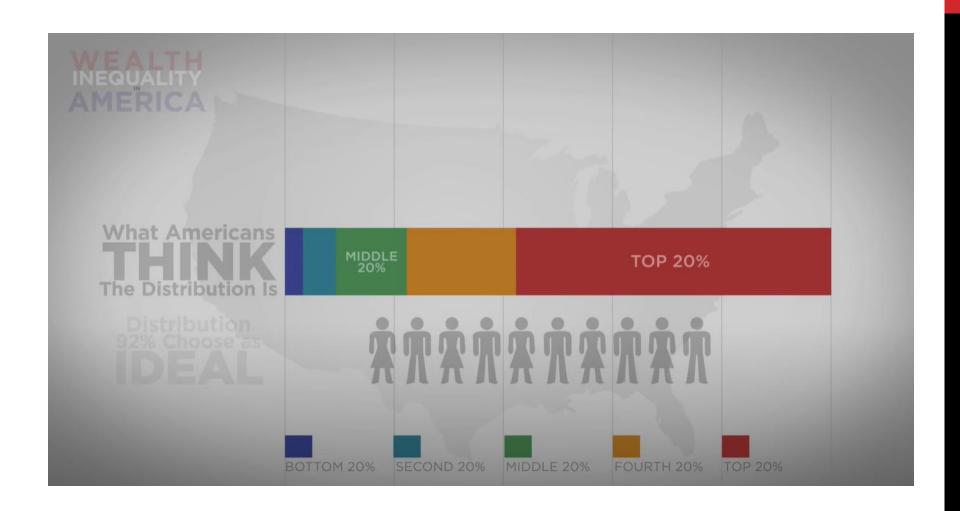
# STORYTELLING

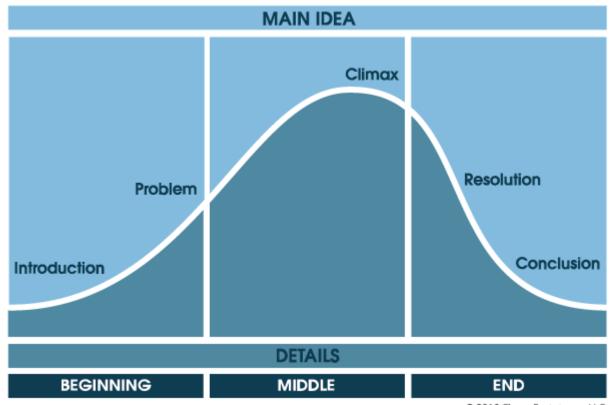


# **STORYTELLING**

#### "The world's second-oldest profession"

Good stories do more than provide facts and data

- They situate and give context
- They engage
- They educateWho / What / WhereWhy / How

