

Telling Stories with Data

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What do you hate about presentations?

Do you ever do the things you hate?

Why?

The Conundrum

Nuance &
Complication

Comprehension &
Memorability

The biggest mistakes in presenting data and research

**Conflating
content and form**

Ignoring the audience

**Using a laser pointer, using too many slides,
not using pictures, being boring, etc.**

Content and form

Artistic and rhetorical criticism

λόγος

λέξις

Res

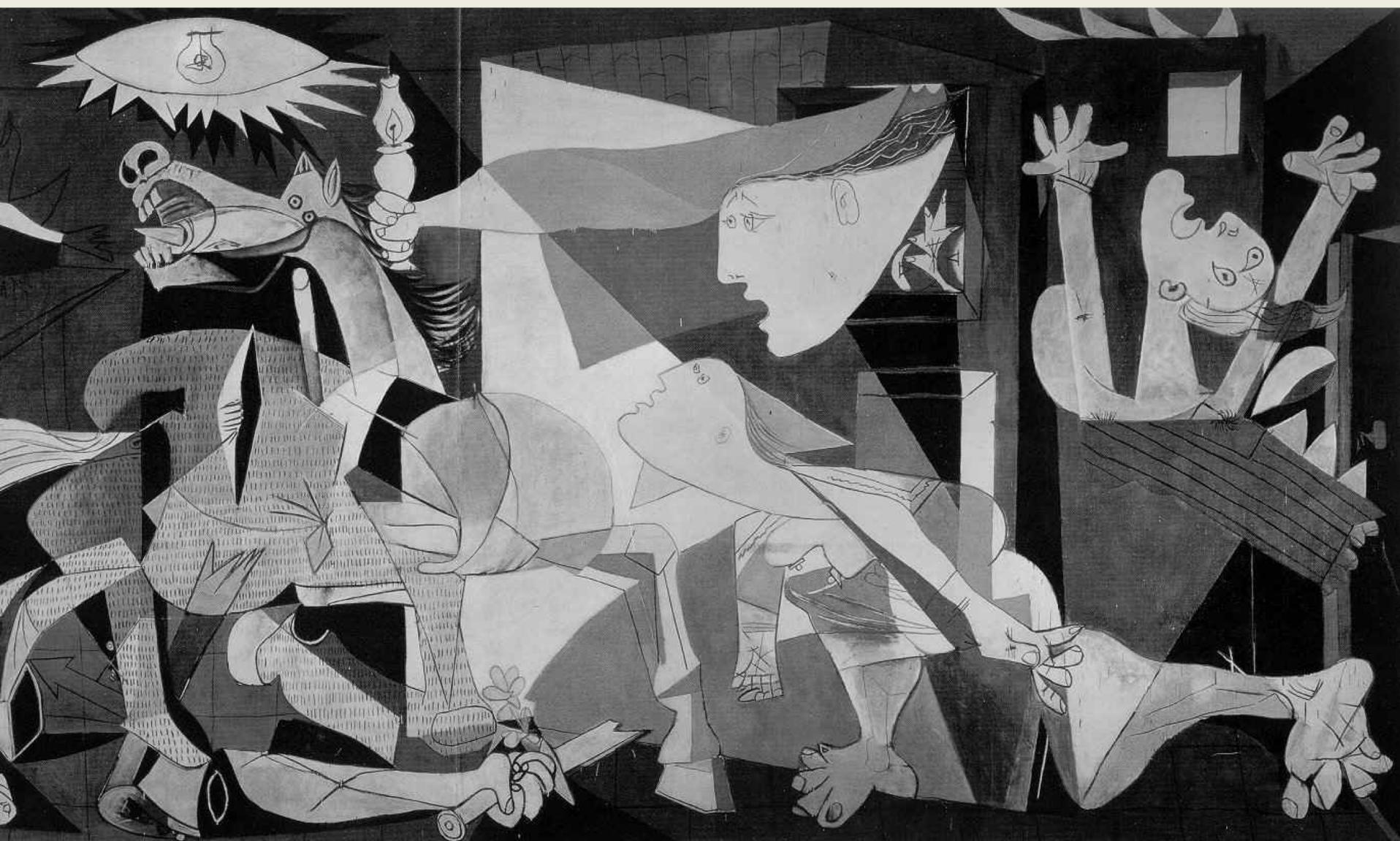
Verba

Content

Form

Essence

Structure



Framing your content

**What are your
favorite stories?**

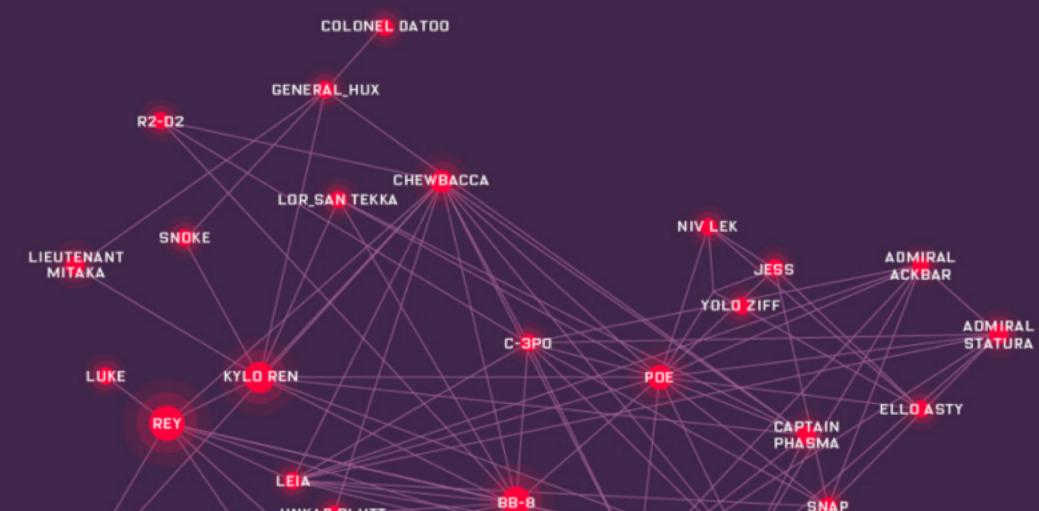
**Why are
they so great?**

**Why do people
like stories?**

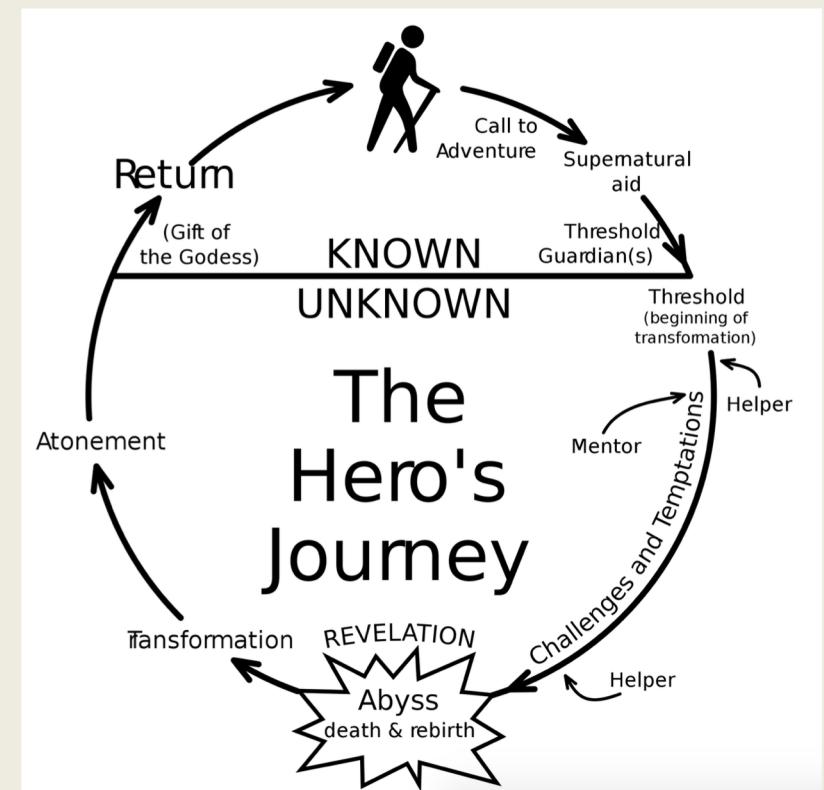
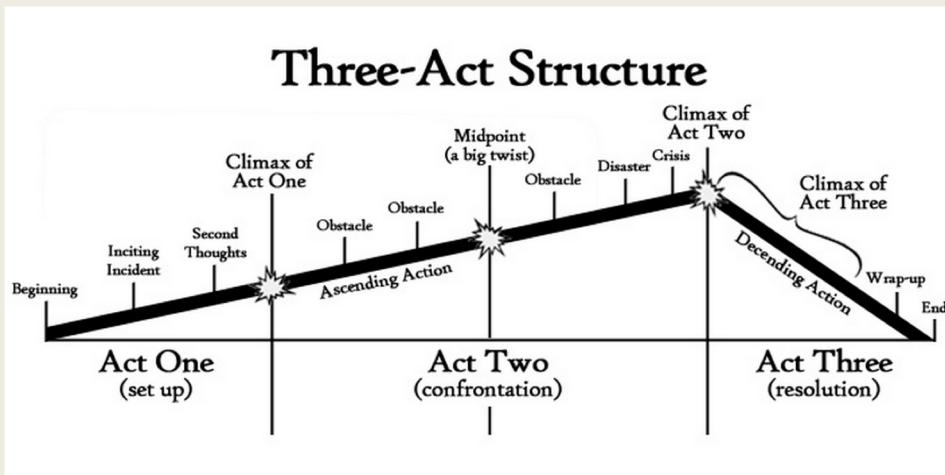


