# How to Give a Really Awful Presentation

Paul Teetor
William Blair & Co., Chicago
CSP 2018, Portland

# Believe me. I know a lot about lousy presentations.

Today’s agenda is

- Writing the presentation
- Giving the presentation
- The bigger picture

*You can prevent an awful presentation simply by asking yourself,*

***Will the audience understand it?***
***Will the audience enjoy it?***
***What is your message?***

# *Writing* an Awful Presentation

# Don't give a motivating introduction.

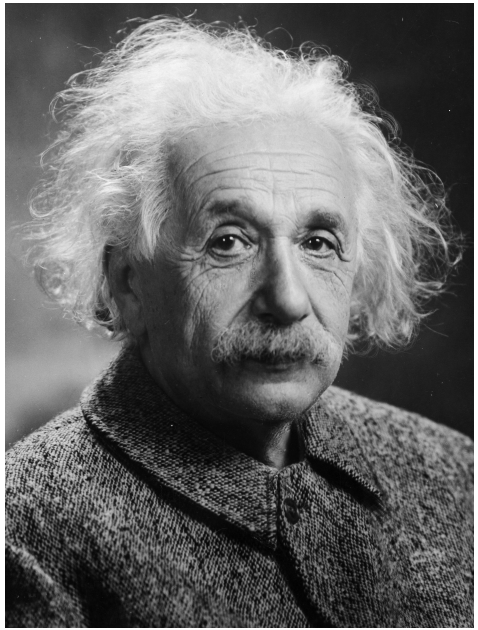
*Bad:*

"Why am I listening to this presentation???"

*Better:*

- *Explain "why" up-front*
- *Capture people's interest from the start*

# Assume everyone in the audience is a near-expert in your field.



*Better:*

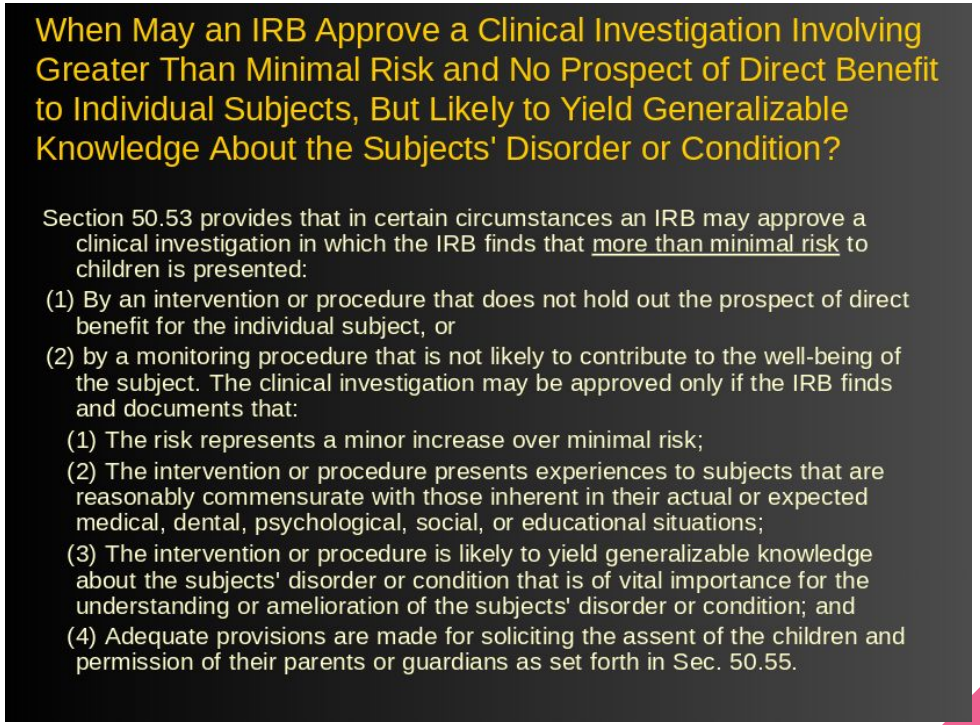
- *Know your audience's boundaries.*
- *Do necessary introduction.*
- *Bring along <u>everyone</u>.*

# Use jargon and acronyms without explanation.


*Better:*

- *Know your audience's boundaries*
- *Expand acronyms (once)*
- *Give one-sentence definitions of highly technical terms*