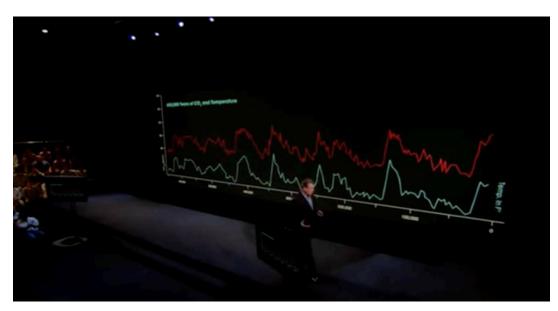


# STORYTELLING WITH DATA/VIS

# **Underscore your arguments** with Data/Facts

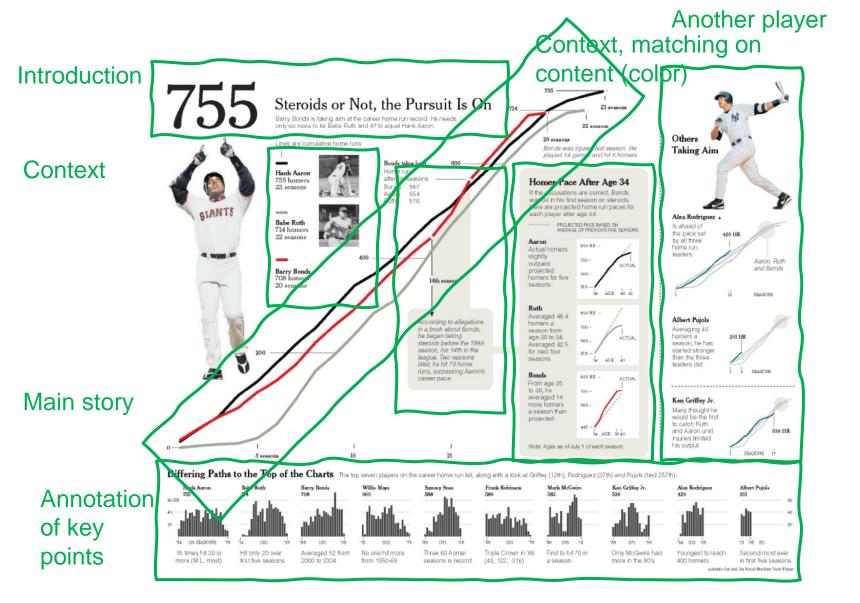
# Leverage the power of Visualization

- Show trends
- Show correlations
- Show outliers
- Convey magnitudes



https://youtu.be/-JluKjaY3r4

# COMPONENTS OF A DATA STORY

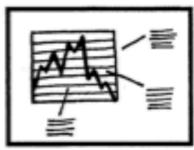


# **GENRE**

Seven Genres



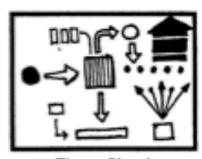
Magazine Style



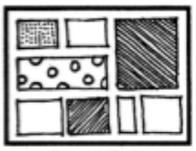
Annotated Chart



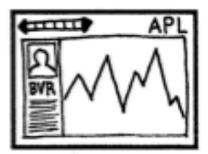
Partitioned Poster



Flow Chart



Comic Strip



Slide Show



Film/Video/Animation

# **AUTHOR OR READER DRIVEN**

#### **Author driven**

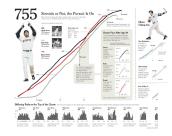
#### Reader driven

Linear ordering

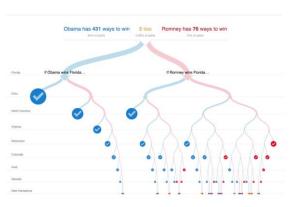
Heavy messaging

No interactivity





No ordering
No messaging
Free interactivity



# **AUTHOR OR READER DRIVEN**

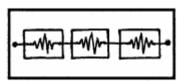
#### **Martini Glass structure**

start with author driven, open up for exploration



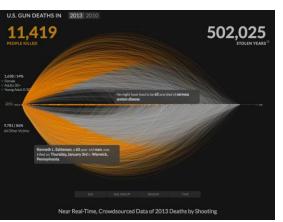
#### Interactive slideshow

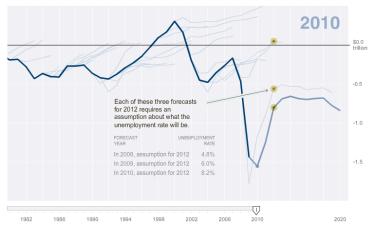
Split into multiple scenes, allow interaction mid-way

