

# Storytelling for Research Communications

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Learning and Design Specialist

My GradExperience | Faculty of Graduate Studies

# Faculty of Graduate Studies

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Recruitment and  
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Academic  
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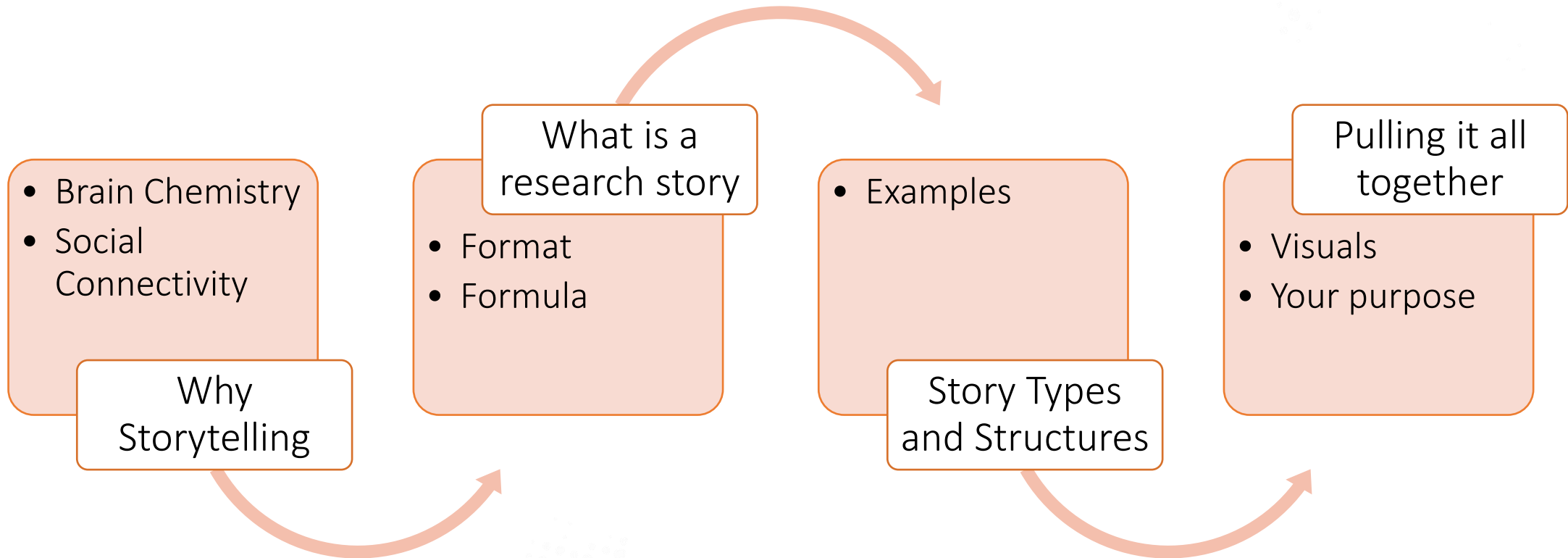
Work-Integrated  
Learning

Experiential  
Learning

Research  
Communications

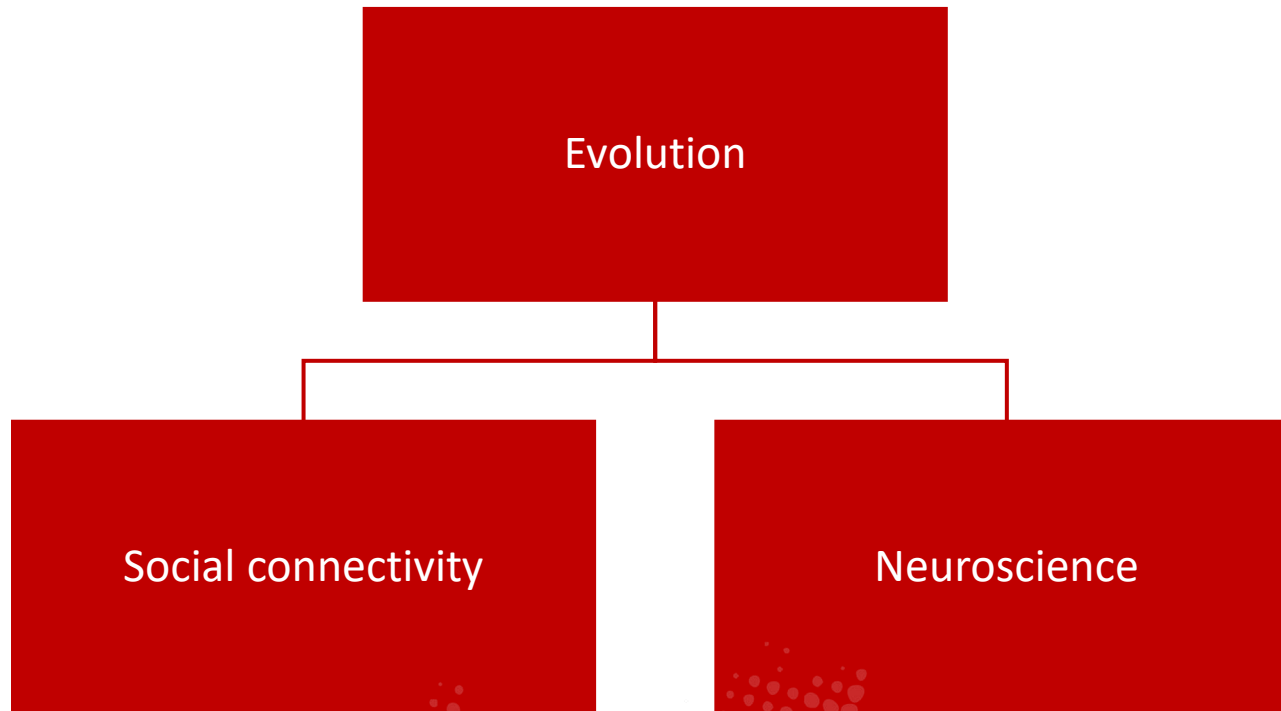
[Mygradskills@ucalgary.ca](mailto:Mygradskills@ucalgary.ca)

# Workshop Outline





# Why does storytelling work so well?



**"Storytelling is our default way of learning and making sense of the world"**

- Holly Walter Kerby (Storyform Science)

# The Science of Storytelling

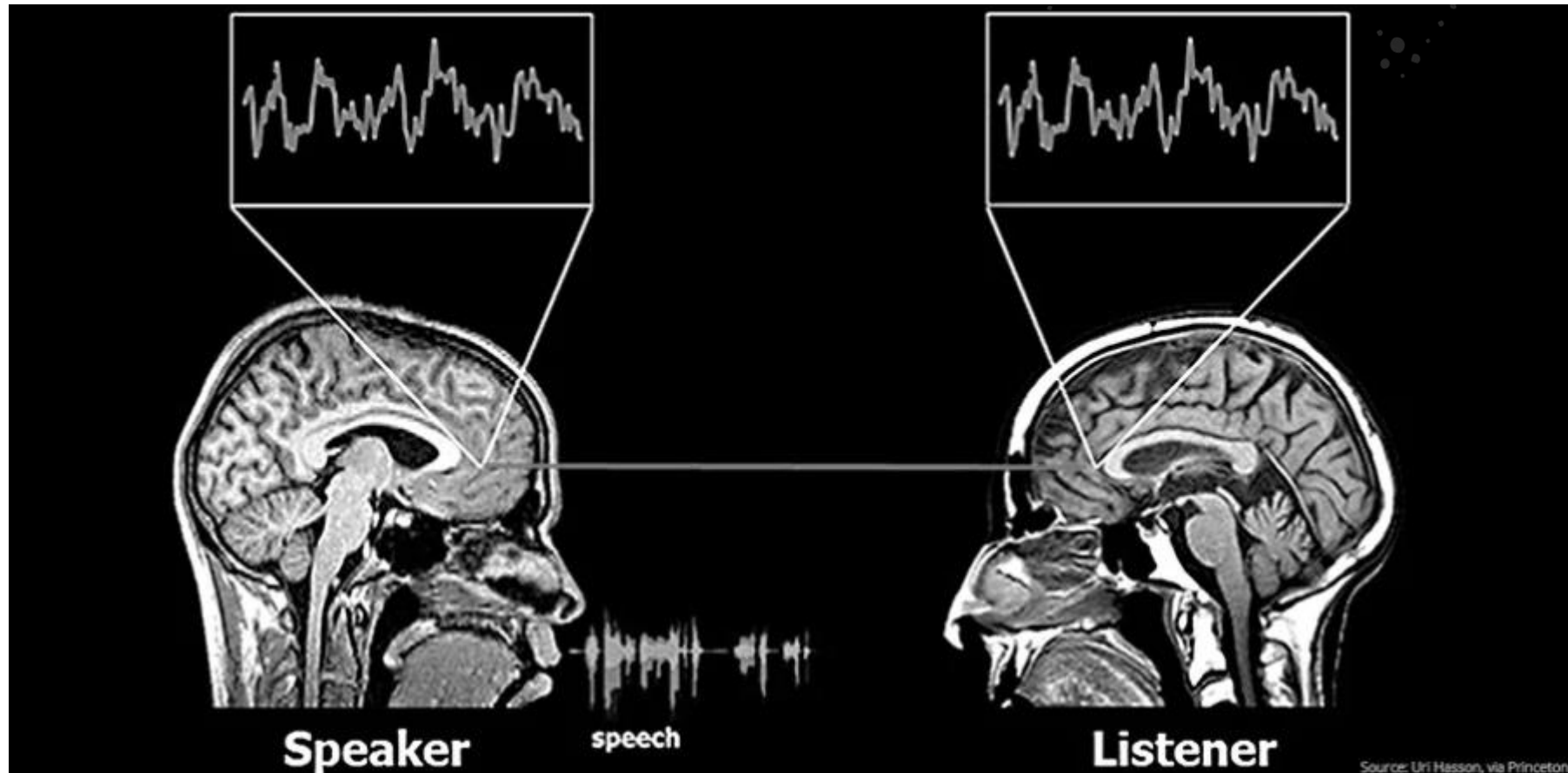
Humans are:

