

It's the singer not the song: how to give a more effective large group presentation

J.S. Keystone TDU TGH
& E.C. Keystone RDU MSH



Jay's contribution: this talk
Ed's contribution: 5.2 million stem cells

Disclosure : conflict of interest

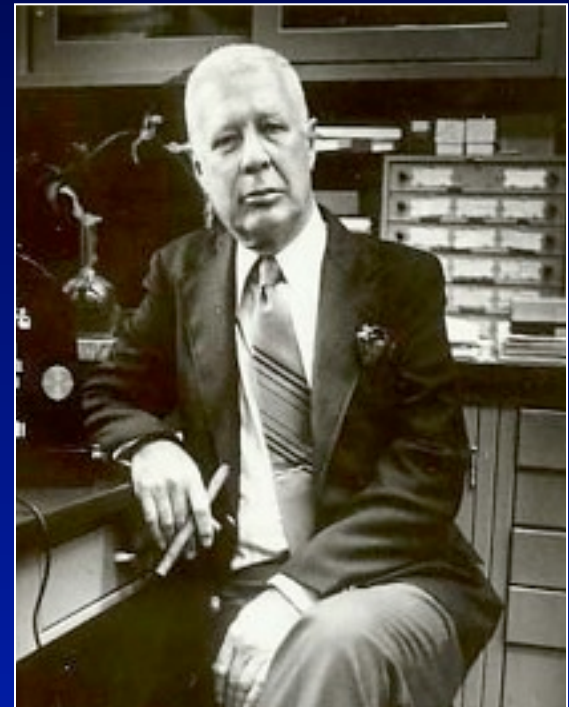
**Fortunately for you, but
unfortunately for me...there
is no financial conflict of
interest in this presentation!**

Outline of this *very* talk

- Major elements of teaching
- Organization of a lecture
- Making it *stick!*
- Slide preparation
- The learning environment
- Learning breaks
- “The” secret to success: slide 66

**“Teaching medicine, and
doing it well, is one of the
most demanding of the
performance arts”**

**Ben Kean
1912-1993**



Godwin's Equation

Good teaching = $\frac{1}{4}$ preparation
+ $\frac{3}{4}$ theatre

Gail Godwin
1937-



The Doctor Fox Lecture: a paradigm of educational seduction

J Med Education. 1973;48:630-5.

- **The speaker** : actor programmed to teach a topic about which he knew nothing.
- **The audience**: psychiatrists, psychologists, and social-worker educators (not representative)
- **Results**: Majority responded favorably to the lecture. (81-100%)

Major Elements of Teaching

- Engaging the learner

Major Elements of Teaching

- Engaging the learner
- **Mastery of the subject**

Major Elements of Teaching

- Engaging the learner
- Mastery of the subject
- Clarity of expression

Goals of a presentation

Delivery of Information

Change in behaviour



Goals of a presentation

Delivery of Information

Change in behaviour



Make it stick!

**“ Speakers often ‘*share data*’:
but they haven’t created useful and
lasting ideas...nothing sticks!”**



Chip and Dan Heath



Making it stick = SUCCESS

Heath C.&D. “Made to Stick”
Random House 2008

1. Simple
2. Unexpected
3. Concrete
4. Credible
5. Emotional
6. Story

Making it stick = SUCCESS

Heath C.&D. “Made to Stick”
Random House 2008

1. **S**imple Remember
2. **U**nexpected
3. **C**oncrete
4. **C**redible
5. **E**mootional
6. **S**tory

Making it stick = SUCCESS

Heath C.&D. “Made to Stick”
Random House 2008

- | | |
|-----------------------|---------------|
| 1. S imple | Remember |
| 2. U nexpected | Pay attention |
| 3. C oncrete | |
| 4. C redible | |
| 5. E mootional | |
| 6. S tory | |