# Use **dense text**, dense tables, and dense math.



# Use dense text, **dense tables**, and dense math.

| Category | Type | $\alpha_0$ | $\alpha_1$ | $\alpha_2$ | $\alpha_3$ | $\alpha_4$ | $\alpha_5$ | $\alpha_6$ |
|---|---|---|---|---|---|---|---|---|
| Relationship between call option's net buying pressure and index returns | | | | | | | | |
| ITM | TOT | **-0.010** | **-0.163** | -0.049 | **2.623** | **0.174** | 0.018 | **0.088** |
| | C | **0.003** | **-0.008** | **-0.016** | **0.054** | **0.007** | 0.002 | **0.078** |
| | P | **-0.004** | -0.003 | **-0.040** | **1.005** | **0.090** | 0.010 | **0.113** |
| | NCNP | **-0.017** | **-0.116** | 0.038 | **1.401** | **0.072** | 0.002 | **0.058** |
| ATM | TOT | **0.027** | -0.082 | 0.169 | **17.909** | **0.917** | -0.077 | **0.191** |
| | C | **0.005** | **0.031** | **0.065** | **0.378** | 0.009 | **0.023** | **0.131** |
| | P | **-0.072** | **0.187** | 0.019 | **4.481** | **0.408** | 0.015 | **0.151** |
| | NCNP | **0.101** | **-0.143** | **0.453** | **8.846** | **0.497** | -0.034 | **0.116** |
| OTM | TOT | **-0.099** | **0.434** | **0.752** | **9.898** | **0.641** | 0.000 | **0.148** |
| | C | **0.003** | 0.012 | **0.021** | **0.212** | **0.019** | 0.001 | **0.138** |
| | P | **-0.085** | **0.286** | **0.255** | **2.537** | **0.186** | 0.010 | **0.163** |
| | NCNP | **0.031** | **-0.088** | **0.328** | **3.900** | **0.262** | -0.003 | **0.122** |
| Relationship between put option's net buying pressure and index returns | | | | | | | | |
| ITM | TOT | **0.015** | -0.023 | -0.043 | **-2.890** | **-0.184** | 0.008 | **0.142** |
| | C | **0.001** | 0.001 | -0.002 | **-0.028** | **-0.005** | -0.000 | **0.026** |
| | P | **0.003** | **-0.040** | **-0.058** | **-0.608** | **-0.061** | -0.007 | **0.089** |
| | NCNP | **-0.007** | **0.098** | **0.023** | **-0.585** | -0.018 | -0.001 | **0.046** |
| ATM | TOT | **0.036** | **0.298** | **0.483** | **-10.926** | **-0.666** | 0.108 | **0.194** |
| | C | 0.001 | **-0.041** | **-0.070** | **-0.193** | -0.006 | **-0.021** | **0.128** |
| | P | **-0.022** | **-0.131** | -0.052 | **-3.743** | **-0.360** | 0.021 | **0.144** |
| | NCNP | **0.054** | **0.532** | **0.560** | **-5.418** | **-0.339** | 0.009 | **0.130** |
| OTM | TOT | **-0.149** | **-0.158** | **-0.342** | **-9.017** | **-0.502** | -0.042 | **0.167** |
| | C | **0.020** | **-0.022** | **-0.073** | **-0.192** | -0.008 | -0.008 | **0.167** |
| | P | **-0.095** | **-0.207** | **-0.169** | **-2.917** | **-0.275** | 0.015 | **0.149** |
| | NCNP | **0.041** | **0.272** | **-0.059** | **-3.961** | **-0.184** | 0.012 | **0.132** |

# Use dense text, dense tables, and **dense math**.

**Case study**

- Normal assumption:

$$f_{\mu,\sigma^2}(x) \equiv (2\pi)^{-\frac{\bar{n}}{2}} |\sigma^2|^{-\frac{1}{2}} e^{-\frac{1}{2}(x-\mu)'(\sigma^2)^{-1}(x-\mu)}$$

1. Prior distribution $\underline{\theta} \equiv (\underline{\mu}, \underline{\sigma}^2)$
2. Views on expectations and covariances

$$(\mu, \sigma^2) \in \mathcal{V} \quad \Longleftrightarrow \quad a\mu \equiv \xi, \quad c\sigma^2 c' \equiv \phi^2$$

3. Posterior distribution (analytical solution)

$$\bar{\mu} = \underline{\mu} + \underline{\sigma}^2 a'(a\underline{\sigma}^2 a')^{-1}(\xi - a\underline{\mu})$$

$$\bar{\sigma}^2 = \underline{\sigma}^2 + \underline{\sigma}^2 c'[(c\underline{\sigma}^2 c')^{-1}\phi^2(c\underline{\sigma}^2 c')^{-1} - (c\underline{\sigma}^2 c')^{-1}]c\underline{\sigma}^2$$