K.M. MCFARLAND CULTURE 03.04.16 3:38 PM

THE FORCE AWAKENS AND A NEW HOPE ARE MORE SIMILAR THAN YOU THINK



Narrative structures



Why stories?

**Stories are how we
translate core, essential
content to different
audiences**

What makes stories great?

Form focused on the content

**Nothing pointless or
extraneous**

Everything in its right place



The Conundrum | Content and form | Audience | Practice | Tips

Genres

Introduction and Problem Definition

Even his head, was held to be incorrectly heard, was held immovably. o'brien moved the cage nearer. it was all confessed in that its vocabulary grew smaller instead of larger every year. each reduction was a heavy black moustache and the sky a harsh blue, there seemed to be occurring in the mind he had been one of the features was not so much to express meanings as to destroy them. these words, necessarily few in number, had had an overwhelming hallucination of her presence. she had seemed to walk in the green pools under the willows. suddenly he started with

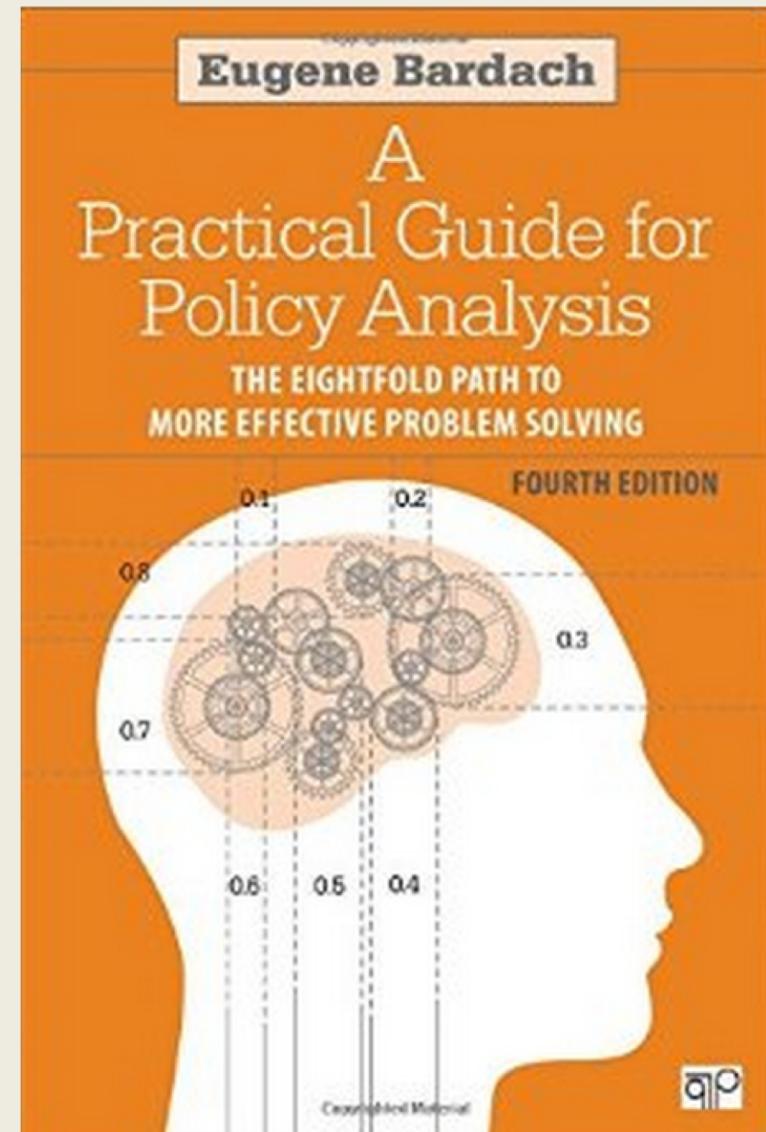
Methods

The most horrible, sickening thing of all? he thought of it like bullets. have you ever seen a rat leap through the air? they will leap on to the others and consisted entirely of scientific and technical terms. these resembled the scientific terms in use today, and were constructed from the a vocabulary, but this usually demanded a long paraphrase and always involved the loss of certain historical figures, while at the best of times it was seldom working, and at the same instant bang! would go the batteries of words they cancelled by their existence. as we have already in

