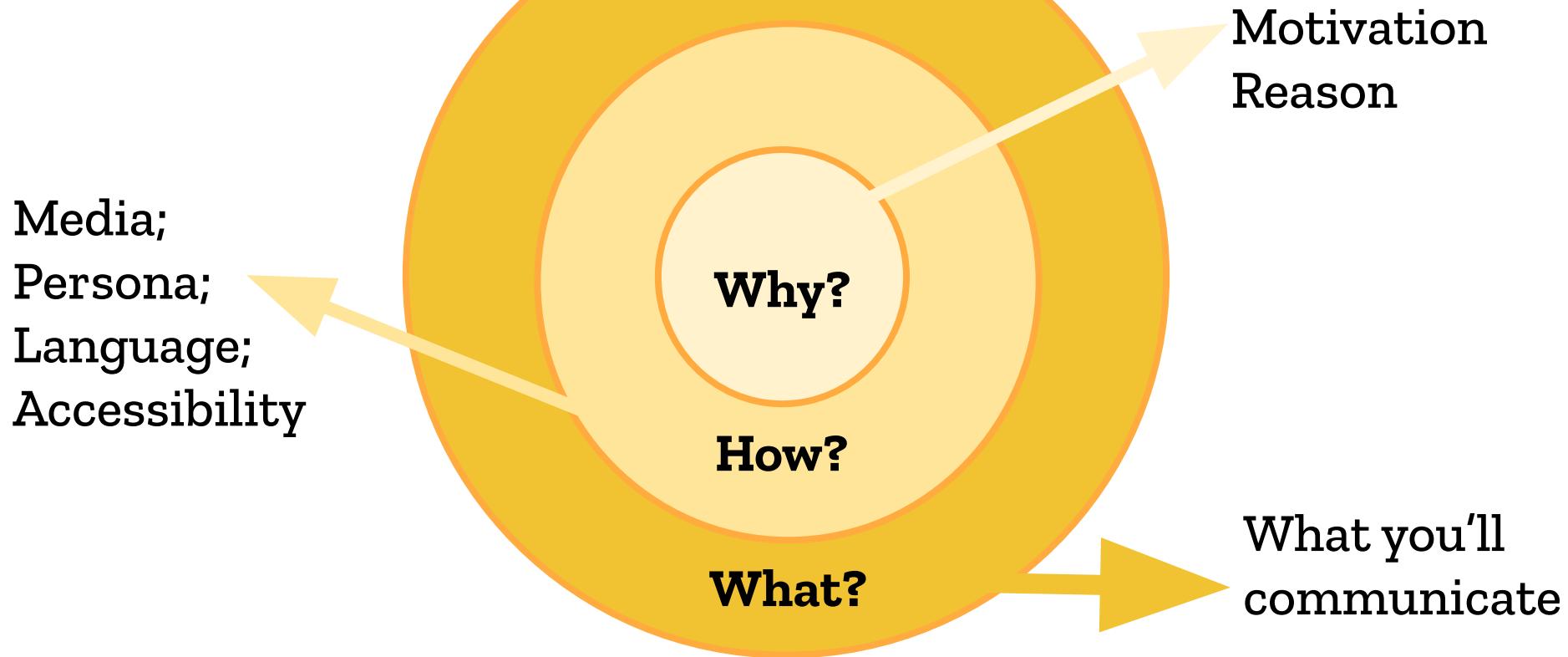
- 3 -

Golden Circle

Plan your SciComm



Golden Circle



LET'S MEDITATE!

Make your own Golden Circle!

- **Why** do you want to do SciComm?
- **How** are you going to do it?
- **What** do you want to communicate?

- 4 -

Personas

Knowing your audience





5 Levels
Sleep

- LEVEL 1
Child
- LEVEL 2
Teen
- LEVEL 3
College Student
- LEVEL 4
Grad Student
- LEVEL 5
Expert





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Expert





Who is your
audience?



what does she
think?