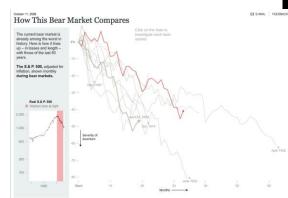


#### **Drill-down story**

Let reader decide which path to follow, all paths are annotated







# STRATEGY FOR STORYTELLING

# **LAYOUT PRINCIPLE**

**Descriptive titles** 

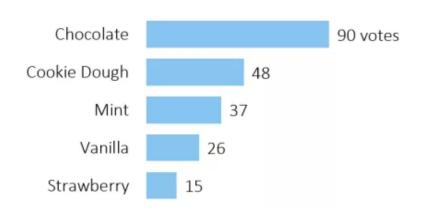
**Descriptive subtitles** 

**Annotations** 

**Saturation** 

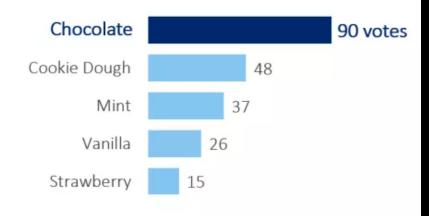
#### **DESCRIPTIVE TITLE AND SATURATION**

Ice cream flavor preferences based on 2014 survey of elementary school students (n=216)



or

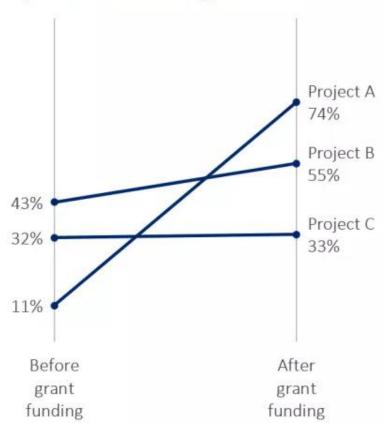
Chocolate was most popular flavor among elementary students surveyed



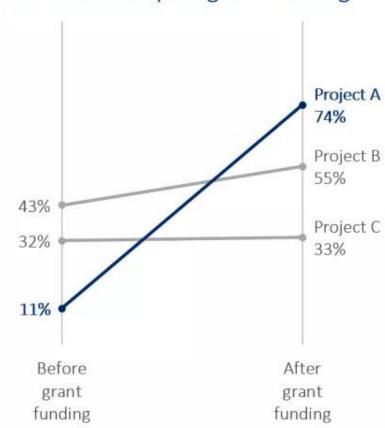
Source: 2014 survey of elementary school students (n=216)

# **DESCRIPTIVE TITLE** AND **SATURATION** EMPHASIZE HOW PROJECT A IS PERFORMING PARTICULARLY WELL

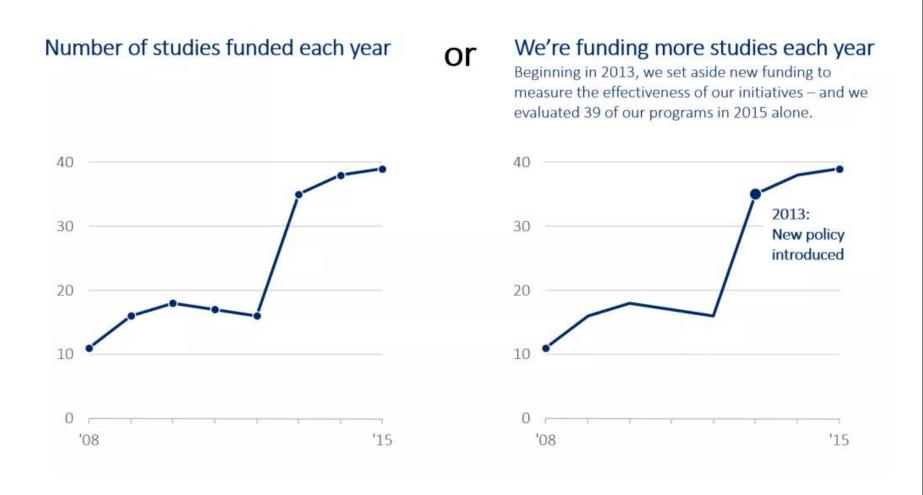
Project results before and after implementation of grant