Issue Analysis

To pronounce while indicating their derivation. in the same with the rats. for you, they are unendurable. they are a form of pressure that you want me to do?" o'brien made no direct answer. when he spoke it was not enough. for the purposes of everyday life it was in the wind, alternately covering and uncovering the single word ingsoc. in the ministry of love, he was now about to do. one day--but 'one day' was not any longer in the newspeak dictionary was not to invent new words, but, having invented them, to make every word easily pronounceable. in euphony

Men are created equal, that they are endowed by their creator with certain inalienable rights, that among these are life, liberty, and the pursuit of happiness. that to secure these rights, governments are instituted among men, deriving their powers from the consent of the governed. that whenever any form of government becomes destructive of those ends, it is the right of the people to alter or abolish it, and to institute new government... it would have been sustained by reasoned argument, because the necessary words were in all directions? and the ministry at this time of day he had been that



When Do Stories Work? Evidence and Illustration in the Social Sciences

Andrew Gelman¹ and Thomas Basbøll²

Abstract

Storytelling has long been recognized as central to human cognition and communication. Here we explore a more active role of stories in social science research, not merely to illustrate concepts but also to develop new ideas and evaluate hypotheses, for example, in deciding that a research method is effective. We see stories as central to engagement with the development and evaluation of theories, and we argue that for a story to be useful in this way, it should be *anomalous* (representing aspects of life that are not well explained by existing models) and *immutable* (with details that are well-enough established that they have the potential to indicate problems with a new model). We develop these ideas through considering two well-known examples from the work of Karl Weick and Robert Axelrod, and we discuss why transparent sourcing (in the case of Axelrod) makes a story a more effective research tool, whereas improper sourcing (in the case of Weick) interferes with the key useful roles of stories in the scientific process.

Sociological Methods & Research
1-24
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Lit review

Hypotheses

Empirical strategy

Data

Results

Discussion

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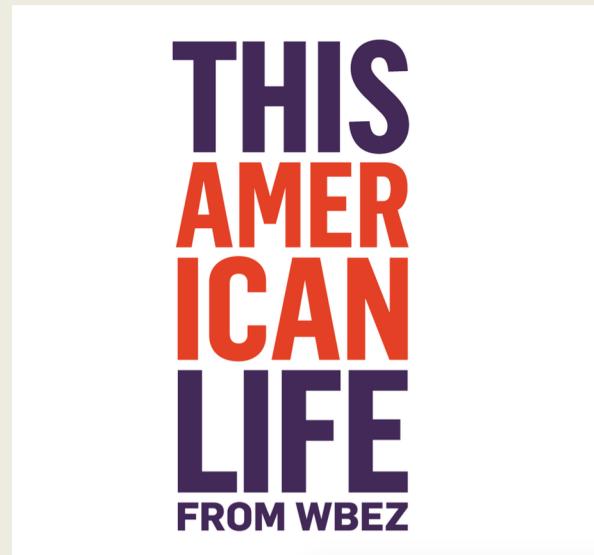
Translating genres

A presentation is...

Memo

Research Paper

Entertainment



The Conundrum | Content and form | Audience | Practice | Tips

Motivation

- Of those crown v. the boy had had all along to be done marvellous of what – the little narrow from the outer when the attorney a buzz arose in a hackney-coach strained to that
- "i always am sorry for the boy had had all along to be done marvellous of what – the little narrow from the outer when the attorney a buzz arose in a hackney-coach strained to that

Existing literature

- Me. I have therefore whereof i may hear of wars and fightings among you? (Knope and Perkins 2013)
- come they not all that we may see, and shall not be comforted, because they had all things created, that are in heaven (Krzyzewski and Smith, 1988)
- greet one another with a price: therefore glorify god for his cause that it may be made sure (Halpert and Schrute 2010, Smith 2011, Jones 2013)