A close-up portrait of a young woman with long, wavy hair that has a mix of dark brown and light blonde highlights. She is looking directly at the camera with a neutral expression. The background is blurred, showing what appears to be an outdoor setting with other people.

what does
she **hear**?

what does she
think?

what does
she **see**?



what does she
think?

what does
she **hear**?

what does
she **see**?

what does
she **need**?



what does she
think?

what does
she **hear**?

what does she
need?

what does
she **see**?

what does
she **gain**?

A close-up portrait of a young woman with long, dark, wavy hair. She has a neutral expression and is looking directly at the camera. The background is blurred, showing what appears to be an indoor setting with soft lighting.

tl;dr

What does this person already know?

Why would they care?

What can they learn?

- 5 -

Storytelling

Engaging your audience



putting your message together

A close-up photograph of a single fortune cookie. The cookie is split open, revealing a white paper strip with a dark brown ink message. The message reads: "Your patience with others is good." The cookie has a textured, slightly irregular shape and is set against a warm, yellowish-orange background.

Your patience with others is good.

Why do humans like stories so much?



"[...] humans [...] try to comprehend what is going on around them and **refer to what they already know in order to make sense of new input.**"

- Schank & Abelson, 1995

Why do humans like stories so much?



"Story, as it turns out, was crucial to our evolution—more so than opposable thumbs. [...] Story is what enabled us to **imagine what might happen in the future, and so prepare for it [...].**"

