Science and Storytelling: Communicating Research to a General Audience
Put the Audience First

“What do I want to say?”

versus

“What does the audience need?”
You want your audience to
Care
Understand
Remember

Focus on what serves those three goals and toss what doesn’t.
Make Them Care: the art of the opener

“The lede should be a flashlight that shines down into the story. It is the hardest part of the story to write.”

–John McFee
How to write a lede

- Straight News
- Anecdote
- Scene-setting
- First person
- Observational
- Zinger
How to write a lead

- **Straight news**
  
  “As deaths from the bridge failure in Genoa rose on Wednesday to 39, it became clear that while the collapse was catastrophic, it was not exactly a surprise.

- **Anecdote**

- **Scene-setting**

- **First person**

- **Observational**

- **Zinger**

  Years before part of the structure dissolved in a lethal cascade of concrete and steel, it required constant repair work, and experts in Parliament, industry and academia raised alarms that it was deteriorating and possibly dangerous.”
# How to write a lede

| ✤ Straight news | “Kim Myers used to compete in rodeo-style barrel horse races, but after being sterilized with an implantable device called Essure, the pain was so intense that she had to stop. It continued for three years, until Ms. Myers had a hysterectomy.” |
| ✤ **Anecdote** | |
| ✤ Scene-setting | Then her surgeon discovered the cause: A piece of metal coil was still embedded in her uterus.” |
| ✤ First person | |
| ✤ Observational | |
| ✤ Zinger | |
How to write a lede

- Straight news
  “On the second floor of an old Bavarian palace in Munich, Germany, there’s a library with high ceilings, a distinctly bookish smell and one of the world’s most extensive collections of Latin texts. About 20 researchers from all over the world work in small offices around the room.”

- Anecdote

- Scene-setting

- First person

- Observational

- Zinger
How to write a lede

- Straight news
  “For many of us, Sept. 11, 2001, is one of those touchstone dates — we remember exactly where we were when we heard that the planes hit the World Trade Center and the Pentagon. I was in Afghanistan.”

- Anecdote

- Scene-setting

- First person

- Observational

- Zinger
How to write a lede

- Straight News
  “At the lowest point of Donald Trump’s quest for the presidency, the Republican nominee might have brought in a political handyman to sand his edges. Instead, he put his campaign in the hands of a true believer who promises to amplify the GOP nominee’s nationalist message and reinforce his populist impulses.”

- Anecdote
- Scene-setting
- First person
- Observational
- Zinger
How to write a lede

- Straight News
- Anecdote
- Scene-setting
- First person
- Observational
- Zinger

“His last meal was worth $30,000, and it killed him.”
How to write a news hook

✦ Provide a twist on a trending story
✦ Localize a national story
✦ Nationalize a local story
✦ Create or play up a controversy
✦ Be contrarian
“Never use a foreign phrase, a scientific word or a jargon word if you can think of an everyday English equivalent.”

–George Orwell
Make Them Understand: combatting jargon

Language should be a bridge, not a barrier.
How to recognize jargon

- Would your next-door neighbor understand the word? Your grandfather? A high school student?
- Do most people know what your acronyms mean?
- Does the word have a different meaning in common speech?
- Is the word long, heavy, too many syllables?
- Do you only use the word when talking about research?
- Are the subjects of your sentences mostly abstractions, not people?
Is this sentence real or generated by an algorithm?

"The student can connect phenomena and models across spatial and temporal scales."

(From the College Board’s AP Chemistry framework)
Is this sentence real or generated by an algorithm?

"We will assess emerging curricula compacting across cognitive and affective domains."

(Algorithm!)
Is this sentence real or generated by an algorithm?

"This class seeks to empower research-based relationships throughout multiple modalities."

(Algorithm!)
Is this sentence real or generated by an algorithm?

"Rubric-based assessment can be taken to scale and can produce valid findings with credible and actionable information about student learning that can be used to improve curricular and assignment designs and to increase effectiveness of programs and classes in advancing the most important learning outcomes of college."