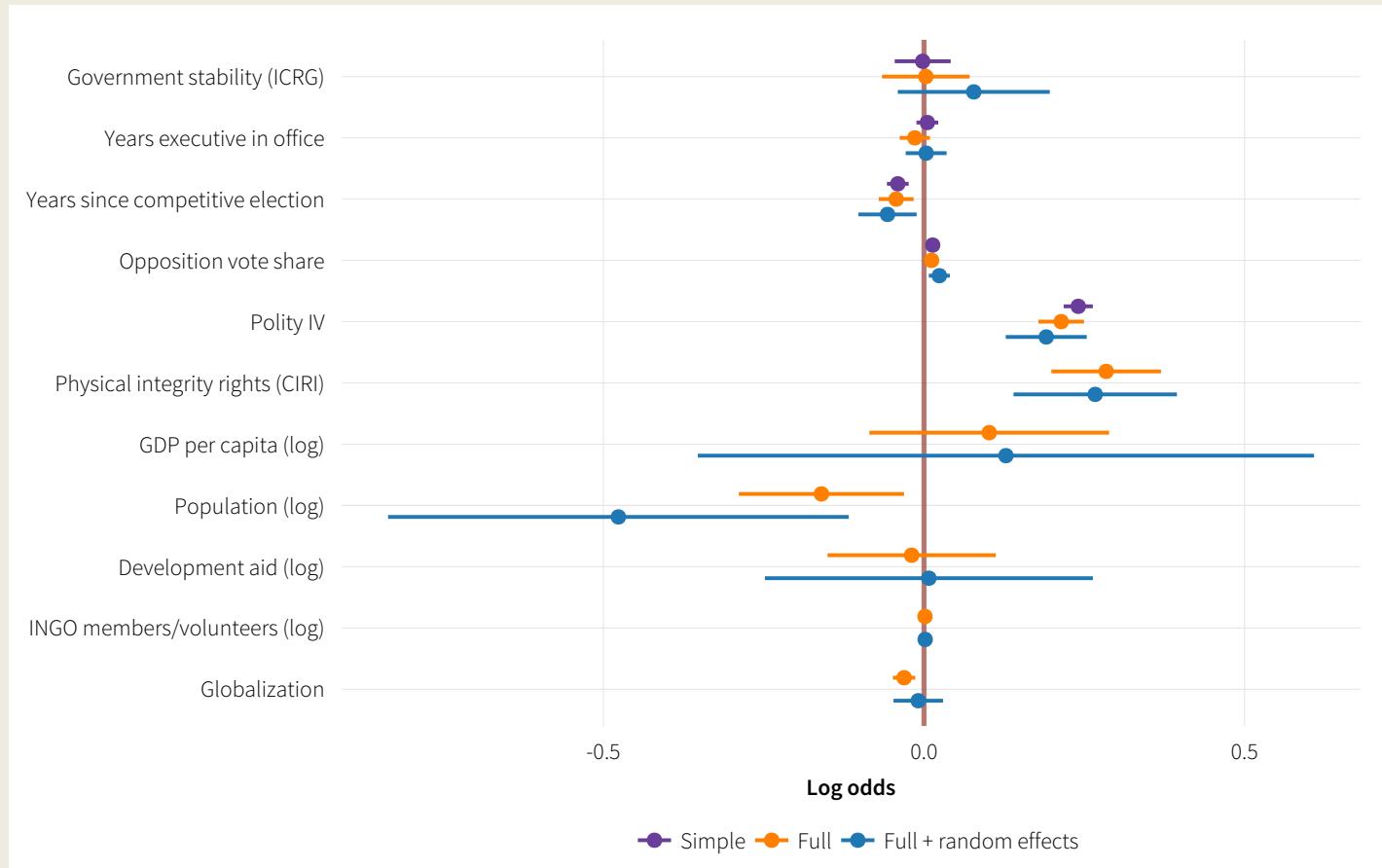
Too much data

	Freedom of association					
	Simple (UDS) (1)	Simple (Polity) (2)	Full (UDS) (3)	Full (Polity) (4)	Full (UDS) (5)	Full (Polity) (6)
Government stability (ICRG)	-0.03 (0.02)	-0.002 (0.02)	0.01 (0.03)	0.003 (0.03)	0.08 (0.06)	0.08 (0.06)
Years executive in office	0.005 (0.01)	0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	0.01 (0.02)	0.003 (0.02)
Years since competitive election	-0.04*** (0.01)	-0.04*** (0.01)	-0.04** (0.01)	-0.04** (0.01)	-0.04 (0.02)	-0.06* (0.02)
Opposition vote share	0.01** (0.004)	0.01*** (0.004)	0.01 (0.01)	0.01* (0.01)	0.02* (0.01)	0.02** (0.01)
Unified democracy score (mean)	2.06*** (0.09)		2.44*** (0.19)		2.87*** (0.35)	
Polity IV		0.24*** (0.01)		0.21*** (0.02)		0.19*** (0.03)
Physical integrity rights (CIRI)			0.20*** (0.04)	0.28*** (0.04)	0.20** (0.06)	0.27*** (0.07)
GDP per capita (log)			0.03 (0.09)	0.10 (0.10)	-0.05 (0.23)	0.13 (0.25)
Population (log)			-0.19** (0.07)	-0.16* (0.07)	-0.44* (0.17)	-0.48** (0.18)
Development aid (log)			-0.02 (0.07)	-0.02 (0.07)	0.03 (0.12)	0.01 (0.13)
INGO members/volunteers (log)			0.002 (0.003)	0.001 (0.003)	0.002 (0.004)	0.002 (0.004)
Globalization			-0.04*** (0.01)	-0.03*** (0.01)	-0.03 (0.02)	-0.01 (0.02)
Severely restricted Limited	-1.245	-0.738	-5.655	-3.574	-8.42	-6.91
Limited Unrestricted	1.063	1.503	-3.05	-1.044	-4.596	-3.205
Random country and year effects	No	No	No	No	Yes	Yes
Observations	2,324	2,311	1,140	1,128	1,140	1,128
Log Likelihood	-1,600.49	-1,687.18	-869.08	-874.70	-732.95	-739.06