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- | | |
|-----------------------|---------------|
| 1. S imple | Remember |
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- | | |
|-----------------------|---------------|
| 1. S imple | Remember |
| 2. U nexpected | Pay attention |
| 3. C oncrete | Understand |
| 4. C redible | Believe |
| 5. E mootional | Care |
| 6. S tory | Act |

malaria:a potential killer

- Simple
- Unexpected
- Concrete
- Credible
- Emotional
- Story

malaria:a potential killer

- **Simple** Malaria kills
- **Unexpected**
- **Concrete**
- **Credible**
- **Emotional**

- **Story**

malaria:a potential killer

- **Simple** Malaria kills
- **Unexpected** More die of malaria than HIV
- **Concrete**
- **Credible**
- **Emotional**

- **Story**

malaria:a potential killer

- **Simple** Malaria kills
- **Unexpected** More die of malaria than HIV
- **Concrete** Deaths = two 747 crashes *every* day
- **Credible**
- **Emotional**

- **Story**

malaria:a potential killer

- **Simple** Malaria kills
- **Unexpected** More die of malaria than HIV
- **Concrete** Deaths = two 747 crashes *every* day
- **Credible** WHO malaria report
- **Emotional**

- **Story**

malaria:a potential killer

- **Simple** Malaria kills
- **Unexpected** More die of malaria than HIV
- **Concrete** Deaths = two 747 crashes *every* day
- **Credible** WHO malaria report
- **Emotional** Every 45 seconds a child dies of malaria in her mother's arms
- **Story**

malaria:a potential killer

- **Simple** Malaria kills
- **Unexpected** More die of malaria than HIV
- **Concrete** Deaths = two 747 crashes *every* day
- **Credible** WHO malaria report
- **Emotional** Every 45 seconds a child dies of malaria in her mother's arms
- **Story** 34 yr.old father of 2 dies of malaria in Ont.when dx missed in ER

Motivation

```
graph TD; Feedback --> Motivation; Motivation --> Framework; Framework --> Information; Information --> Intermission; Intermission --> Feedback;
```

Feedback

Framework

Intermission

Information

Motivation

 Enthusiasm

Motivation

❖ Enthusiasm

❖ Curiosity

Motivation

❖ Enthusiasm

❖ Curiosity

❖ Relevance

Enthusiasm

Show passion...

Enthusiasm

Show passion... or pretend you care!

Enthusiasm

Show passion... or pretend you care!

Change the 'volume'

Enthusiasm

Show passion... or pretend you care!

Change the 'volume'

Repeat for emphasis

Enthusiasm

Show passion... or pretend you care!

Change the 'volume'

Repeat for emphasis

Change the cadence (rhythm)

A black and white portrait of Mark Twain, showing him from the chest up. He has white, wavy hair and a prominent white mustache. He is looking slightly to the right. The background is dark.

**“No word was ever as effective
as a rightly timed pause”**

**Mark Twain
1835-1910**

A black and white portrait of Mark Twain, showing him from the chest up. He has white, wavy hair and a prominent white mustache. He is looking slightly to the right of the camera. He is wearing a dark suit jacket over a light-colored shirt and a dark tie. The background is dark and out of focus.

A pause says “ pay attention! ”

**Mark Twain
1835-1910**

Target your audience!!



Presenter media.com

Relevance

- Who is my audience?

Relevance

- Who is my audience?
- What would interest them?

Relevance

- Who is my audience?
- What would interest them?
- What do they *need* to know?

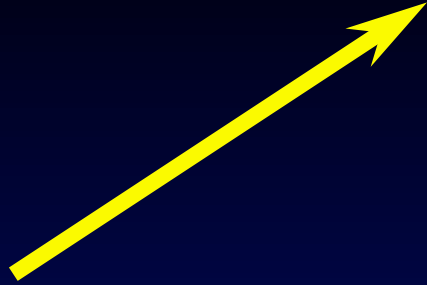
Motivation

Feedback

Framework

Intermission

Information



Framework

- Tell them what you want to say
- Say it . . .
- Tell them again !