- inherently responsive to storytelling
- wired for emotional decision making
- Have pattern-seeking brains



Daniel Kahneman ( 2011)

# Neural Coupling



(Ariel Group, 2020)

# Brain Chemistry

Certain parts of stories induce neurotransmitters and peptide hormones

Dopamine



- Activated by intrigue
- Plays a major role in memory and motivation

Oxytocin



- Plays a role in social bonding
- Released when hearing personal stories
- Related to empathy and trust

Endorphins



- Laughter
- Relaxation
- Perceptiveness and sense of well-being



# Cognitive Bias and Storytelling

We have cognitive bias towards stories:

## Identifiable Victim Effect

- “The everyday hero”
- People are compelled by real and personal stories

## Self-Relevance Effect

- We remember information that relates to us

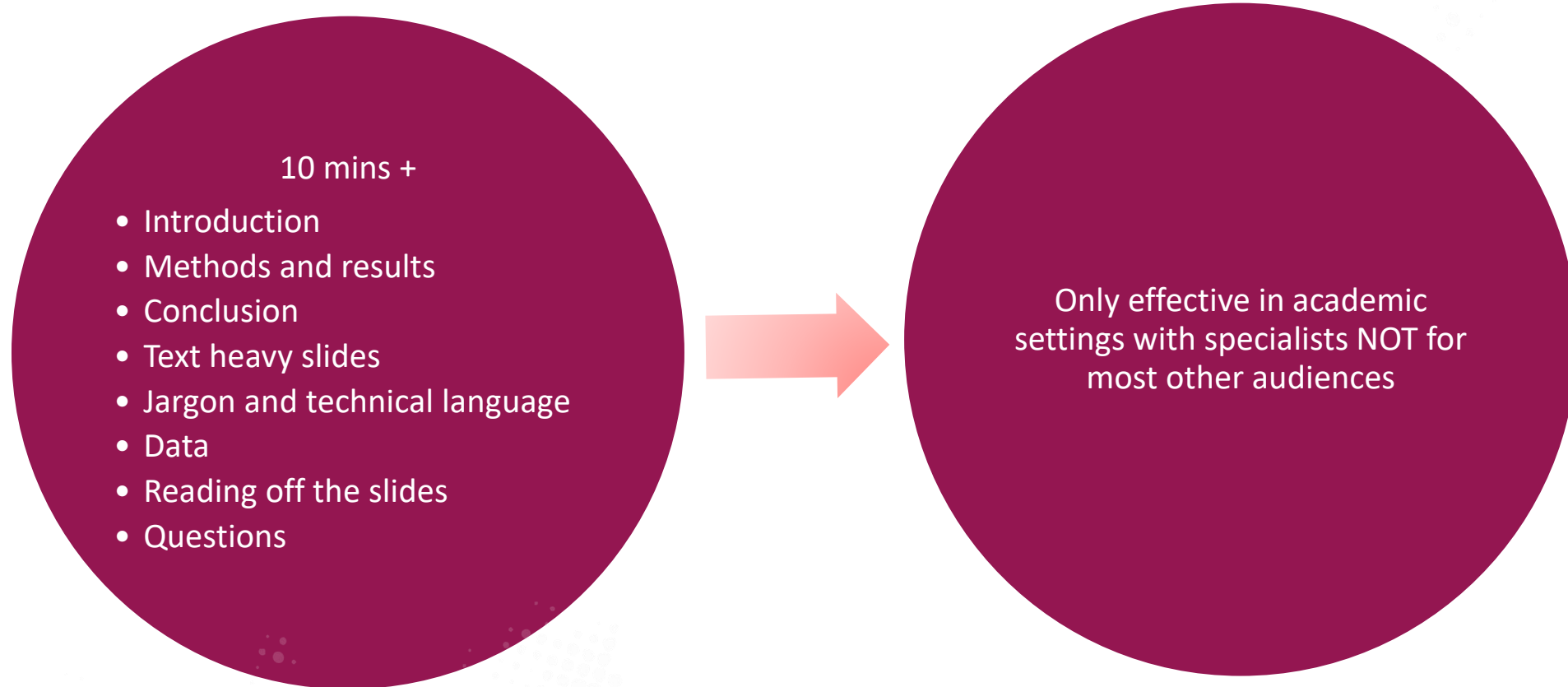
## Confirmation Bias

- We direct our attention to information that confirms our pre-existing knowledge or ideas

## The Decline Bias

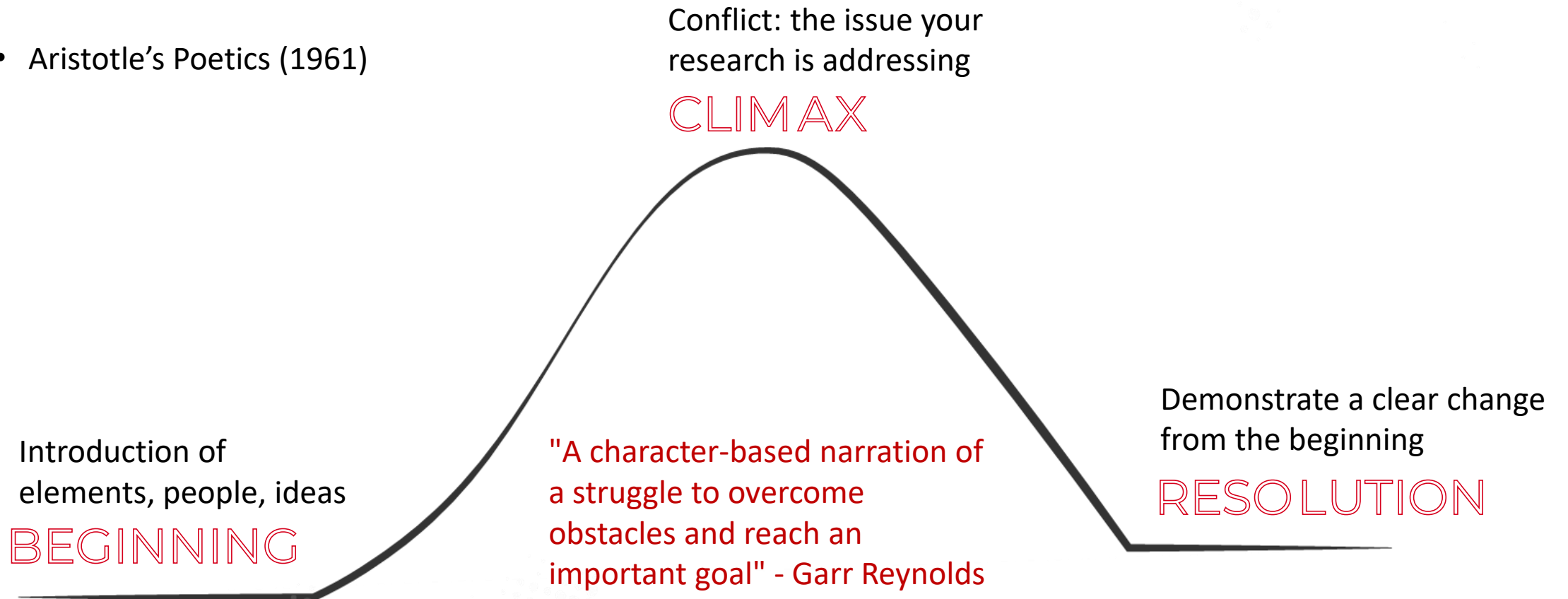
- We are fascinated by stories of the past
- We seek out nostalgia

