Storytelling with Visualization

Megan Monroe
madey.j@gmail.com
www.madeyjay.com
37! Grams Saturated Fat (Medium Popcorn)
20 Grams Saturated Fat (USDA Recommended)

37 Grams Saturated Fat (Medium Popcorn)
Grams Saturated Fat (USDA Recommended)  
20  ↓  ×  40  =  37  Grams Saturated Fat (Medium Popcorn)
TED Talk
http://www.ted.com/talks/hans_rosling_shows_the_best_stats_you_ve_ever_seen?language=en
Storytelling with Visualization
What makes a good story?

storyteller

What makes a **good** story?

audience
What makes a good story?
What was that story about?
What was that story about?
What was that story about?
What makes a good story?

storyteller

point

audience
Three-Act Structure

Act One
(set up)

Act Two
(confrontation)

Act Three
(resolution)
NOT with a Fizzle, But with a BANG
What makes a good story?

- Touches people
- Has substance
- Representative of the human condition
- Includes conflict and resolution
- Embraces idiosyncrasies
- Goes beyond the five senses
- Doesn’t default to an easy solution
- Makes people laugh
- Makes people cry
- Imaginable setting
- Plot structure
- Inner struggle
- Must arrive somewhere
- Outer struggle
- Has good characters
- Creates vivid images
- Honest
- Relatable

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audience

point
Storytelling with Visualization
Storytelling with Visualization
Wealth Inequality in America
https://www.youtube.com/watch?v=QPKKQnijnsM
Wealth Inequality in America Graphic
Carte Figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813.

Dessiné par M. Minard, Inspecteur Géral des Ponts et Chaussées, en octobre.

Dans le 20 Novembre 1869.

Les nombres d'hommes perdus sont représentés par les longueurs des lignes colorées à raison d'une millième pour six mille hommes; ils sont donc écrits en têtes des lignes. Le rouge désigne les hommes qui restent en Russie, le bleu ceux qui en sortent. Une représentation qui ressemble à dresser la carte on-elle prise dans les ouvrages de M. Chretien, de Segur, de Teissendier, de Chambery, ou le journal médicale de Jacob, pharmaciens de l'Armée depuis le 28 Octobre.

L'on mieux faire juger de l'été la diminution de l'armée, j'ai supposé que le corps du Prince Jerome et du Maréchal Murat qui étaient détachés de Moscou et sa région vers Olone et Tilsit, avaient toujours marché avec l'armée.

TABLEAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de zéro.
Steroids or Not, the Pursuit Is On

Barry Bonds is taking aim at the career home run record. He needs only six more to tie Babe Ruth and 47 to equal Hank Aaron.

Hank Aaron
755 home runs
23 seasons

Babe Ruth
734 home runs
22 seasons

Barry Bonds
708 home runs
20 seasons

Bonds took lead
Home runs after 16 seasons
Bonds fell
Aaron 554
Ruth 516

Bonds was injured last season. He played 14 games and hit 6 home runs.

Homer Pace After Age 34
If the accusations are correct, Bonds was 34 in his first season as steroids. Here are projected home run paces for each player after age 34.

Aaron
Actual home run slightly outpace projected home runs for five seasons

Ruth
Averaged 46.4 home runs a season from age 30 to 34. Averaged 42.5 for next four seasons.

Bonds
From age 35 to 39, he averaged 14 more home runs a season than projected.

According to allegations in a book about Bonds, he began taking steroids before the 1999 season, his 14th in the league. Two seasons later, he hit 73 home runs, surpassing Aaron’s career pace.

Differing Paths to the Top of the Charts
The top seven players on the career home run list, along with a look at Griffey (12th), Rodriguez (37th) and Pujols (tied 257th).

Aaron 225
Ruth 714
Bonds 708
Willie Mays 660
Sammie Sosa 586
Fonzie Robinson 586
Mark McGwire 580
Ken Griffey Jr. 536
Alex Rodriguez 429
Albert Pujols 205

16 times hit 30+ in more (M.L. norm).
Hit only 20-over first five seasons.
Averaged 52 from 2000 to 2004.
No one hit more from 1950-69.
Three 60-home runs seasons is record.
Triple Crown in ’66 (45, 122, 316).
First to hit 70 in a season.
Only McGwire had more in the 90’s.
Youngest to reach 400 home runs.
Second most ever in first five seasons.
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Home runs after 16 seasons
Bonds 754
Ruth 516

2000
600
700
800
900
1000
10 seasons

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Differing Paths to the Top of the Charts

The top seven players on the career home run list, along with a look at Griffey (12th), Rodriguez (27th), and Pujols (16th) in 2007.

- Hank Aaron
  - 755 home runs
  - 23 seasons

- Babe Ruth
  - 734 home runs
  - 22 seasons

- Barry Bonds
  - 708 home runs
  - 20 seasons

Alex Rodriguez
- 424 home runs
- 2006, 2007

Albert Pujols
- 40 home runs
- 20-30 seasons

Ken Griffey Jr.
- 479 home runs
- 20-30 seasons
TURN AROUND

Every now and then I

BRIGHT EYES

Get a little bit

- lonely and you're never coming 'round
- tired of listening to the sound of my tears
- nervous that the best of all the years have gone by
- terrified and then I see the look in your eyes

Fall apart

AND I NEED YOU

NOW, TONIGHT

MORE THAN EVER!!
Chess Match
http://www.turbulence.org/spotlight/thinking/gallery.html
Color Viz
http://muyueh.com/greenhoney/
Silk Road
Animation

User Paced Animation

Here is the English Dataset, keeping Lightness as a constant . . .

Image

User Paced Images
What makes a good story?

storyteller

point

audience
100m Dash

http://www.nytimes.com/interactive/2012/08/05/sports/olympics/the-100-meter-dash-one-race-every-medalist-ever.html?_r=0
Budget Forecasts

Movie Revenue

Tech IPO

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audience
Global Arms
http://armsglobe.chromeexperiments.com/
Evolution of the Web
http://www.evolutionoftheweb.com/
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audience
Temporal Event Data

Me:

6:00am Wake Up

6:01am Coffee

6:02am – 11:00pm Work on Dissertation

11:01pm Netflix
Check Airway
Breath Sounds
Pulse
GCS
Secondary Survey
Children’s Trauma Unit

A - Airway
B - Breathing
C - Circulation (Pulse)
D - Disability (GCS)
E - Exposure (Secondary)
(Stop Talking)

(Show Demo)
Storytelling with Visualization

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