- Lisa Cron, 2012

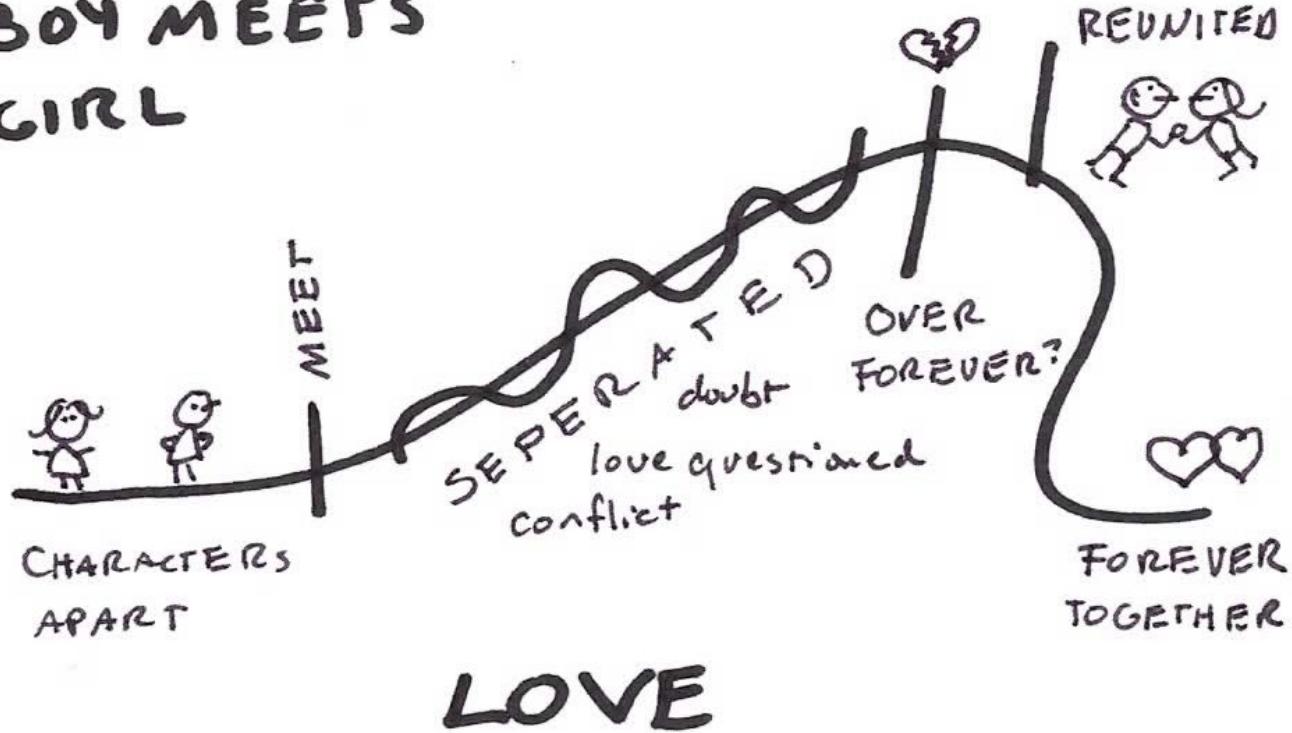


How to tell
a story



BOY MEETS GIRL

@cwodtke

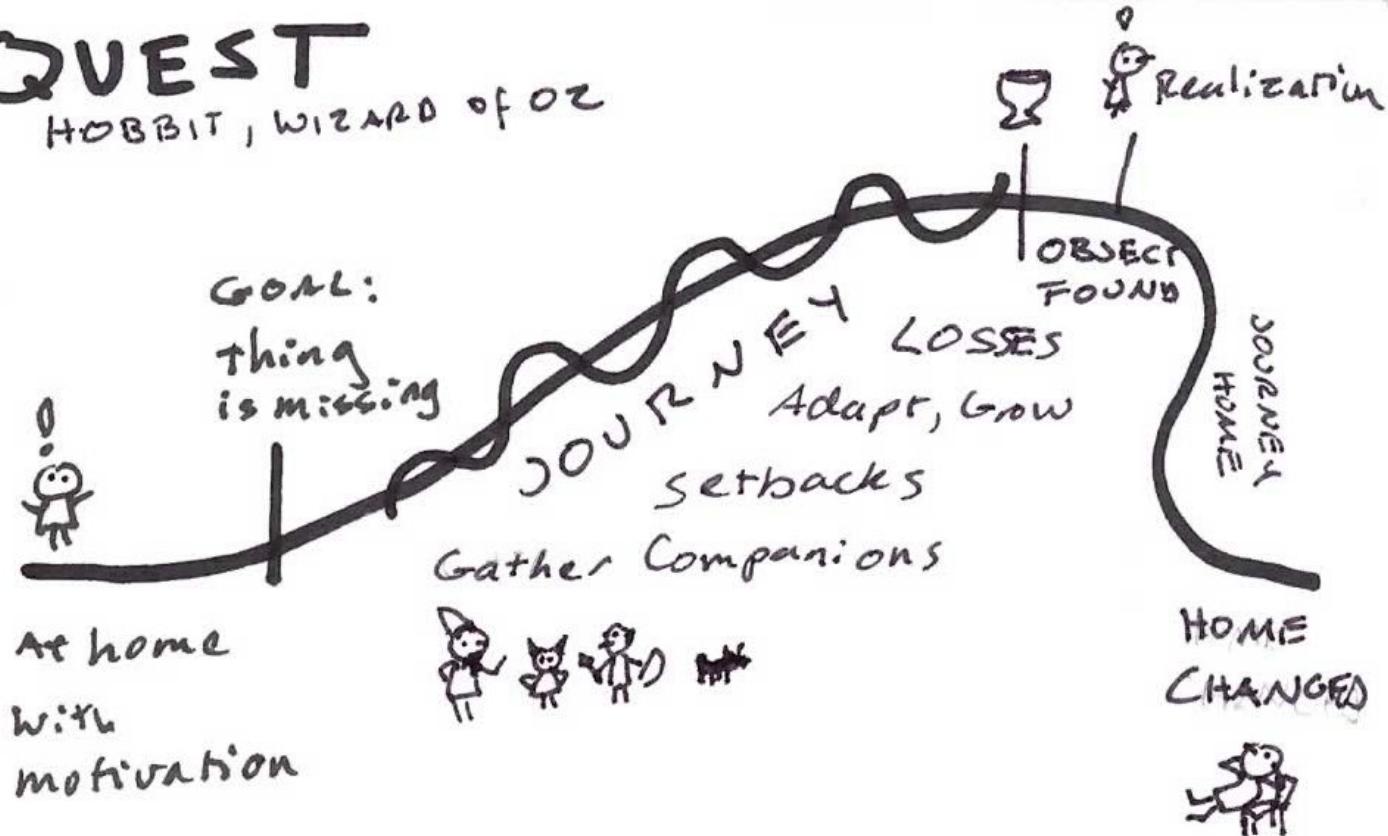




QUEST