# You don't always need to present like an academic!



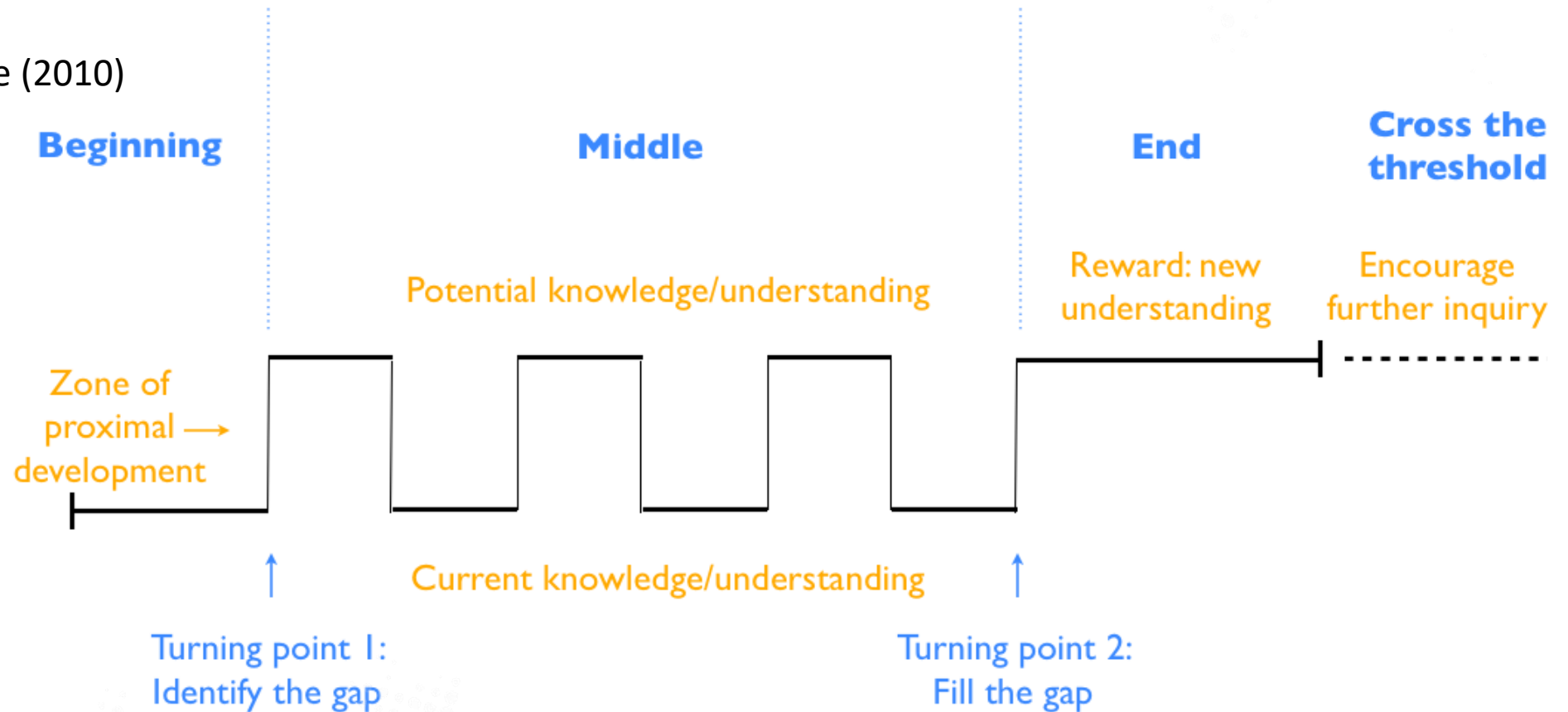
# What is a story?

- Aristotle's Poetics (1961)



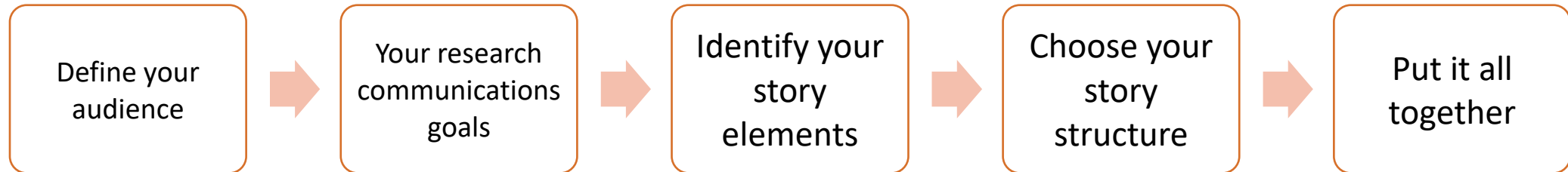
# What is persuasive storytelling?

- Nancy Duarte (2010)