Framework

- Objectives
- Lecture outline
- Organized, logical
- Thesis development
- Summary

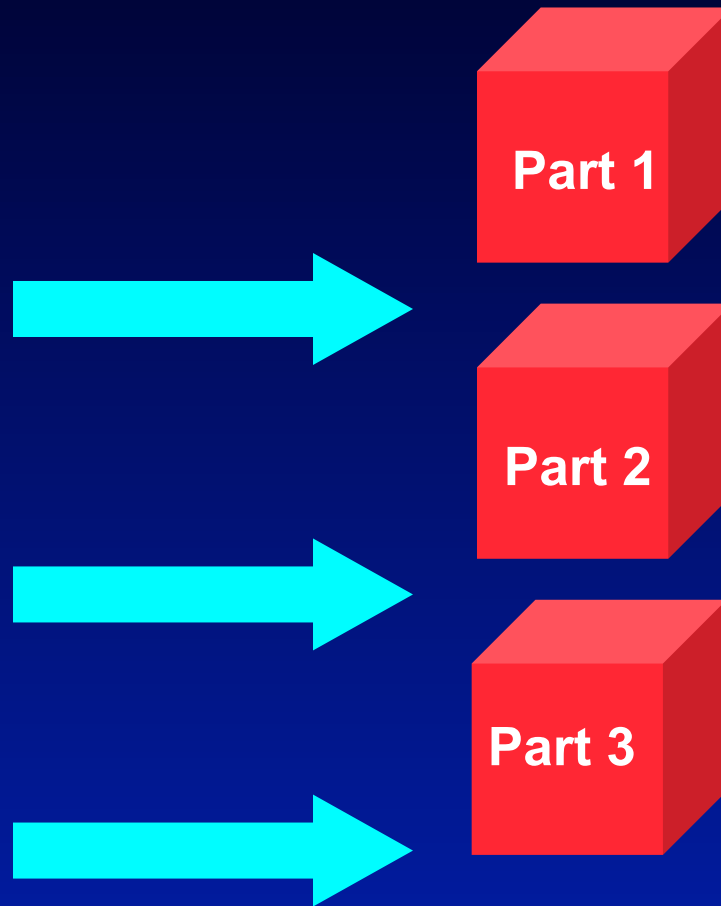
Thesis Development: “Chunk-ing”



Dawne Bernhart
Dinner party 2006

Thesis Development: “Chunk-ing”

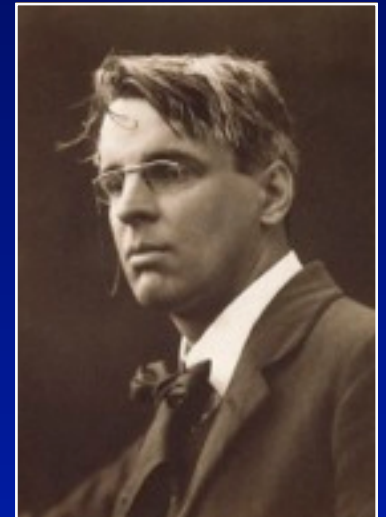
Summary



Dawne Bernhart
Dinner party 2006

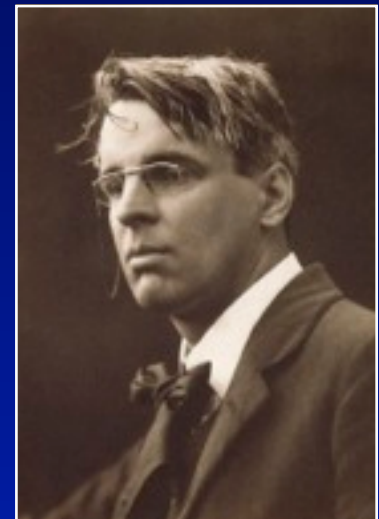
“Education is **not the
filling of a pail, but the**