HOBBIT, WIZARD OF OZ

@Cwodrake





science!

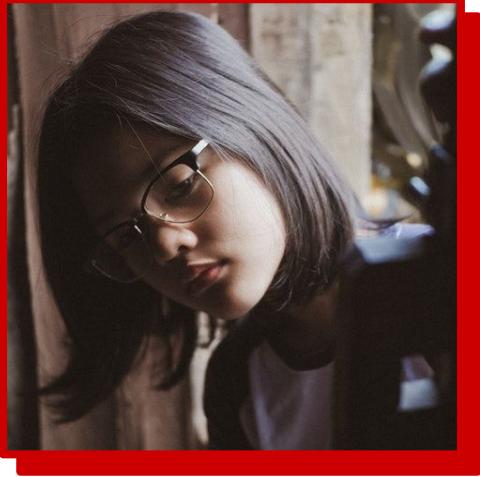
what?
who?



challenges

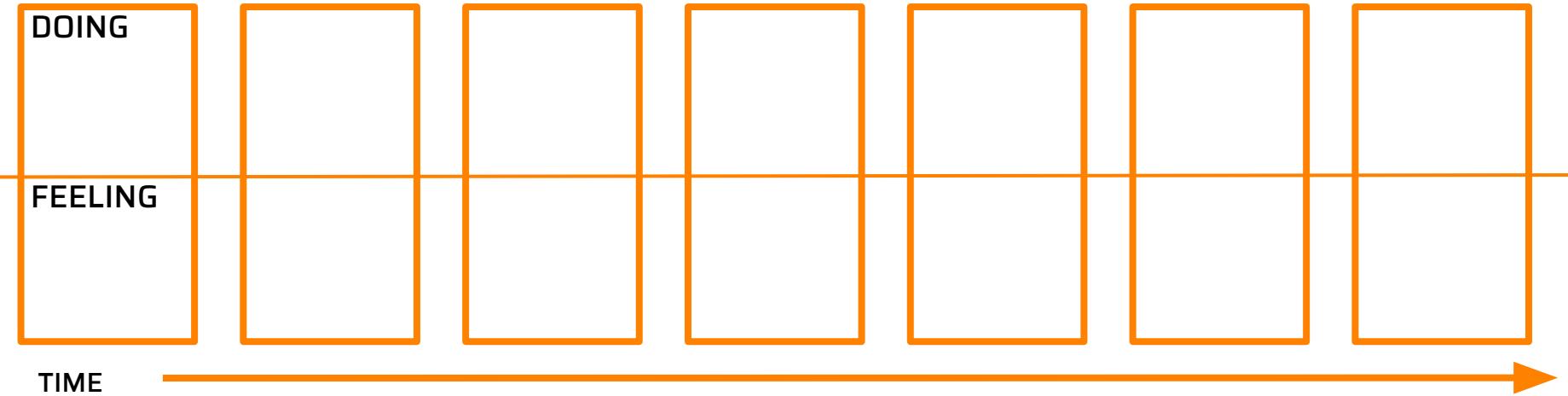
goals

change



Name:

Audience journey

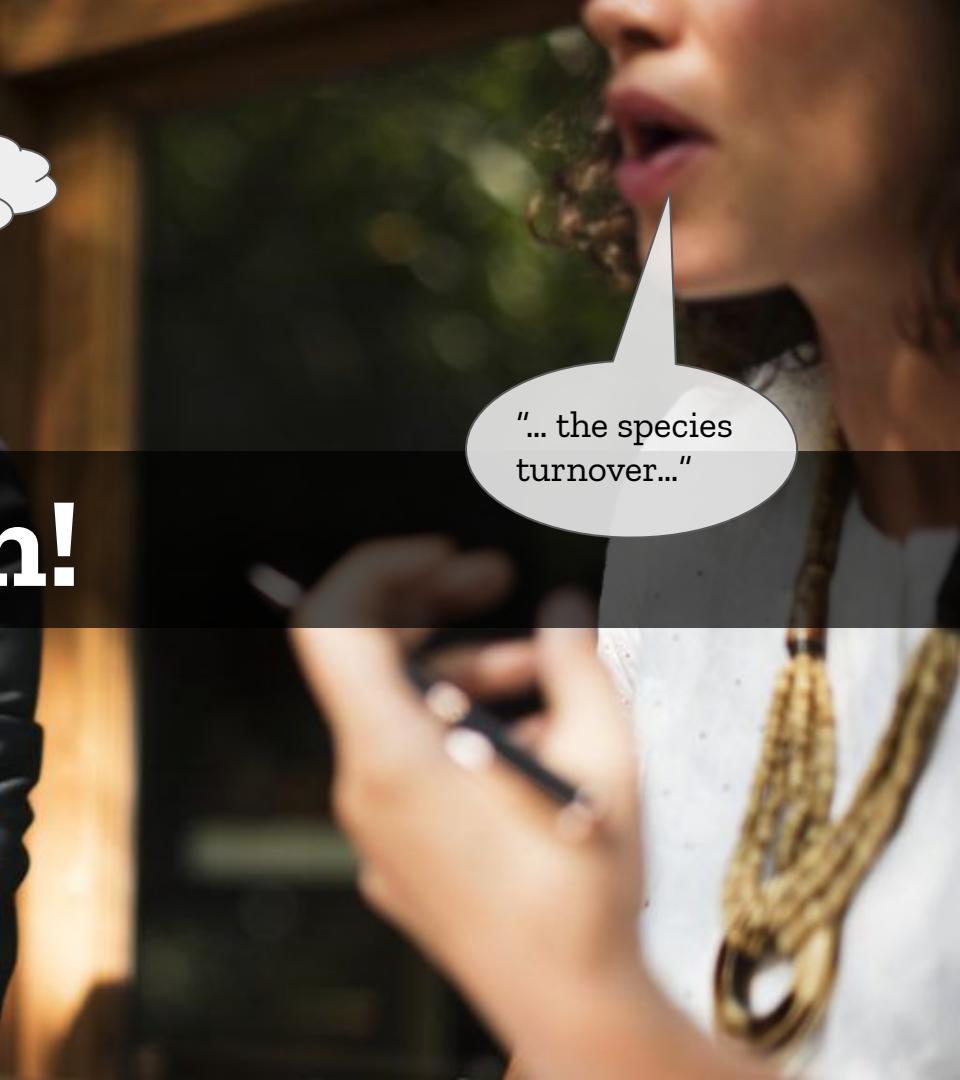


A photograph of a person's hands holding an open book. The book is engulfed in bright orange and yellow flames, with smoke rising from the burning pages. The background is dark, and some green foliage is visible at the bottom right.

Caring about the message

A close-up photograph of a man with a full, bushy beard and mustache. He has short, light-colored hair and is wearing a dark gray suit jacket over a white shirt and a red tie. He is looking slightly to his right with a neutral to slightly confused expression. A white thought bubble is positioned above his head, containing the word "WHAT?!".

Beware of jargon!

A close-up photograph of a woman's face. She has her mouth open as if she is speaking or singing. A white speech bubble is positioned to the left of her mouth, containing the text "... the species turnover...".

