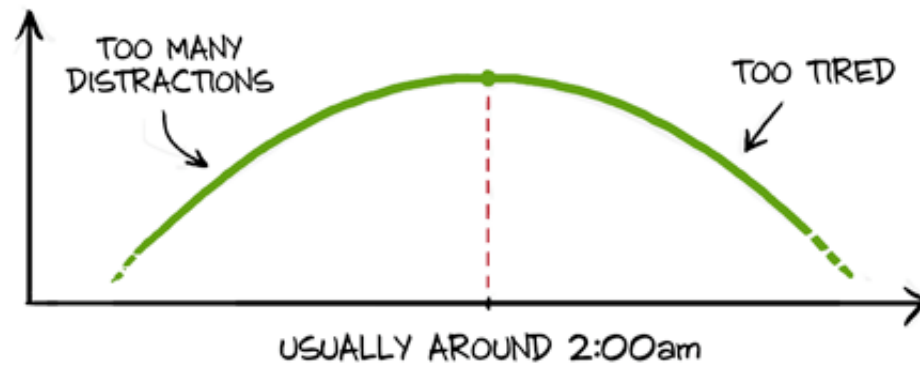


# visualization for the masses

## MY PEAK PRODUCTIVITY

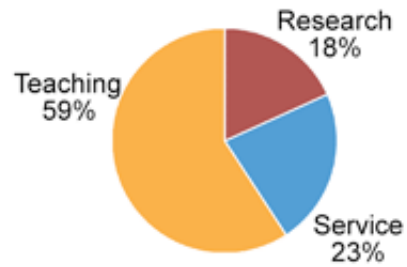


JORGE CHAM © 2009

[WWW.PHDCOMICS.COM](http://WWW.PHDCOMICS.COM)

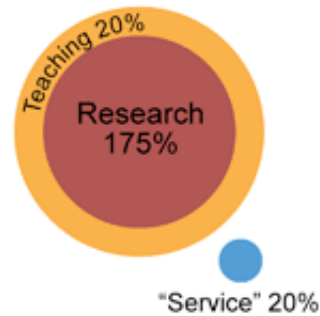
## HOW PROFESSORS SPEND THEIR TIME

How they actually spend their time:



Source: Higher Education Research Institute Survey (1999)

How departments expect them to spend their time:



How Professors would *like* to spend their time:

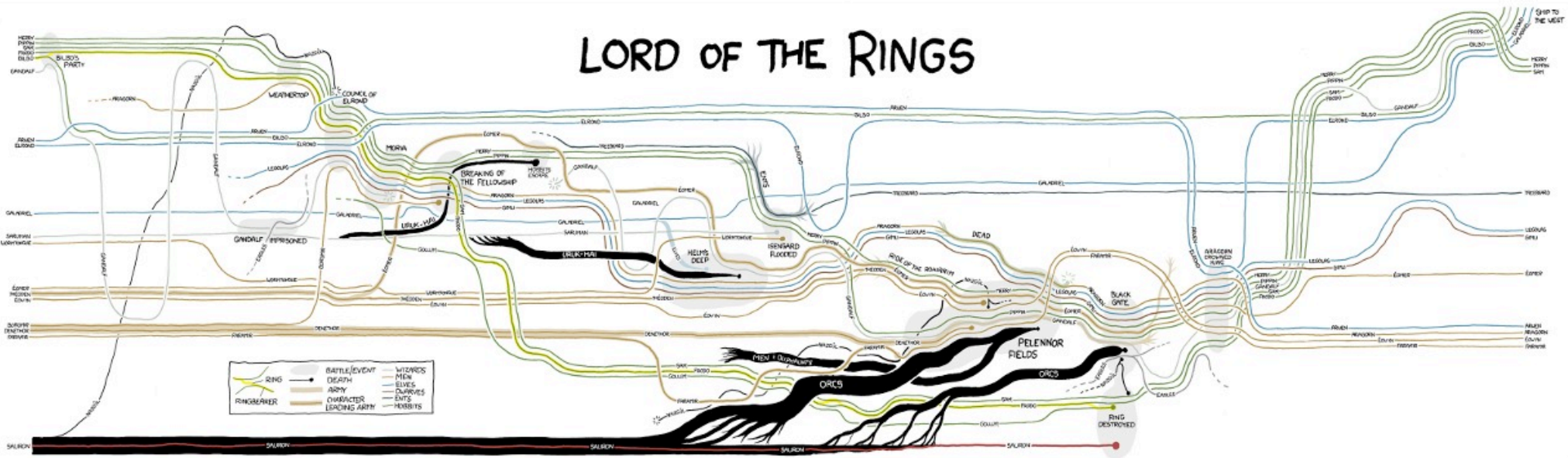


JORGE CHAM © 2008

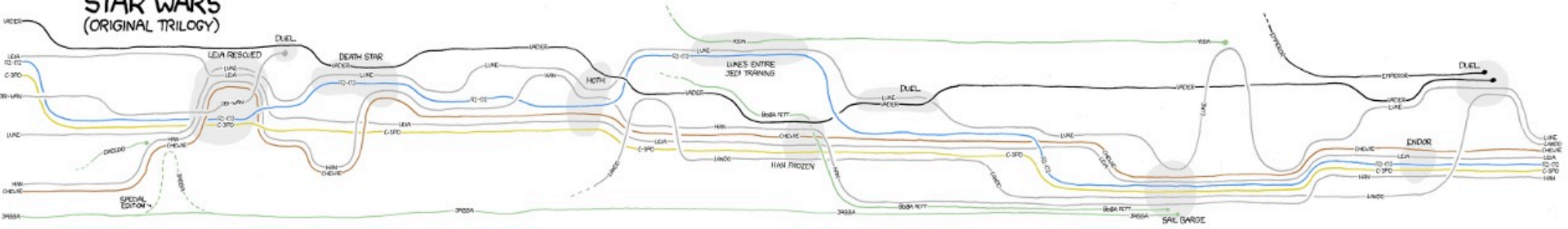
WWW.PHDCOMICS.COM

THESE CHARTS SHOW MOVIE CHARACTER INTERACTIONS.  
 THE HORIZONTAL AXIS IS TIME. THE VERTICAL GROUPING OF THE  
 LINES INDICATES WHICH CHARACTERS ARE TOGETHER AT A GIVEN TIME.