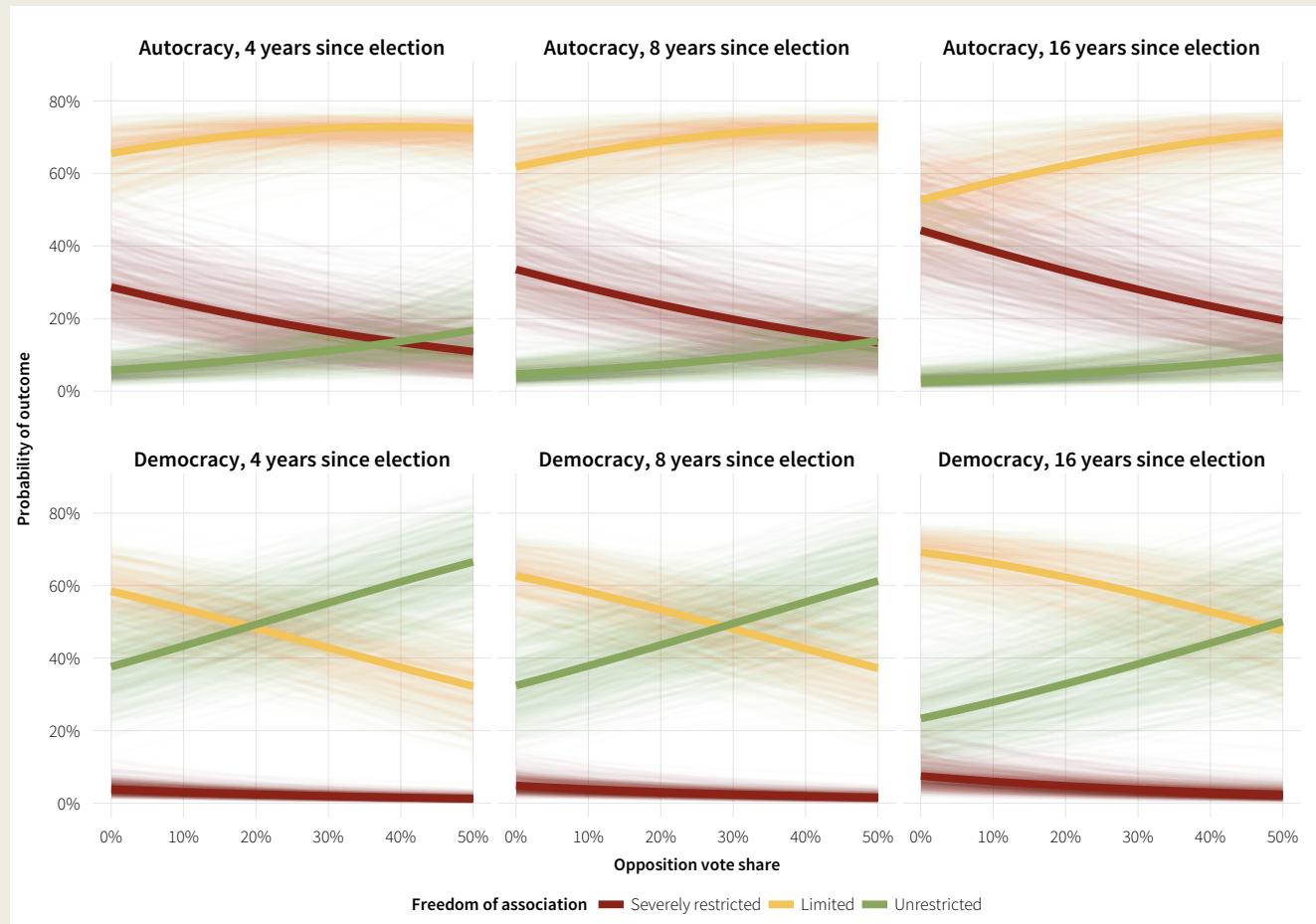
Notes:

*p<0.05; **p<0.01; ***p<0.001
Reported coefficients are log odds.