# The process to storytelling for research communications



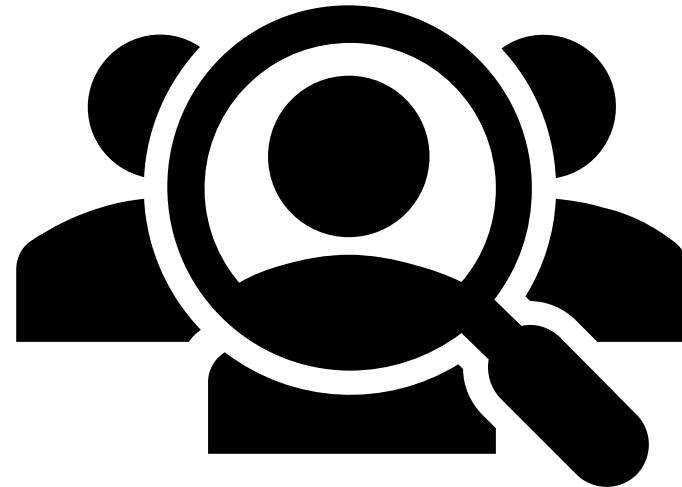
# Your Audience

# Your target audience

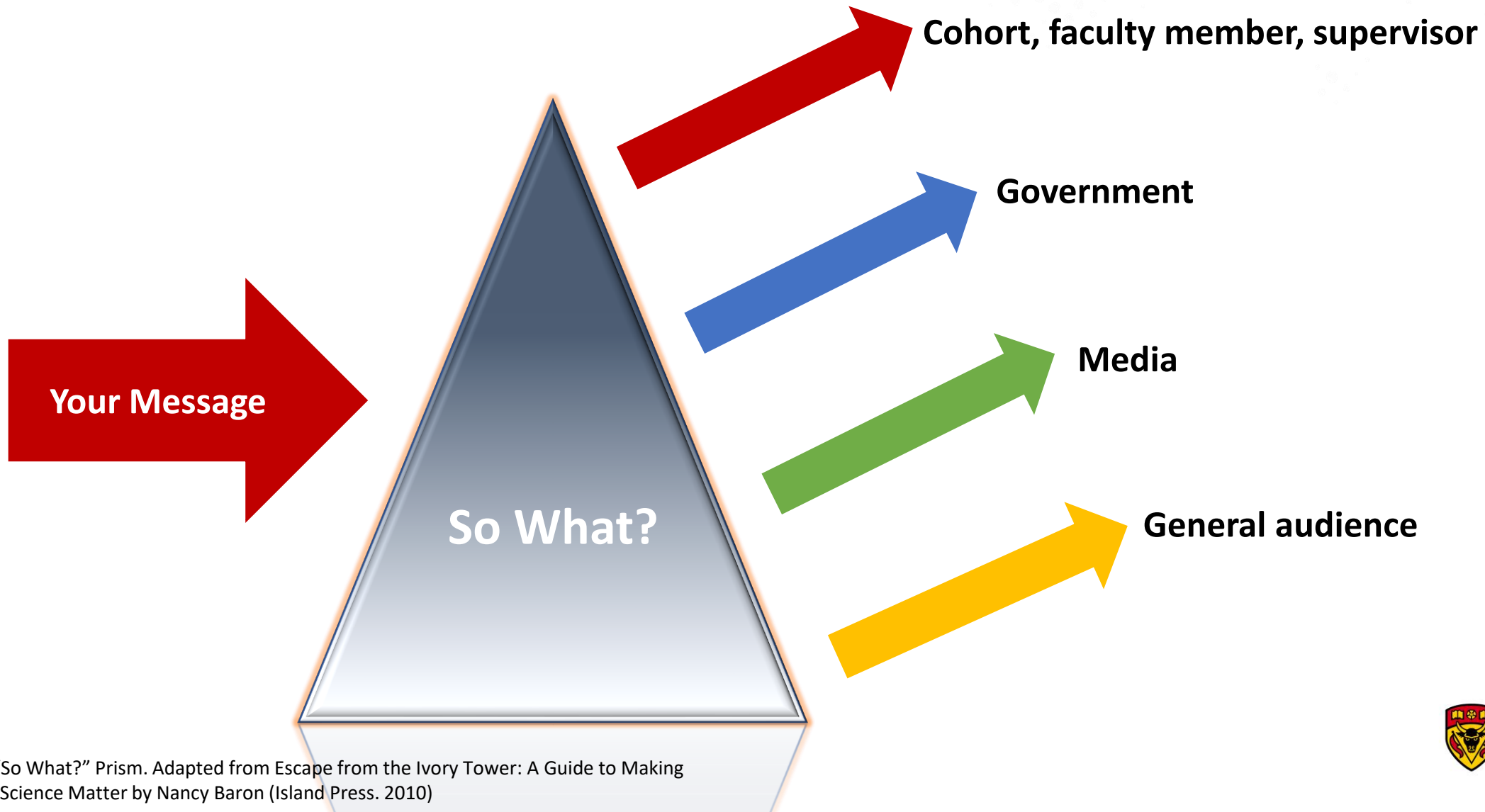
Comes 1st - **without an audience your information goes nowhere!**

Potential target audiences:

- ☐ Researchers
- ☐ Policy-makers
- ☐ Business leaders
- ☐ Community groups
- ☐ Educators
- ☐ International Audiences
- ☐ Practitioners
- ☐ Decision-makers
- ☐ General public
- ☐ Media

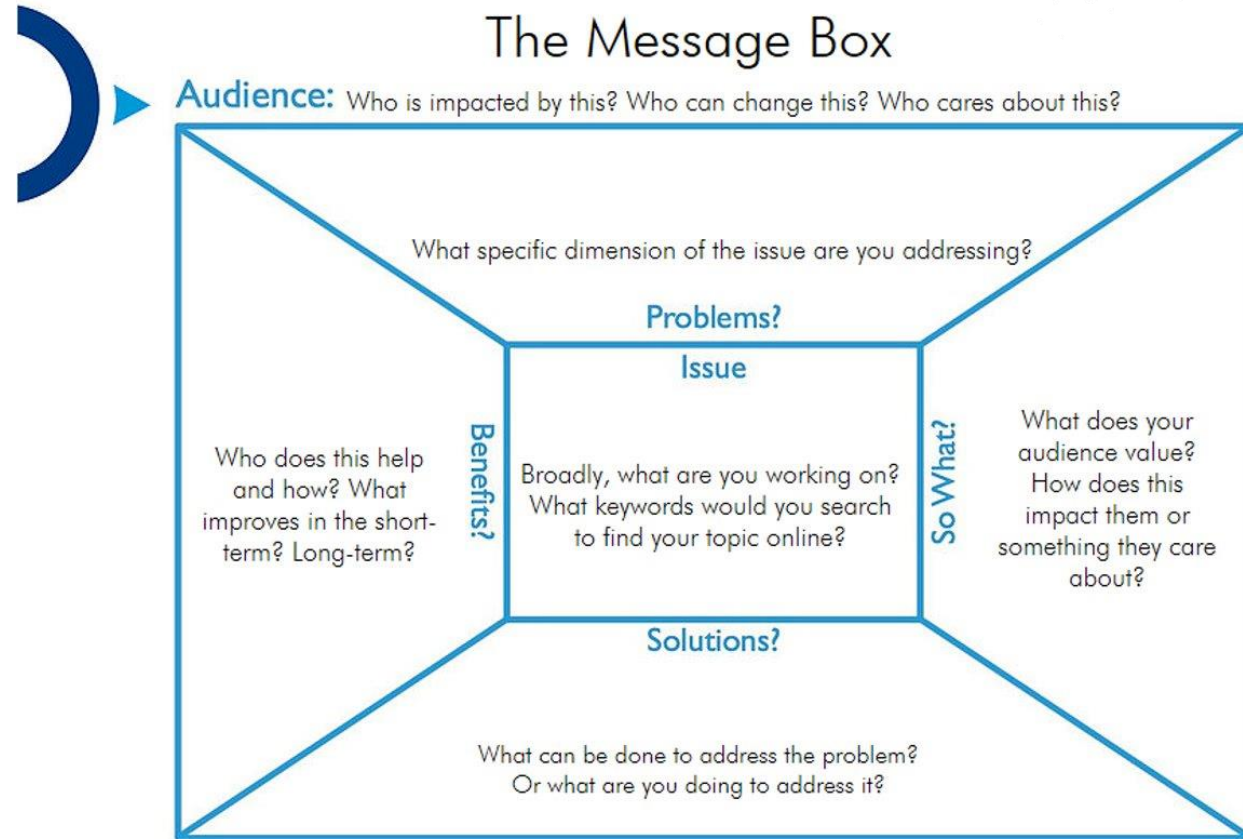


# What do they need to know?





# Identify your elements



COMPASS

# What does your audience need?

Move away from the deficit model

- Your audience doesn't need to catch up to you and your knowledge, you need to meet them where they are.