or Project A had the greatest gains after the four-year grant funding



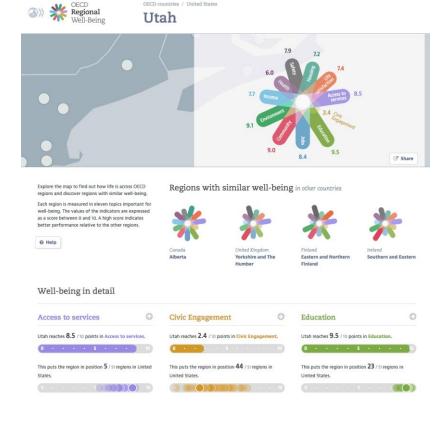
# DESCRIPTIVE TITLE, **DESCRIPTIVE SUBTITLE**, AND **ANNOTATION** FOR INCREASED UNDERSTANDING



### INTERACTIVITY

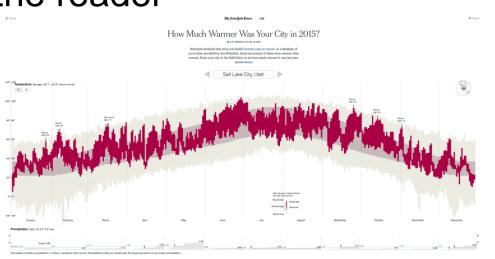
Navigation
Steppers, Scrolling,
Play/Fwd/Rwd, etc.

Details on Demand Highlights when desired



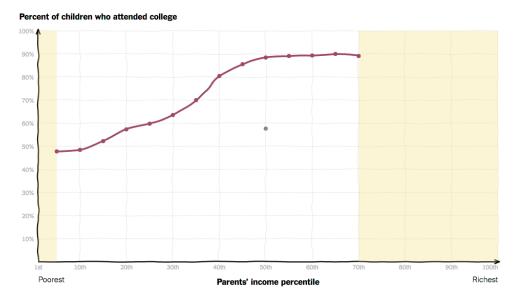
Making it relevant to the reader

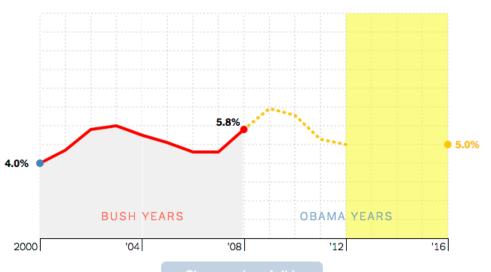
What do you think? Who are you? Where do you live?



# ASK FOR OPINIONS/ PRIOR KNOWLEDGE

Ask reader to draw a trend
Juxtapose with
reality
what other people think



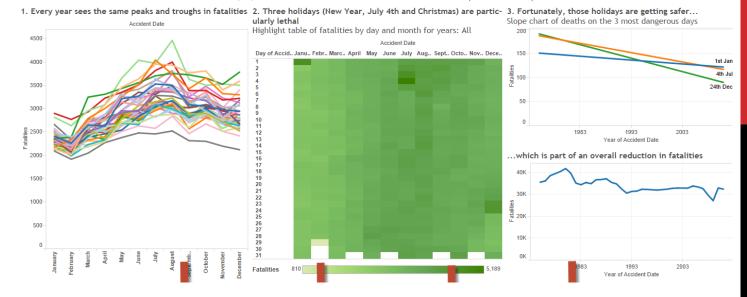


# DESIGN CONSIDERATION

Fewer people are dying on US roads, but seasonal trends

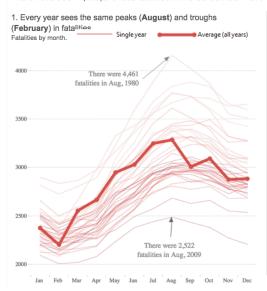
There have been 1,236,670 road fatalities in the US between 1979 and 2011. This dashboard explores the seasonality in the data.

