CONTROLLING FOCUS
EXPLAINING WHILE EXPLORING

WE'VE ALL BEEN THRILLED AND DELIGHTED BY THE UNEXPECTED OUTCOME OF...

WE'RE TRICKLED A MAGIC TRICK!

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GRAX PRESENTS

GRADUATE EDUCATION

THIS COMIC IS PART OF A LARGER PROFESSIONAL DEVELOPMENT EXPERIENCE FOR GRADUATE STUDENTS TO AID AND ENHANCE RESEARCH COMMUNICATION SKILLS. THIS COMIC, OTHER RESOURCES LIKE IT, ARE AVAILABLE ONLINE AT: GRADX.MIT.EDU

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MIT
MANY OF THESE TRICKS RELY ON -
-MISDIRECTION-

- i.e. controlling where & what the audience focuses on.

BUT, WHILE THE MAGICIAN CONTROLS TO DISTRACT THEIR AUDIENCE FROM WHAT THEY SHOULDN'T SEE,

THE PRESENTER CONTROLS TO DO JUST THE OPPOSITE -

- TO REMOVE DISTRACTION AND TO DIRECT THE AUDIENCE'S ATTENTION TO WHAT THEY SHOULD SEE.
However, most presenters use slides, and if not used appropriately, slides can become a distraction.

When you advance to a new slide the audience looks at the slide. They immediately try to read it while listening to you at the same time.
IF WHAT YOU'RE SAYING ISN'T IMMEDIATELY RELEVANT, OR REINFORCING WHAT THEY'RE SEEING, THE AUDIENCE HAS TO CHOOSE.

THEY EITHER LISTEN TO YOU OR READ THE SLIDE.

OR WORSE, TRY TO DO BOTH AT THE SAME TIME.

IF YOU AREN'T CAREFUL, YOUR SLIDES WILL COMPETE WITH YOU FOR YOUR AUDIENCE'S ATTENTION.

TO KEEP SLIDES FROM COMPETING WITH YOU FOR YOUR AUDIENCE'S ATTENTION, TRY TO KEEP SLIDES "GLANCEABLE".

THAT WAY, AN AUDIENCE CAN GLANCE AT THE NEW INFORMATION ON A SLIDE AND THEN FOCUS THEIR ATTENTION BACK ON YOU.
Otherwise, given the choice of listening to a presenter or reading a complex slide, I prefer the former. I'll opt for the latter if the presenter is boring.

Or if I don't think that the presenter will cover what's on the slide before advancing.

Data slides, however, can be notoriously complex and not glanceable.

We've already touched upon the intuition behind what to do.

2. Then here

3. Now here

4. Finally here

1. Look here

What they hear should be relevant to what they see. If the audience is going to read it anyway, let them, but guide them verbally by exploring the data with them.
Then they can pay attention to you and examine the data at the same time. That way what they see is also relevant to what they hear.

Here's an approach:

1. **Contextualize**
   - Give context

2. **Orient**
   - Orient your audience

3. **Interpret**
   - Then, interpret the data for them.
1. The question
2. The goal
3. The setup
4. The method
5. Etc.

In terms of timing, most presenters show a data slide and then proceed to give context for that slide.

Consider reversing that order:

Give context for the next slide before advancing to it (and show either a blank screen or stay on the previous slide).
For example, if you show a graph, define the axes.

Then, when you advance to the data, orient the audience to what they are seeing.

Or if you show something physical, are we seeing it from the side or the top?

Or if size is significant, what is its scale?

Tony Eng (5.7 feet)

Lambeosaurus (49.2 feet)
Because if the audience naturally wants to read the data on the slide anyway, let them. But at the same time, help them begin to make sense of what they are seeing by orienting them.

Finally, interpret the data for them.

Help them see what it is you see in the data.

And what it is you want them to see in the data.
DO TWO THINGS!

ONE-POINT OUT THINGS THAT ONE WOULD EXPECT TO SEE IN THE DATA AND THEN...

TWO-POINT OUT OUTLIERS.

THE EXPECTED HELPS THE AUDIENCE CONFIRM BOTH THEIR UNDERSTANDING AND THE VALIDITY OF THE DATA, BUT THE UNEXPECTED TENDS TO BE MORE INTERESTING.

EXPECTED

UNEXPECTED

CONTEXTUALIZE, ORIENT, AND INTERPRET.

THESE THREE STEPS CAN BE AS QUICK OR AS LONG AS YOU WANT.

THEY SHOULD BE STREAMLINED SO THAT THEY FLOW SMOOTHLY FROM ONE INTO THE OTHER.

CONTROLLING FOCUS HELPS THE AUDIENCE LISTEN TO YOU AND READ THE SLIDE WITHOUT HAVING TO CHOOSE ONE AT THE EXPENSE OF THE OTHER.
By taking the time to explore the data with your audience,

what you say aligns with, and explains, what they are seeing.

Your presentation of your data will be cleaner and clearer.
YOUR AUDIENCE WILL BE...

- FOCUSED ON YOU -

- LESS DISTRACTED AND -

- LIKELY WITH YOU THE WHOLE TIME.
IT'LL SEEM...

Magical.
GradX is a project that seeks to expand access to professional development to all MIT graduate students and faculty. Its first offering, Gradcommx (both an online & live course availability TBA), will focus on communication skills for graduate students.

**Design Principles**

Pedagogical design principles strive to make the course simple in concept, complex in practice; customizable to student needs; connected to resources via links and gateways to other MIT resources and services; and featuring differentiated approaches to increase comprehension.

Teaching materials can be adapted by faculty to any population.

**Components**

GradX consists of a series of learning experiences that are fun and user-friendly. These elements include:

- **Comics**
- **Podcasts**
- **Activity Prompts**
- **Instructor Lectures**
- **Expert Interviews**
- **Research Exercises**
- **And more!**

**Topics Covered**

1. **Choosing appropriate language** to avoid overwhelming your audience
2. **Using narrative** to explain why your research is important
3. **Synthesizing prior work** to convey where yours fits in by highlighting differences
4. **Controlling focus** in order to minimize cognitive load when presenting data
5. **Leaving time** for an audience to process when explaining how something works
6. **Distilling your message** when time & attention spans are short

Find out more at: gradx.mit.edu