Reletive entropy (explicit form)

$$\mathcal{E}(\mu, \sigma^2 \| \underline{\mu}, \underline{\sigma}^2) = \frac{1}{2}(\mathrm{tr}(\sigma^2(\underline{\sigma}^2)^{-1}) - \ln|\sigma^2(\underline{\sigma}^2)^{-1}| + (\mu - \underline{\mu})'(\underline{\sigma}^2)^{-1}(\mu - \underline{\mu}) - \bar{n})$$

# Use dense text, dense tables, and dense math.

*Better:*

- *Bullets, not paragraphs*
- *Graphs or summary statistics, not tables*
- *Focus on critical equations - and unpack them*

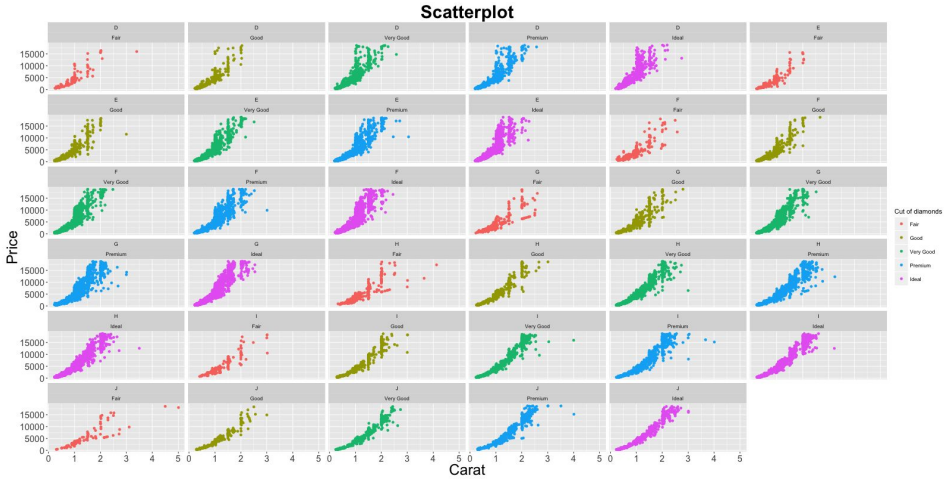
# Show computer code, but don't explain it.

```
functions {
    real sum_constraint(vector x, int t, int Lambda) {
                    int t_start;
                    int t_end;
        real s;
                    s<- 0;

                    // wind back from: (t-1)  to:  t-(Lambda-1)
                    t_start<- t-1;
                    t_end<-   t-(Lambda-1);

                    for (i in t_start:t_end) {
                        s<- s - x[i];
                    }

        return s;
        }
}

data {
    int<lower=12> T;
    vector[T] y;
    int<lower=12,upper=12> Lambda;
}

parameters {
    vector[T] theta_1;
    vector[T] s;
    real<lower=0> sigma_1;
    real<lower=0> sigma_2;
    real<lower=0> sigma_3;
}

transformed parameters {
    vector[T] ss;

    for (t in 1:(Lambda-1)) {
        ss[t]<- 0;
    }
```

*Better:*

- *Use short excerpts, minimal examples*
- *Walk thru, line by line*
- *Highlight key stuff*
- *Or just show design*