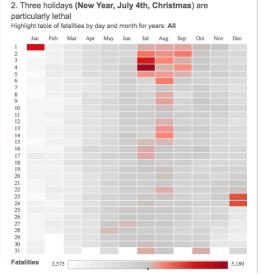
Fewer Colors
Averages for
Context
Better Scales
Richer
Annotations

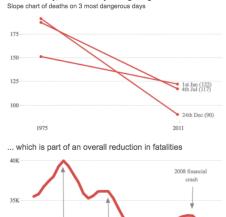


#### Fewer people are dying on US roads, but seasonal trends persist.

There have been 1,263,670 road fatalities in the US between 1979 and 2011. This dashboard explores the seasonality in the data.







antilock brakes

Seatbelt laws and

3. Fortunately, those holidays are getting safer...

Data from the National Highway Traffic Safety Administration
http://www-nrd.nhtsa.dot.gov/Cats/Index.asp.

# ENGAGEMENT

## **KNOW YOUR AUDIENCE**

People you don't know are difficult to influence

What do they know?
What motivates them?
What experiences do you share?
What are common goals?
What insights can you give them?

# **TARGET AUDIENCE**

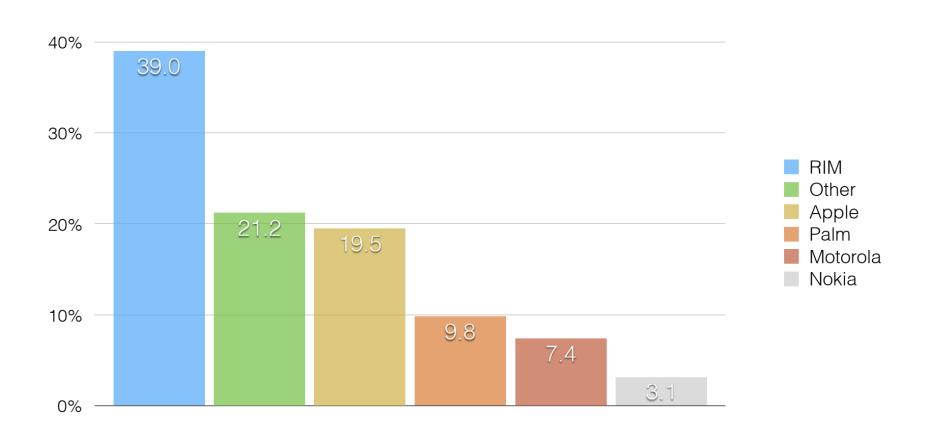
Opinionated



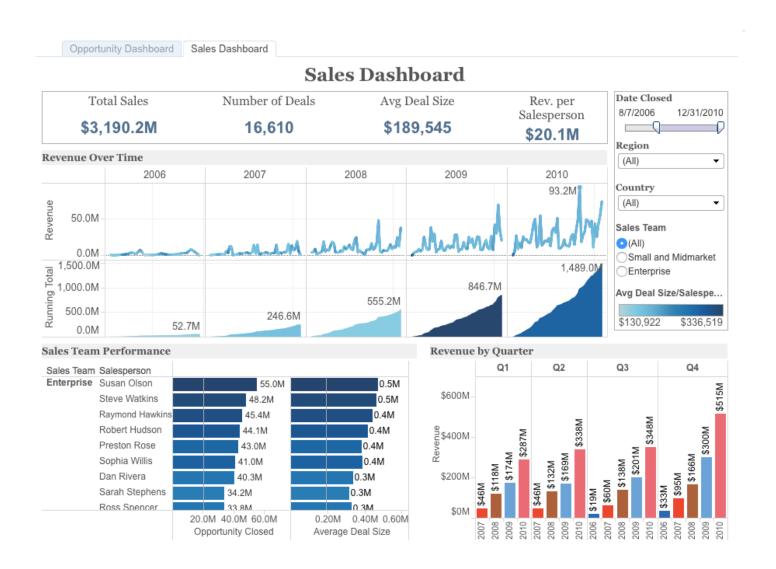
Neutral

Low Information Density High Information Density

# **TARGET AUDIENCE?**

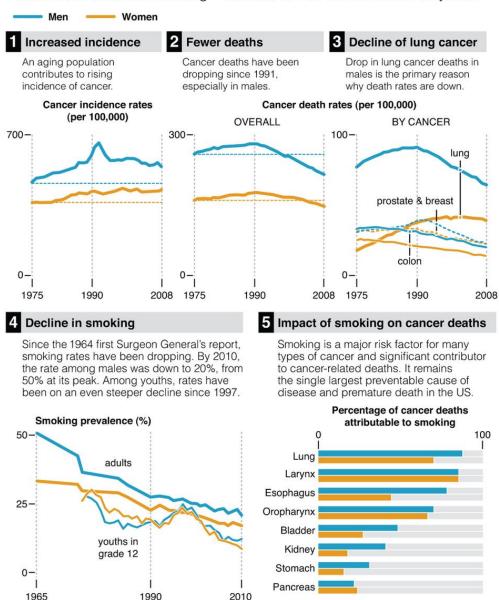


# **TARGET AUDIENCE?**



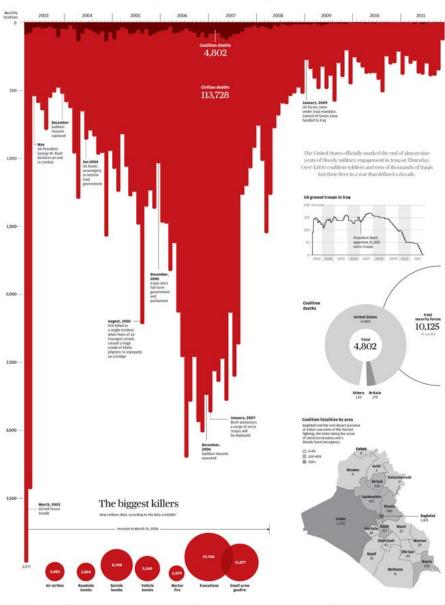
#### WHERE THERE'S SMOKE—THERE'S CANCER

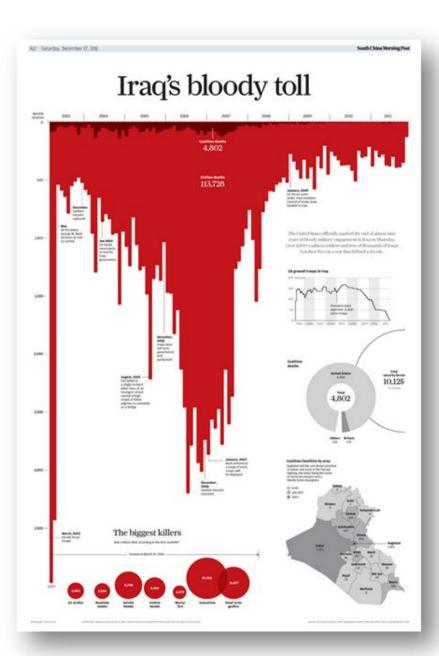
Cancer rates are up, but mortality is down. New diagnostics and treatments are responsible for part of this trend. But the greatest single contributing factor is the decline in smoking—rates are at their lowest level in 50 years.