(from a press release announcing new education research)
How to translate jargon

In a somatic society which promotes visible, idealized forms of embodiment, men are increasingly being interpellated as image-conscious body-subjects. Some research suggests that men negotiate appearance issues in complex and varied ways, partly because image concerns are conventionally feminized. However, little research has considered how overweight men construct body projects in the context of weight loss, or how men talk to each other about weight management efforts. Since sources of information and support for overweight men are now provided online, including dedicated weight loss discussion forums, our analysis focuses on one such forum, linked to a popular male-targeted magazine. We conducted a thematic analysis of selected extracts from seven threads on the forum. Our analysis suggests a widespread focus on appearance, as well as the use of emotion categories when describing difficult bodily experiences. Invariably, however, such talk was carefully constructed and constrained by hegemonic masculinities founded on discipline, work-orientation, pragmatism and self-reliance. The findings are discussed in relation to magazine masculinities and aesthetics, as well as literature on male embodiment.
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How to translate jargon

Modern men face a dilemma: society tells them that they ought to have an attractive body, but they are also warned that being concerned about beauty and body image is a feminine trait. However, little research has considered how overweight men think and talk about weight loss. Online weight loss forums offer a window onto these issues, so we analyzed seven comment threads from one forum hosted by a popular men’s magazine. We found that while men often engaged in emotional discussions of their own appearances and bodies, they always framed their comments within conventionally masculine terms such as discipline, work ethic, pragmatism, and self-reliance. We discuss these findings in light of the way men’s magazines treat masculinity and male beauty, and we relate them to previous work.
Make Them Remember: telling a good story

“Sometimes reality is too complex. Stories give it form.”

–John Luc Godard
Make Them Remember:
telling a good story
How to use stories when discussing your research

- Methods
- Technical concepts
- Findings
- Policy implications
- Conclusion
How to use stories when discussing your research

- **Methods**
  - Describe the obstacles surrounding your research question like a crime story in which you are the detective examining the crime scene for evidence.

- **Technical concepts**

- **Findings**

- **Policy implications**

- **Conclusion**
How to use stories when discussing your research

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Start with a very simple example, then extrapolate: “Imagine two refugees, both from the same country, of similar age, ethnic background, and skill levels. When resettled in different places, one thrives in finding work while the other struggles. The reasons their paths diverge are complex, but with an algorithm mining tens of thousands of historical cases, we don’t need to understand them fully in order to learn from them. The algorithm can detect systematic patterns, so the next time it receives a refugee who closely resembles these two, it will send him or her to the location where the earlier refugee prospered.

Take that basic idea and multiply it by a dozen individual characteristics and hundreds of potential resettlement locations, and you have a sense of what the algorithm can do if put in service of the thousands of refugees a country might receive in a given year.”
How to use stories when discussing your research

- **Methods**
  - Link the numbers to individual human lives: “When a woman arrives at the hospital, hours away from giving birth, without ever having seen a physician or midwife during the pregnancy, her caregivers may not know her medical history or whether she has risk factors that make labor dangerous for her or her baby. Many unauthorized immigrant women found themselves in this situation because they lacked coverage for prenatal care, and they were at disproportionate risk for poor outcomes like infection, obstructed labor, and newborns with low birth weight.”

- **Technical concepts**

- **Findings**

- **Policy implications**

- **Conclusion**
How to use stories when discussing your research

✤ Methods

Paint a picture from daily life: “For many Americans, life without a car is unthinkable. Between long commutes, children’s activities and appointments, and all the errands that keep a household running, we can spend more time in our cars than at home. When the family car breaks down, those essential routines are thrown into disarray until it’s repaired.

✤ Technical concepts

For people without a driver’s license, including the vast majority of unauthorized immigrants, that unwelcome scenario is a daily reality. Unable to legally drive, they may find their choice of jobs restricted, educational opportunities out of reach, and medical care difficult to access.”

✤ Findings

✤ Policy implications

✤ Conclusion
How to use stories when discussing your research

- **Methods**
  Describe your own journey to the topic and why you care: “As both a clinician and a family caregiver, I saw firsthand the human experience behind these numbers. When you spend time at the bedside, you realize that for people with serious illness, time is precious, and how they spend it, and with whom, is profoundly meaningful. Palliative care gives patients and their families the gift of time well spent, when it matters most.”

- **Technical concepts**

- **Findings**

- **Policy implications**

- **Conclusion**
“PowerPoint doesn’t kill presentations. People kill presentations. But using PowerPoint is like having a loaded AK-47 on the table: You can do very bad things with it.”

–Peter Norvig, Google director of research
Better Presentations: language

- Headers: don’t waste valuable real estate
- Bullet points: “slugs”, not sentences
- One idea per slide
- Save something for speech
- Beware bullet overload
- Folios
Better Presentations: layout

- Consistency
- White space
- Information hierarchy
- Contrast
- Photos & graphics
Thank you

Noelle Daly
Communications Director
Immigration Policy Lab
noelle.daly@stanford.edu