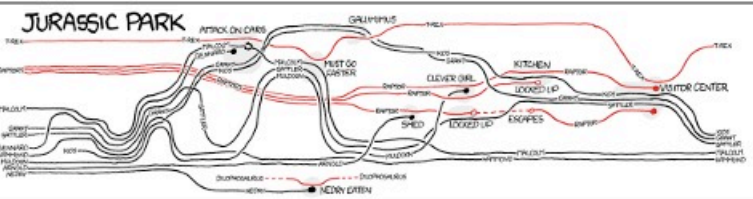
# LORD OF THE RINGS



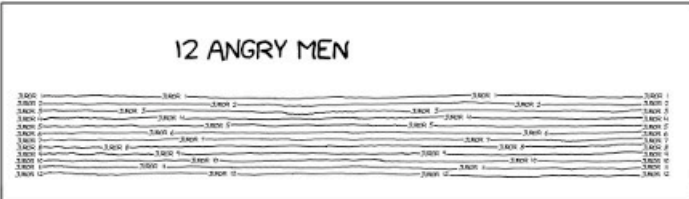
## STAR WARS (ORIGINAL TRILOGY)



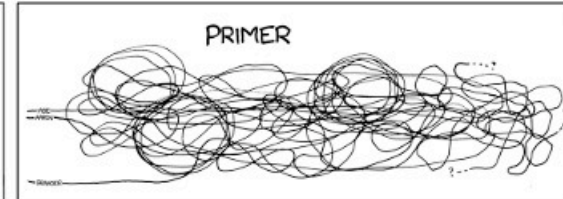
## JURASSIC PARK



## 12 ANGRY MEN



## PRIMER



to see full comic go to  
<http://xkcd.com/657/>

visualization for the masses

# Recap of this talk

- NameVoyager
- Many Eyes
- Visualization as a community component

in conclusion,  
make it *a success*

# SUCCESS



- **S**imple
- **U**nexpected
- **C**oncrete
- **C**redible
- **E**mootional
- **S**tories



# Conclusion

- Accessible
- Simple
- Unexpected
- Concrete
- Credible
- Emotional
- Share-able
- Stories

thank you!

Wattenberg (2005)

*Baby names, visualization, and social analysis*

# Motivations

- Simple visualization for wife's book
- Wanted to find out why it became an instant hit
- Hoped to begin discussion on social data analysis

# Proposed solution

- Name visualization
- Stacked chart with smooth transitions
- Very simple interaction
- Informal post-hoc analysis

# Evaluation

- Looked at what people had to say
- Hypothesized success from
  - Target audience
  - Surprise factor
- Roles of social exploration
  - Achievers, Socializers, Explorers, Killers

# Contributions

- A really cool visualization that many people have liked and used
- Design hypothesis for social data analysis
  - Common ground but unique perspective
  - Expressive spectator interface
  - Discovery transfer
- Started discussion on roles in social data analysis

a success?



Viegas et al (2007)

*Many Eyes: A Site for Visualization at Internet  
Scale*

# Motivations

- Wanted an open environment for visualization collaboration
- Desired to improve upon other collaborative tools, and existing website limitations
  - Ease of use
  - Interaction
  - Visualizations
  - Availability / Accessibility

# Proposed solution

- Web 2.0 online tool (YouTube for visualizations)
- Open data structure
- Easily share-able visualizations
- Built in tools for collaboration
- Extremely simple, well thought out design
- Uses non-complex paradigms
- Interactive
- Flexible, built-in visualizations

# Contribution

- Tool that allows people all around the world to collaborate on data
- Tool that is compelling to watch as it is to drive
- Furthered discussion on asynchronous collaboration
- Discussed design principles for a general audience

Danis et al (2008)

*Your Place or Mine? Visualization  
as a Community Component*

# Motivation

- See what people were doing with Many Eyes
- Discover why a site that didn't hit “critical mass” still became widely used
- Determine visualization's role in the community

# Evaluation

- Detailed interviews with 20 random users
  - Bloggers versus non-bloggers
- Looked at logs

# Contribution

- Visualization to prime discussion elsewhere
- Insight from interviews
  - Learn-ability
  - Usability
  - Motivations
    - Explore, Collaborate, Communicate, Teach
  - Conversation and commentary
  - Concerns about public data and privacy



a success?

the big picture...

# Recap of this talk

- NameVoyager
- Many Eyes
- Visualization as a community component

# Take home guidelines

- Accessible
- Simple
- Unexpected
- Concrete
- Credible
- Emotional
- Share-able
- Stories

thank you!

Go try them out!

NameVoyager

*<http://www.babynamewizard.com/voyager>*

Many Eyes

*<http://manyeyes.alphaworks.ibm.com/manyeyes/>*