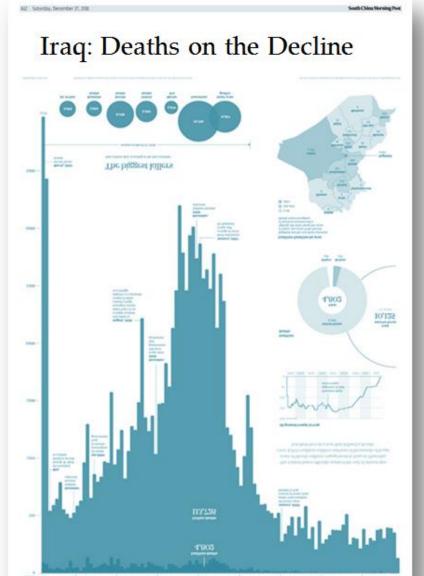


Al2 Saturday, December 17, 2011 South China Morning Post

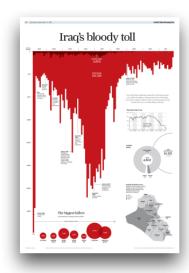
# Iraq's bloody toll

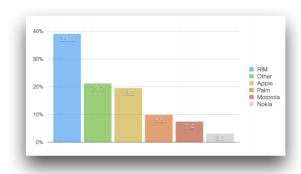


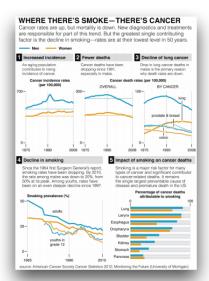




#### Opinionated









Neutral

Low Information Density High Information Density

# **TARGET AUDIENCE**

Opinionated









Neutral

Low Information Density High Information Density

# EXERCISES

#### What's the Genre?

(Magazine, Annotated Chart, Partitioned Poster, Flow Chart, Comic Strip, Slide Show, Video/Animation)

#### Is it Author or Reader Driven?

Can you make out a particular structure? (Martini Glass, Interactive Slideshow, Drill-Down Story)? Why?

**Does it have a good Introduction?**What medium is used for the introduction?

Is the story opinionated or neutral?

Does it use titles, legends, and highlights well?

Does it use interactivity well?

Is the visualization well designed?

#### 1.5 Million Missing Black Men

By JUSTIN WOLFERS, DAVID LEONHARDT and KEVIN QUEALY APRIL 20, 2015

For every 100 black women not in jail, there are only 83 black men. The remaining men – 1.5 million of them – are, in a sense, missing.

"Missing" men

17 missing black men for every 100 black women

Among cities with sizable black populations, the largest single gap is in Ferguson, Mo.

40 missing black men for every 100 black women

North Charleston, S.C., has a gap larger than 75 percent of cities.

25 missing black men for every 100 black women

This gap – driven mostly by incarceration and early deaths – barely exists among whites.

#### What's the Genre?

(Magazine, Annotated Chart, Partitioned Poster, Flow Chart, Comic Strip, Slide Show, Video/Animation)

#### Is it Author or Reader Driven?

Can you make out a particular structure? (Martini Glass, Interactive Slideshow, Drill-Down Story)? Why?

Does it have a good Introduction?
What medium is used for the introduction?

Is the story opinionated or neutral?

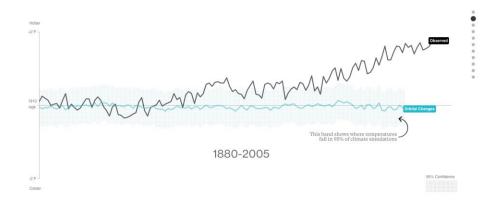
Does it use titles, legends, and highlights well?

Does it use interactivity well?

Is the visualization well designed?

#### Is It the Earth's Orbit?

The Earth wobbles on its axis, and its tilt and orbit change over many thousands of years, pushing the climate into and out of ice ages. Yet the influence of orbital changes on the planet's temperature over 125 years has been negligible.



#### What's the Genre?

(Magazine, Annotated Chart, Partitioned Poster, Flow Chart, Comic Strip, Slide Show, Video/Animation)

#### Is it Author or Reader Driven?

Can you make out a particular structure? (Martini Glass, Interactive Slideshow, Drill-Down Story)? Why?

Does it have a good Introduction?
What medium is used for the introduction?

Is the story opinionated or neutral?

Does it use titles, legends, and highlights well?

Does it use interactivity well?

Is the visualization well designed?