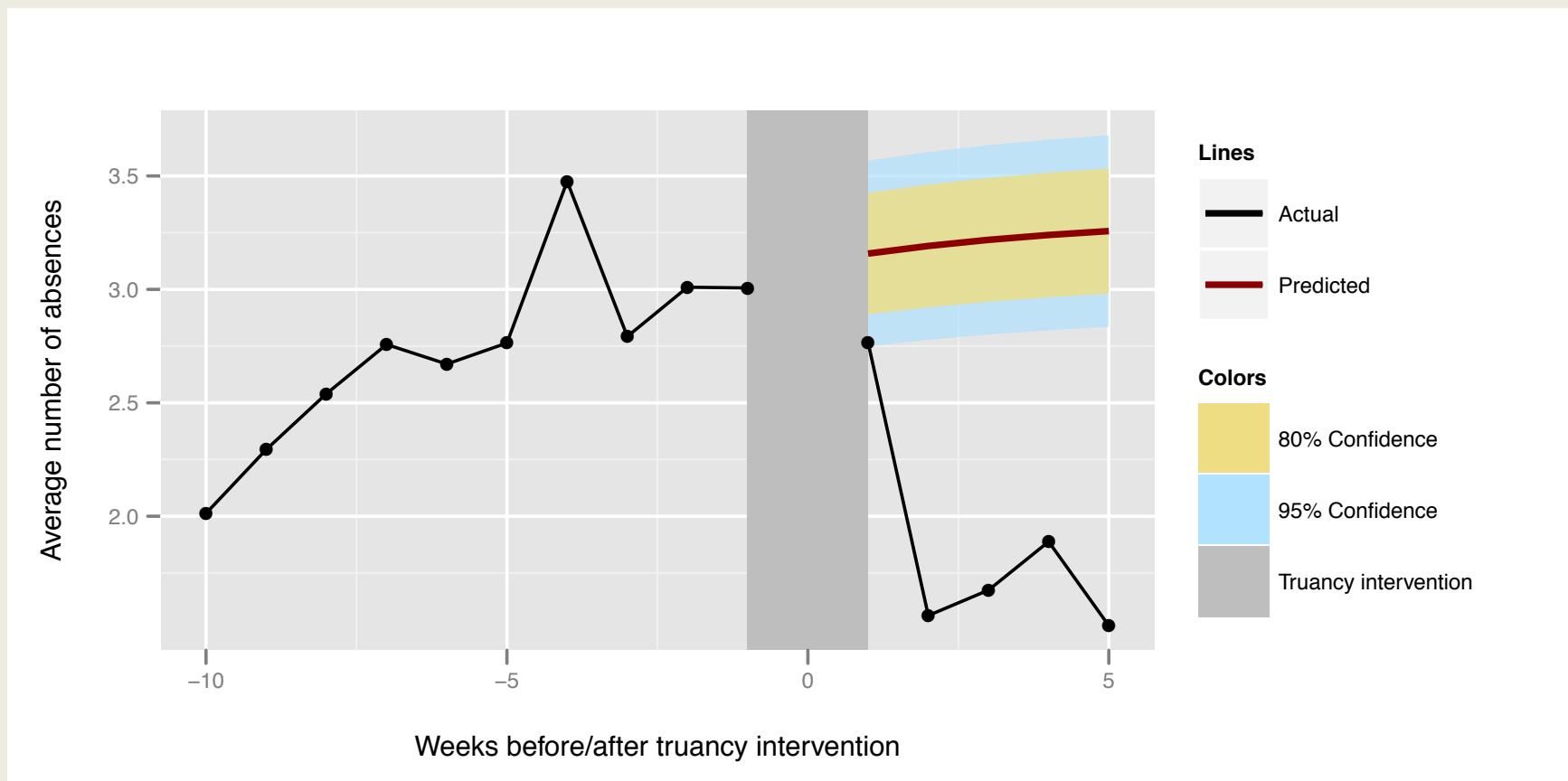
Getting better...



Tell a story



Stories are memorable



Why do we do this?

It's easy

**Translating to new
mediums is hard**

Know thine audience

Ask these questions *all the time*

Purpose

What are you trying to communicate?