# Use illegible illustrations.




*Better:*

- *Summarize, summarize, summarize*
- *Share your insight, not your details*

*Credit: http://r-statistics.co/screenshots/ggplot_5.png*

# Show off your PowerPoint skills with bizarre transitions, colors, and FONTS.

*Better:*

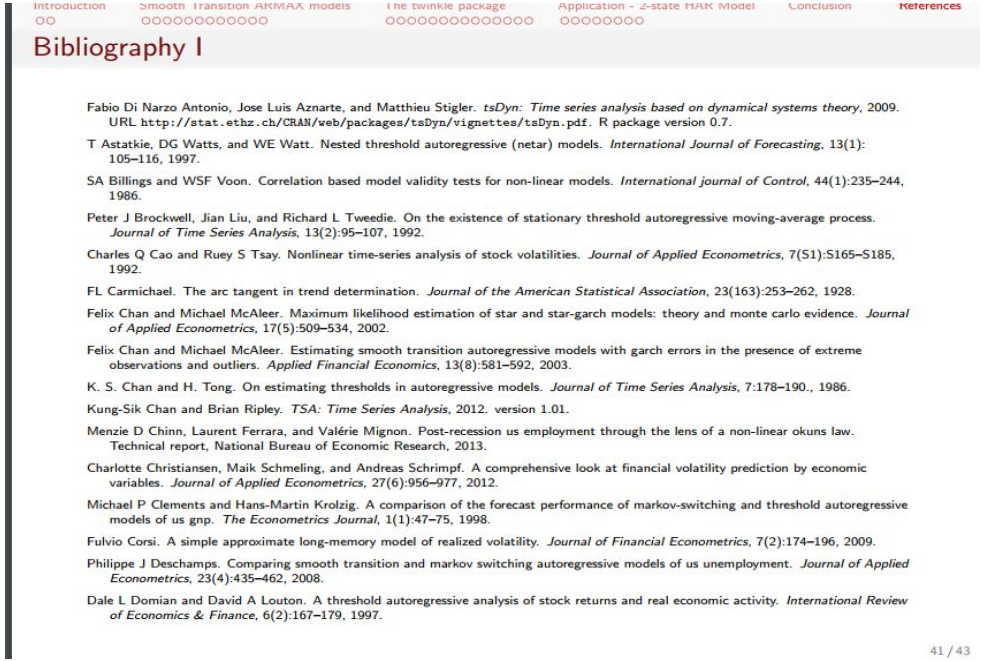
- *Focus on content, not flash*
- *Have mercy on your audience*

# Don't end with a summary.

*Better:*

- *Plan time for summary*
- *Tell ’em what you told them*
- *Give them closure*

# Provide many references instead of a link.





## Bibliography I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*Credit: http://past.rinfinance.com/agenda/2014/talk/AlexiosGhalanos.pdf*

*Better:*

- *Post your materials on-line*
- *Provide a link to them*

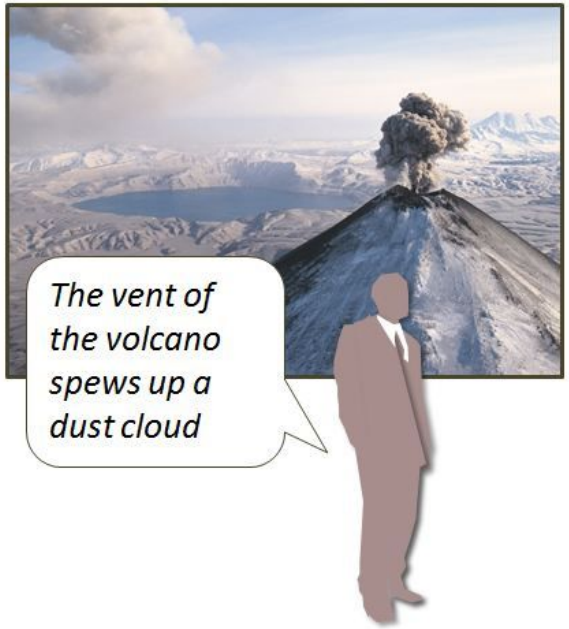
# *Giving* an Awful Presentation

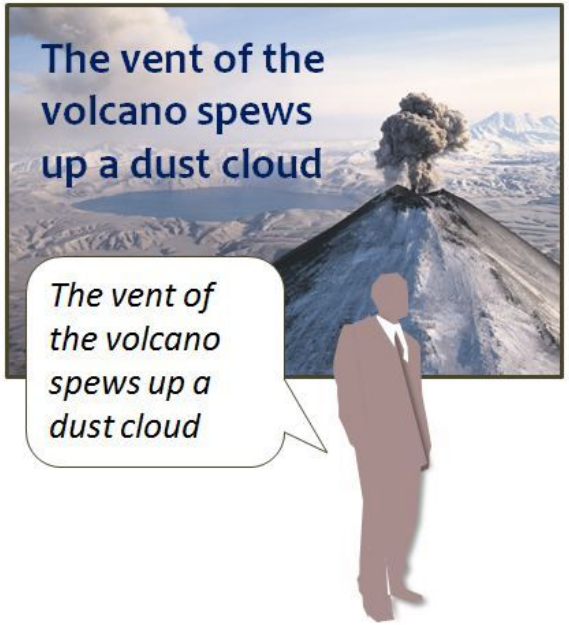
# Have no backup for the presentation technology.