**W.B. Yeats
1865-1939**



“Education is **not the
filling of a pail, but the
lighting of a fire”**

W.B. Yeats
1865-1939



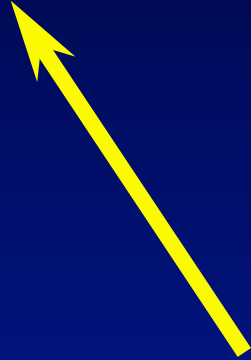
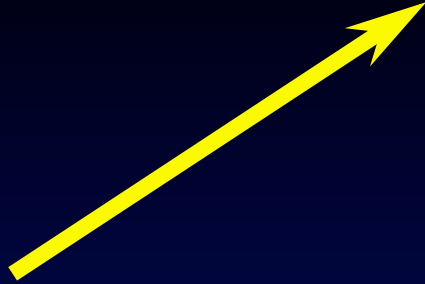
Motivation

Feedback

Framework

Intermission

Information



Do the math!!

$$\text{Teaching} \propto \frac{1}{\text{Learning}}$$

The major villain: the curse of knowledge!

“One of the worst things
about knowing or *not*
knowing a lot is that we’re
tempted to share it all”



Chip & Dan Heath 2008

The major villain: the curse of knowledge!

“The most difficult part of preparing a talk is *not* what to put in, but what to leave out”



Chip & Dan Heath 2008

“The secret to a good presentation is to have a good beginning and a good ending... and to have the two as close together as possible.”

**George Burns
1896-1996**



Slide preparation: data

- Distill the data
- Avoid absolute numbers
if % will do
- Reference the data legibly

TABLE 6. Number of imported malaria cases among U.S. civilians, by purpose of travel at the time of acquisition* — United States, 2003

Category	Imported cases	
	No.	(%)
Visiting friends/relatives	422	(53.9)
Tourism	98	(12.5)
Missionary or dependent	72	(9.2)
Business representative	59	(7.5)
Student/teacher	30	(3.8)
Peace Corps volunteer	11	(1.4)
Refugee/immigrant	4	(0.5)
Air crew/sailor	2	(0.3)
Other	16	(2.0)
Unknown	69	(8.8)
Total	783	(100.0)

* In several cases, more than one purpose of travel was specified.