Make the information relevant to their context

- Give examples: images, or short explanations
- Analogy, metaphor, simile

Make your information accessible

- Inclusive, and contextually specific

DATA



SORTED



ARRANGED



PRESENTED  
VISUALLY

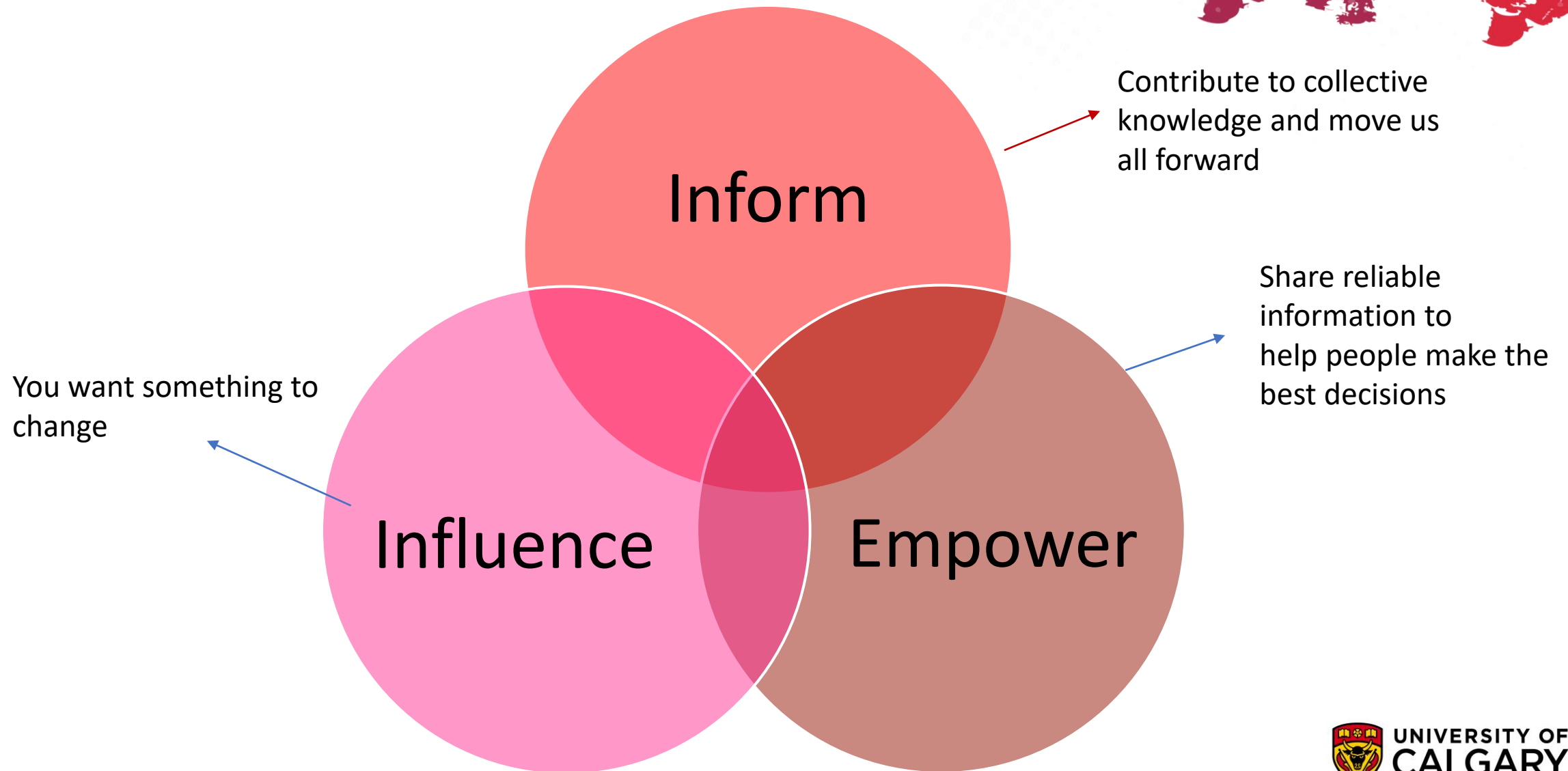


EXPLAINED  
WITH A STORY



# Your Communication Goals

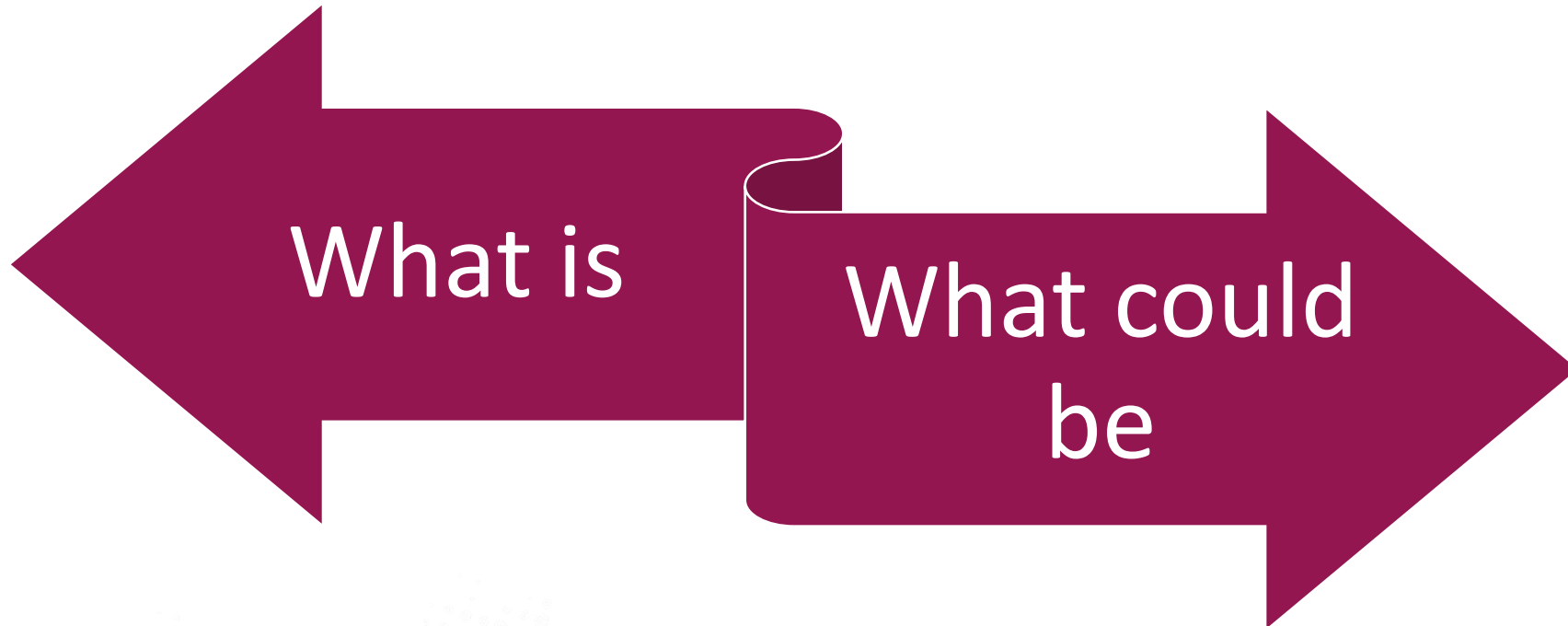
# Define communication goals?





# Define your conflict

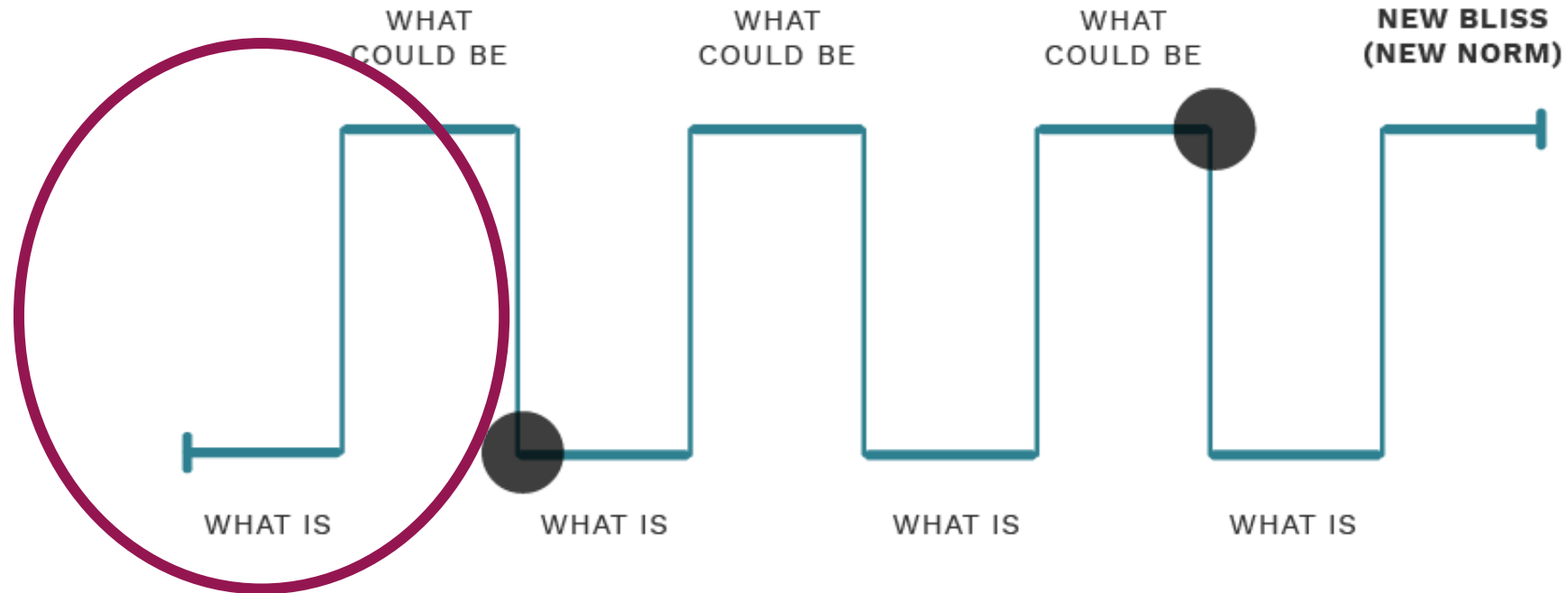
- Nancy Duarte (2010)



# 4 Story Formats

# What is

- Nancy Duarte (2010)