*I strongly suggest*

- *Bring your slides in a PDF file*
- *Store on a USB drive*
- *Bring your laptop*
- *Bring a VGA adaptor*

# Read your slides.




*Credit: https://speakingpowerpoint.files.wordpress.com/2011/05/richard-mayer-myth-busted-11.jpg*

# Don’t let the audience hear you.

*Bad:*

- Don’t project.
- Face the screen.
- Abandon the microphone altogether.

*Better:*

- *Think like a performer*
- *Face the audience*
- *Project your voice*
- *Put yourself out there - literally*

# Speak quickly and unpleasantly.

*Bad:*

- Talk quickly and continuously
- Never pause
- Many “uhhs” and “umms”

*Better:*

- *Use pauses and breaks.*
- *Stop at periods, breathe at commas.*
- *Plan about 1 slide per minute.*

# Stick to the facts. Never smile. Avoid all humor.

*Better:*

- *Send a message: you enjoy your topic.*
- *People really like stories.*
- *Bonus for funny stories.*

# Shoot yourself in the foot.

*Bad:*

- Negate yourself ("I'm don't know much about this, but ...")
- Negate your materials ("This slide isn't important, but...")

*Better:*

- *Have some confidence and some humility.*
- *Delete unimportant slides.*

# Don’t respect your audience.

*Bad:*

- Wander off topic
- Run past your allowed time
- Ask "Any questions?", then ignore the audience

*Better:*

- *Stay on script*
- *Again, plan about 1 slide per minute*
- *Always time your talk*

# Include a link to your materials, but flip past it.

"OK, here's the link to my on-line materials."

```
https://www.amazon.com/Cookbook-Analysis-Statistics-Graphics-Cookbooks/dp/0596809158/ref=sr_1_1?ie=UTF8&qid=1511717440&sr=8-1&keywords=r+cookbook
```

*Better:*

- *Keep the URL short*
- *Linger on the slide*

# The Bigger Picture

# There are many ways to ruin your graphics.

*For help with graphics, I recommend*

*William Cleveland, “The Elements of Graphing Data”*

*Naomi Robbins, “Creating More Effective Graphs”*

# Make it up as you go along.

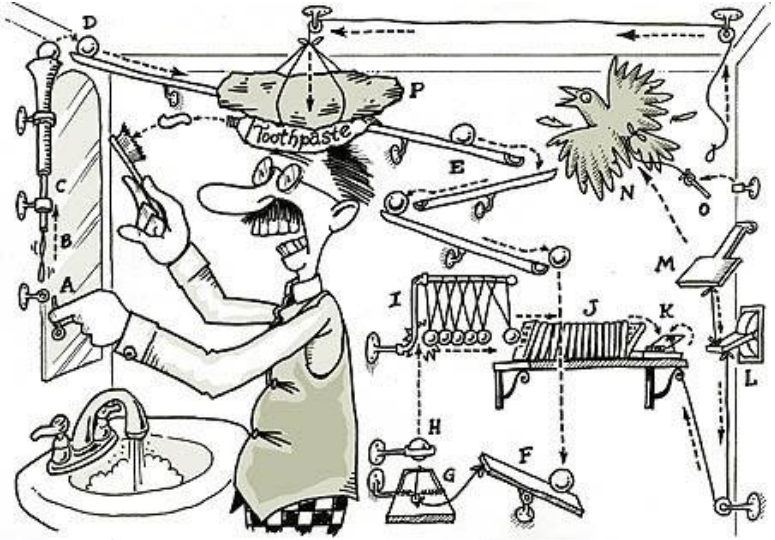
*Bad:*

*"I'll just wing it."*

*Better:*

- *Know what you'll say and when you'll say it.*
- *Practice, practice, practice.*
- *Time your talk.*

# Do a live demonstration.




"Gee. It usually works."

*I strongly suggest*

- *Practice the demo!*
- *Bring a PDF file of static screen images, just in case.*
- *Arrive extra early and check the room setup*

# Barrel ahead. Ignore the mood of the room. Stay out of touch with the audience.

*Better:*

- *Pause*
- *Look around*
- *Check in*
- *Stay flexible*

*Credit: http://keywordsuggest.org/*

*Every slide in this presentation is saying:*

*Think about your presentation from the audience point of view.*

***Will they understand it?***

***Will they enjoy it?***

***What is your message?***

*Thank you. And please,* ***don't be awful****.*

*Slides available at*

bit.ly/csp2018-awful