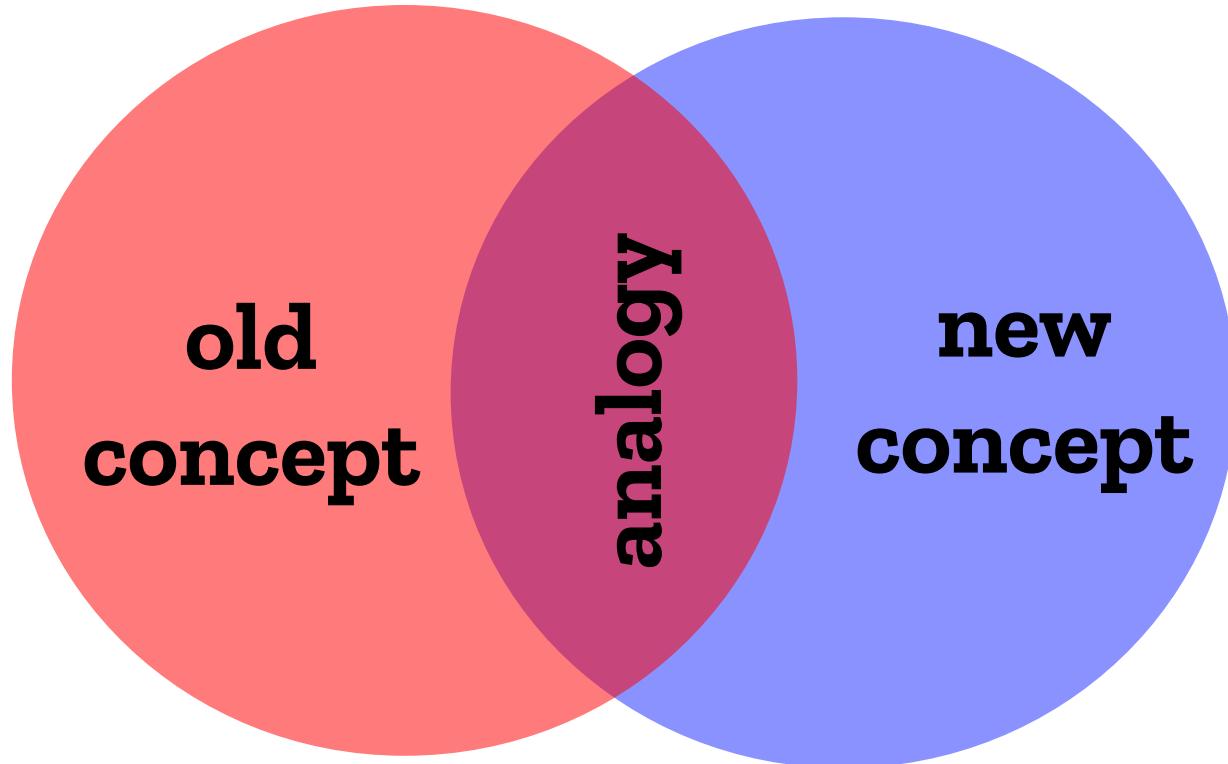
A photograph of a seagull standing on a dark wooden railing. The bird is facing left, its body angled away from the viewer. It has white plumage on its head and neck, with dark grey or black feathers on its wings and back. Its yellow beak is slightly open. The background is a soft-focus view of a building with light-colored walls and a window with white horizontal shutters.

It's a matter
of balance.

"All animals in the world are like a big family. Some animals are like brothers and sisters and other animals are like the children of each others aunts and uncles. In this big family, all animals fight with each other for food, space, water and stuff. I **study if brother and sister animals fight more with each other than they do with the children of their aunt and uncle.**

To study this I make **not real worlds** in computers. In these not real worlds I have many many not real animals and I make these not real animals fight **a lot lot lot lot of times**. I then see which animals fought the most. It's pretty cool."

Analogies





ALWAYS explain

Be fair





Questions?

Thank you!

See you tomorrow @ 1-2:30PM EST!