# What are the types of stories you could tell?



- Personal
- Historical
- Mystery
- Reality Scenario



# A Personal Story

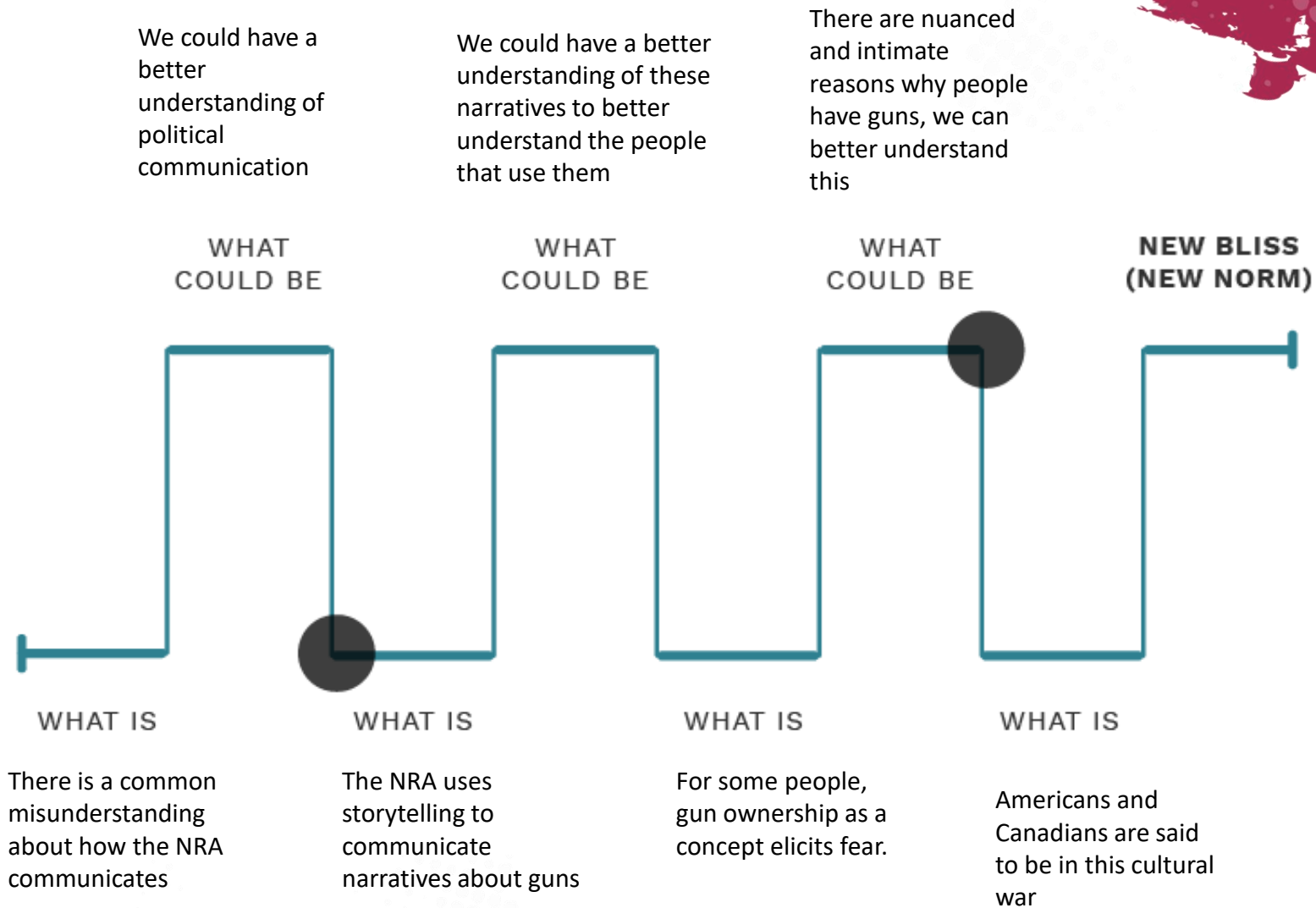
- You are the main character
- Why are you doing the research?
- What inspires you?
- What you research experiences are?

# Noah Schwartz

## Carleton University (SSHRC Top 25)

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<https://youtu.be/hSm0PEhWDAk>



Having a better understanding of each other can help us chart a dialogue to no mans land.



A close-up, shallow depth-of-field photograph of several glass test tubes or flasks in a laboratory setting. Some contain green liquids, others yellow. The focus is sharp on the central tube, with others blurred in the foreground and background.

# Historical Story

- What is the history of the problem?
- What is the history behind the tools that I am using in my research?
- What about other scientists, people, subjects that influenced past research on this topic?

# Alexandra Bischoff

## Concordia University, Top 25 finalists

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<https://youtu.be/GLCs60U456o>



# Mystery

<https://thefurbearers.com/blog/pemberton-music-festival-cleanup-highlights-need-for-change/>



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# Reality Scenario

- Turn a statistic into a story
- Ask the audience what if?
- Set the scene

# Reality Scenario: Katherine Silang (3 MT finalist)

<https://youtu.be/SgoXbbQxHhk>



Pregnancy can exacerbate sleep disruption - which can be linked to serious health concerns

WHAT IS



WHAT  
COULD BE

We can treat insomnia in pregnancy with CBT-I

WHAT IS

We don't have any information about how a therapy for insomnia can help with post-partum depression

WHAT  
COULD BE

Improving sleep could be the underlying mechanism of action that we can target for better care

WHAT IS

Sleep is not a big enough focus in pre-natal care

NEW BLISS  
(NEW NORM)

We can pave the way for women to have early access to interventions

What structure would you choose? Why?



# Your Story Structure

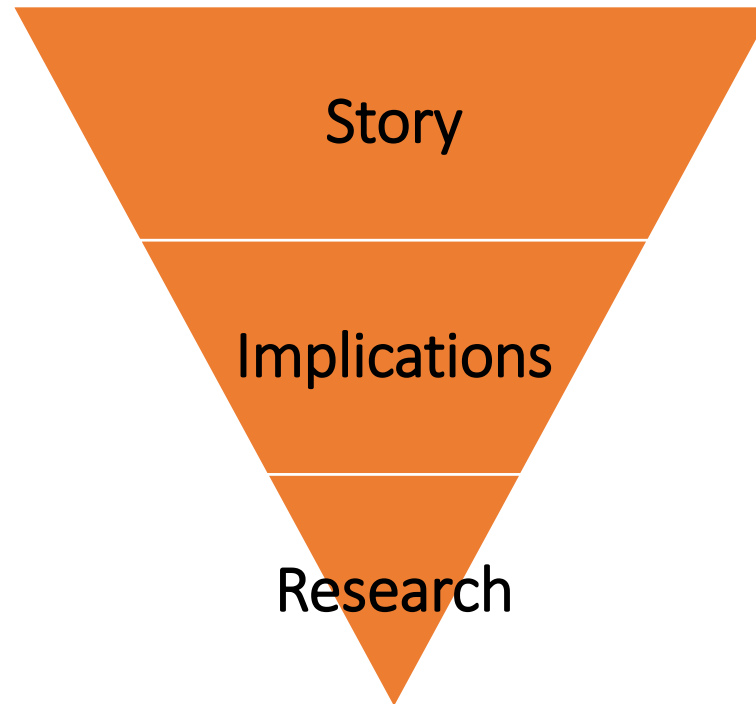
The beginning of your presentation is when you are guaranteed to have 100% of the audience's attention