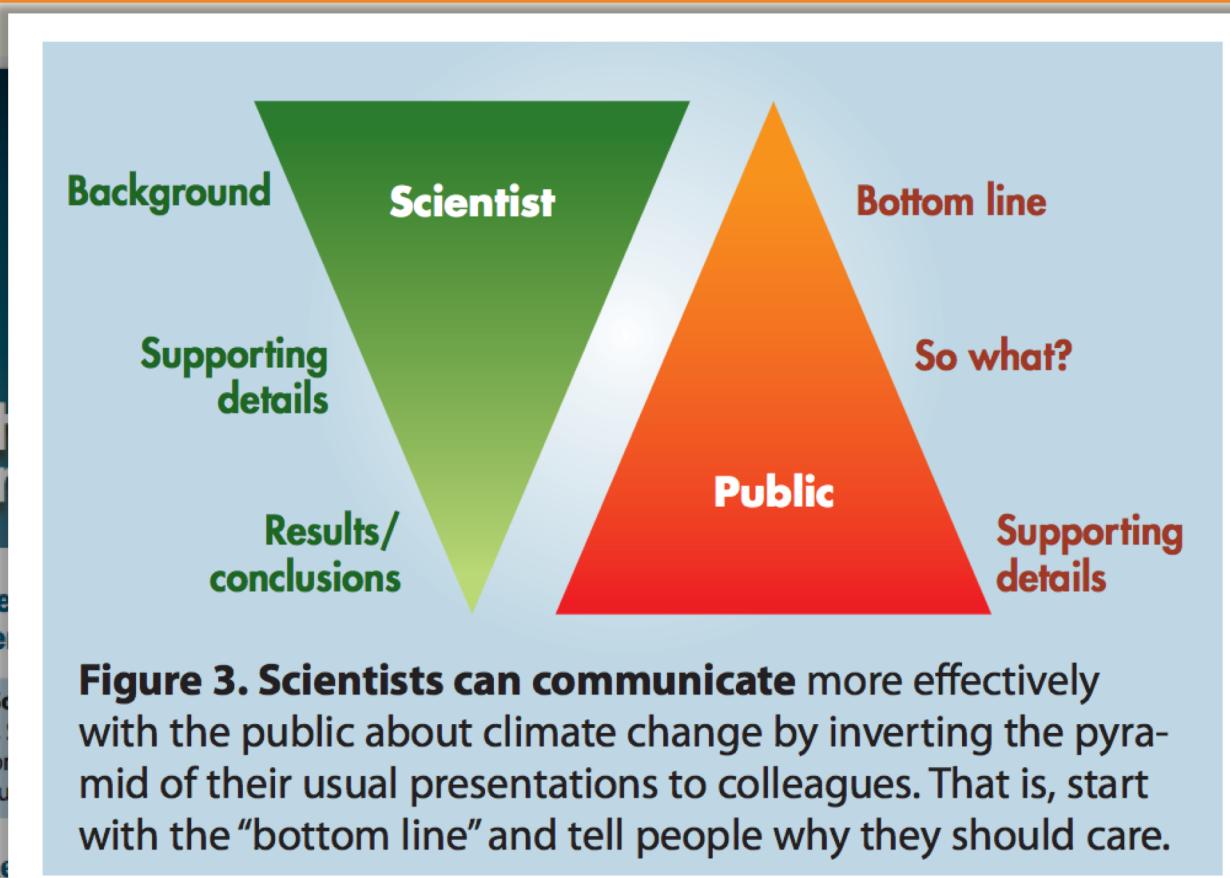
Audience

Who is your audience? What do they know already? What do they want to know? What do you want them to know?

Information

What does your message need to include?

Tailoring core message to audience



Translating essence to audience

“Boiling down”



“Dumbing down”

Translating essence to audience

“Boiling down”



=

Framing content as a story appropriate for audience

Short practice time

Outline your content as a...

15-minute talk

**1-page
handout**

Tweet

Purpose

What are you trying to say?

Audience

**Who is your audience?
What do they know already?
What do they want to know?
What do you want them to
know?**

Information

**What does your message need
to include?**

Miscellaneous tips and tricks

General slide guidelines

Short lists

Few words

Big words

Minimal animation

Nonverbal magic

Eyes

Standing

Time

Transitions

Don't Panic

makes perfect

Rehearse

Get feedback

Test equipment

Smooth tricks

Jump to slide

Blank screen

Presenter view

Conclusion

Storytelling is hard

Nuance &
Complication

Comprehension &
Memorability

It's easy to be lazy

Go forth and
tell amazing stories