# Start with a Story (University Affairs)

The Hero's Journey



The Funnel

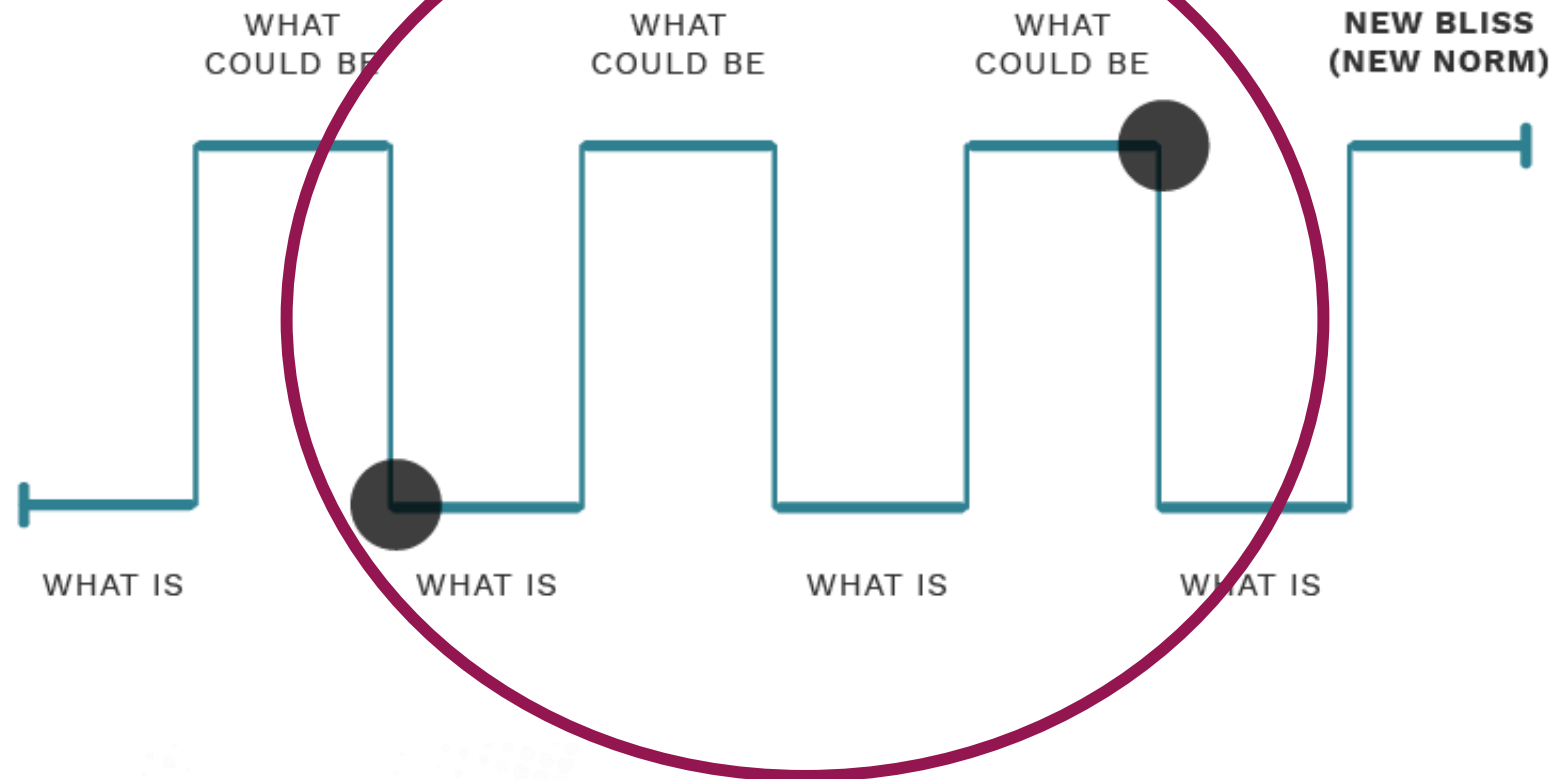


The Dumbbell



# Build contrast

- Nancy Duarte (2010)



# Putting it all together



# Don't start with powerpoint!

Leave your visuals until you have drafted your talk

## Mindmapping

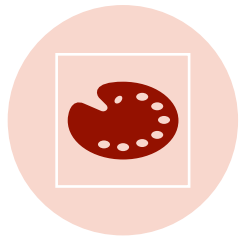


## Sticky Notes



Arrange and then re-arrange

# Make it consistent



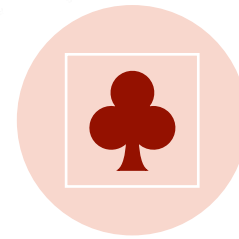
COLORS



IMAGERY



FONT



GRAPHICS



BRANDING



## Logos

Use our logos correctly for a professional, consistent brand impression.

[Learn about logos](#)



## Colours

Our colours set us apart from other universities.

[How to use our colours](#)



## Fonts

Our fonts include Gotham, Museo Sans, Calibri, Georgia, and Proxima Nova.

[Find out about our fonts](#)



## Imagery

Photography, illustration and graphics enhance our storytelling.

[Learn to use images](#)

<https://www.ucalgary.ca/brand/brand-standards>

# Less is more! (especially with text)

1

Use smart art to  
show processes

2

Use pictures to  
convey meaning

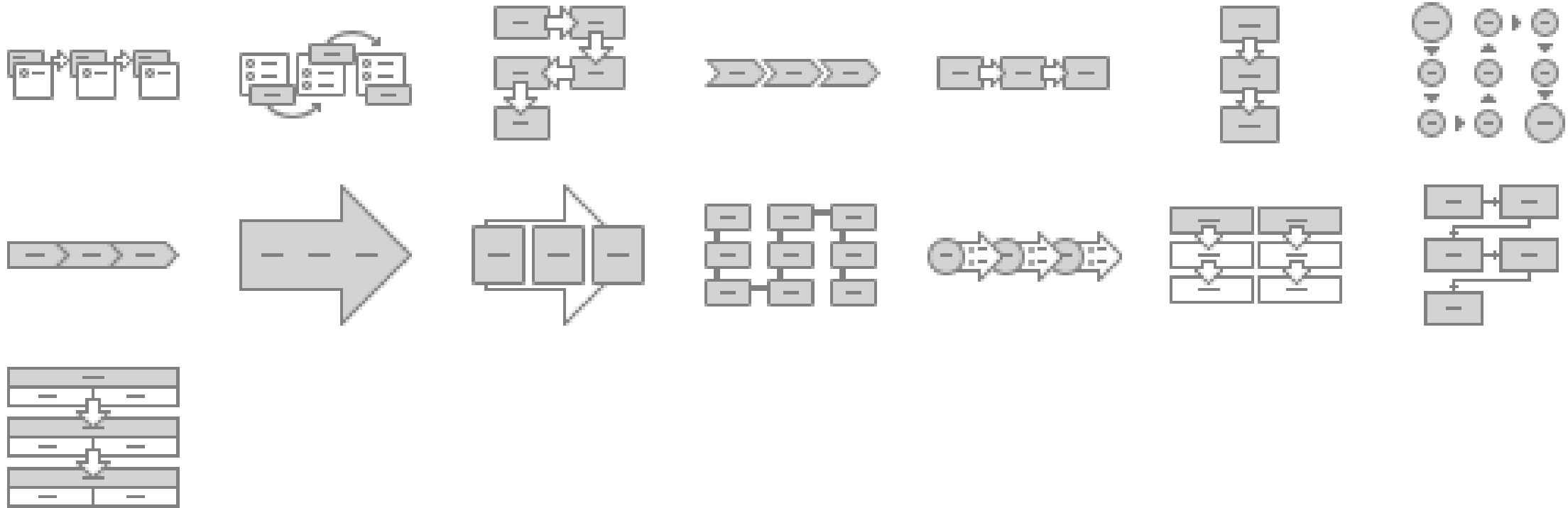
3

Use directional  
tools or masking  
to point to  
something

4

Reproduce and  
simplify your  
charts and  
graphs

# SmartArt to show processes





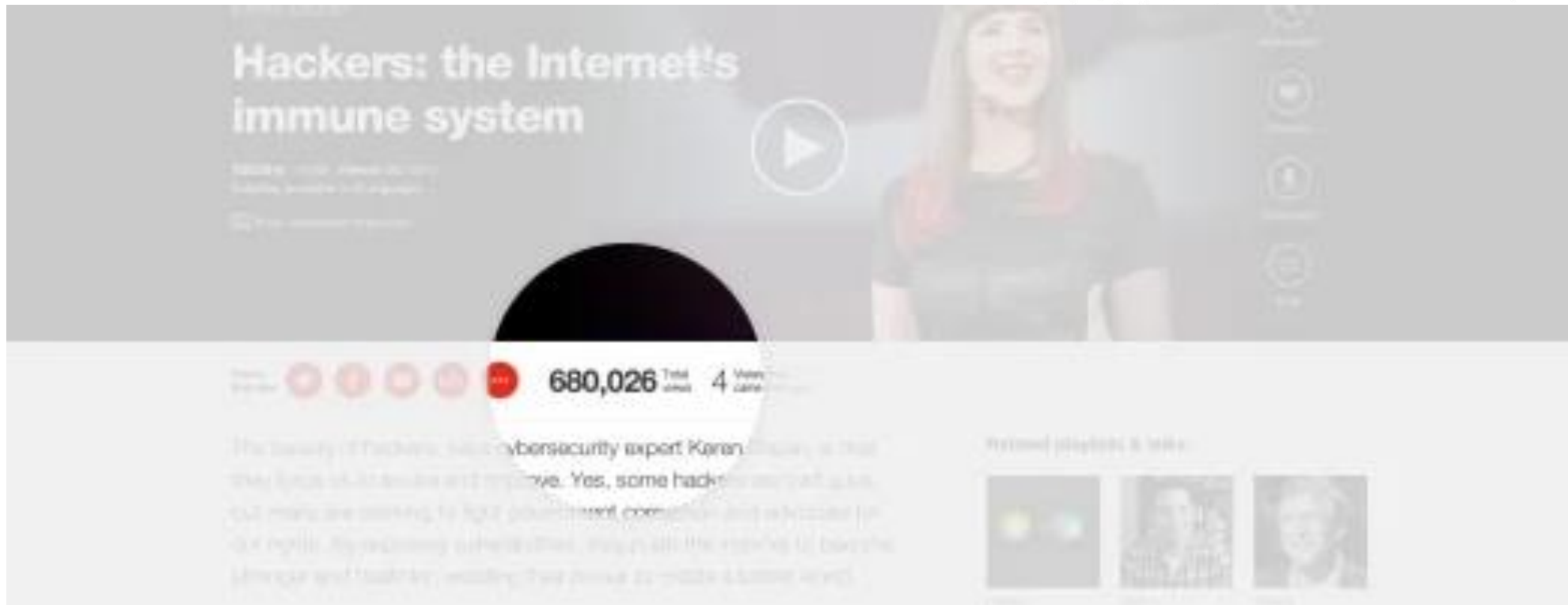
# Pictures to convey meaning

- Aaron Weyenberg ("Preparing for worst case scenarios")



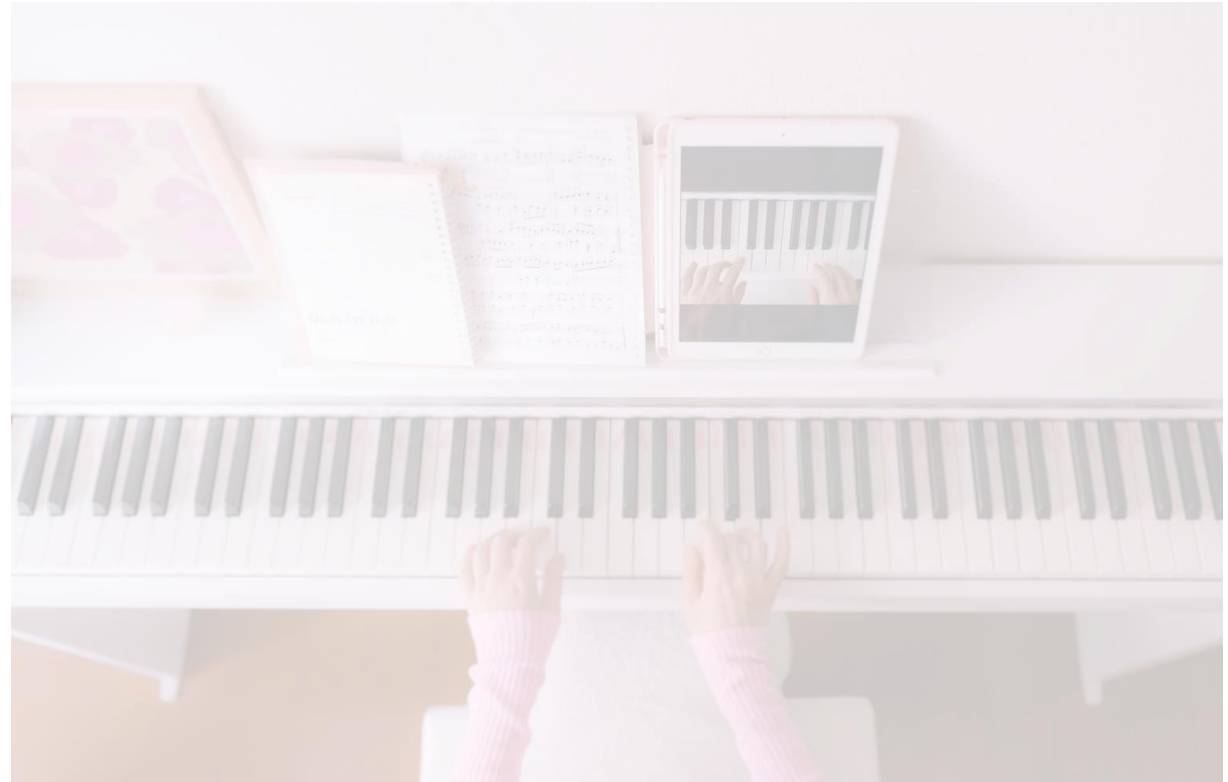


# Directional tools or masking



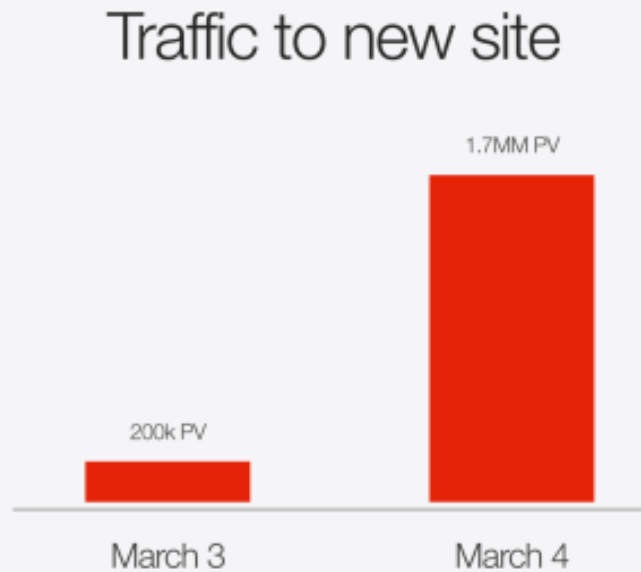
- (1) Set the image transparency to something less than 100.
- (2) Duplicate that image so there is one directly over the top of the other.
- (3) Set the dup'd image transparency back to 100

# How to mask

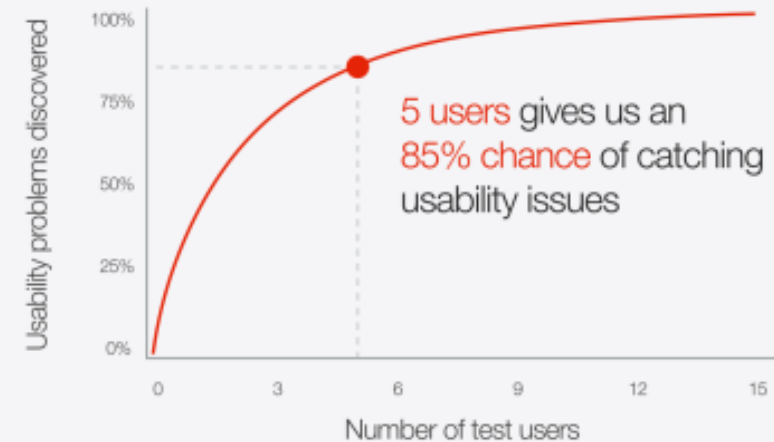


- (1) Set the image transparency to something less than 100.
- (2) Duplicate that image so there is one directly over the top of the other.
- (3) Set the dup'd image transparency back to 100
- (4) Crop to shape your dup'd image

# Simplify your data



## How many users do I need? (Usability problem frequency: 30%)



# Resources



# Organizing your content

- [The message box](#) Compassscicomm.org
- [7 Things to do When you Have to Give a Short Speech](#), by Bill Murphy, Jr., Inc.
- [Explaining Your Work to Friends and Family](#), PhD Talk
- [What to Do When They Say, “Tell Us About Your Research,”](#) by Mary Morris Heiberger and Julia Miller Vick, *The Chronicle of Higher Education*
- [Do You Have Mysterious Dragons in Your Research?](#), by Joseph Barber, Inside Higher Ed
- [How to Give More Persuasive Presentations](#), Nancy Duarte

# Visuals

- Powerpoint (16:9 widescreen format)
  - Insert > tools to create shapes icons, 3D models
- Unsplash (imagery) <https://unsplash.com/>
- Colourbox (imagery) <https://www.ucalgary.ca/brand/brand-standards/imagery>
- GNU Image Manipulation Program (imagery) <https://www.gimp.org/>
- Canva (design) <https://www.canva.com/>
- BioRender(science design) <https://biorender.com/>
- Tableau (data viz) <https://www.tableau.com/>
- Inkscape.org (design)<https://inkscape.org/>
- Adobe Creative Suite (design) <https://people.ucalgary.ca/~appinst/software/adobe-software-user-guide.pdf>
  - Student Plans: <https://www.adobe.com/creativecloud/buy/students.html>

# You as a presenter

- [Tips and Techniques for More Confident and Compelling Presentations](#), by Matt Abrahams
- [Conquering Stage Fright](#), by the Anxiety and Depression Association of America
- [9 Speaking Tips for Non-Native Speakers](#), by Ryan Avery
- [Four Ways to Make Your Research Presentation Stand Out](#), GradLife blog

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