Imported malaria USA 2013 N= 908

MMWR 2016;65:1-16

Category	Percent
VFRs	57.0
Business	8.2
Missionary	6.2
Tourism	3.8
Student	2.9

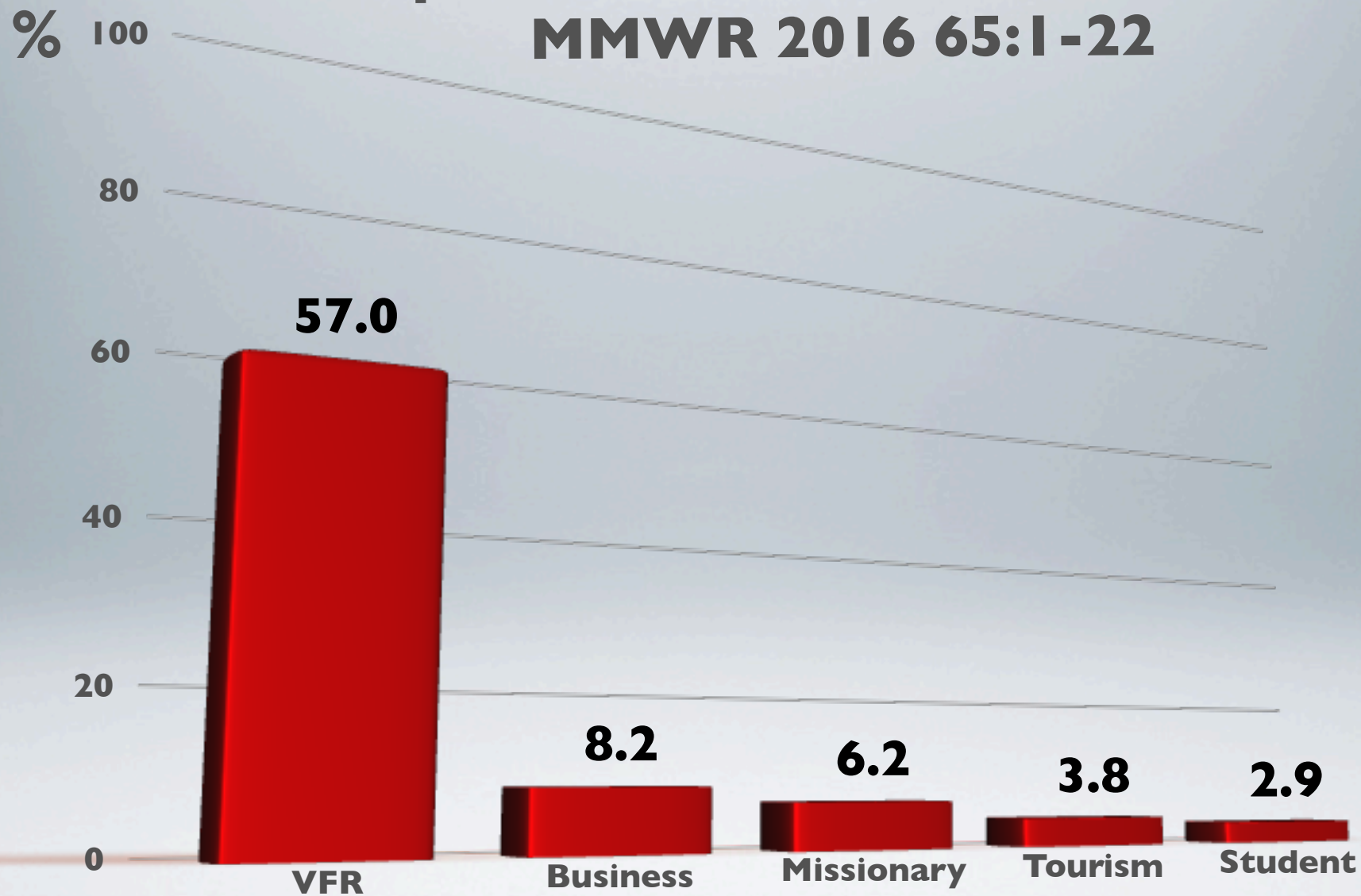
Most imported Malaria in VFRs

USA 2013 N=908 MMWR 2016;65:1-16

Category	Percent
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Imported Malaria USA 2013n=908

MMWR 2016 65:1-22



“I know that this slide is busy and difficult to read, but...”

Imported Malaria in Children

Table 2. Number of imported malaria cases in children in 11 industrialized countries, by age group, 1993–2002

Country	Age group, y, no. (%) [*]							Total
	0–2	3–5	6–8	9–11	12–14	15–17	18	
Australia	131 (8.7)	143 (9.5)	139 (9.2)	174 (11.6)	233 (15.5)	456 (30.3)	228 (15.2)	1,504
Denmark†	26 (10.1)	44 (17.1)	47 (18.3)	37 (14.4)	30 (11.7)	55 (21.4)	15 (5.8)	257
France	1,149 (17.4)	1,247 (18.8)	1,054 (15.9)	1,042 (15.7)	920 (13.9)	887 (13.4)	319 (4.8)	6,618
Germany‡	112 (14.8)	123 (16.2)	120 (15.9)	117 (15.5)	97 (12.8)	142 (18.8)	46 (6.1)	757
Italy§	80 (19.7)	107 (26.3)	67 (16.5)	47 (11.5)	31 (7.6)	57 (14.0)	18 (4.4)	407
Japan	1 (2.2)	8 (17.8)	10 (22.2)	1 (2.2)	6 (13.3)	8 (17.8)	11 (24.4)	45
Netherlands	47 (11.2)	67 (16.0)	65 (15.5)	45 (10.7)	45 (10.7)	115 (27.4)	36 (8.6)	420
Sweden¶	12 (7.7)	20 (12.9)	26 (16.8)	30 (19.4)	24 (15.5)	32 (20.6)	11 (7.1)	155
Switzerland	60 (14.4)	81 (19.5)	72 (17.3)	65 (15.6)	55 (13.2)	60 (14.4)	23 (5.5)	416
United Kingdom	351 (9.2)	619 (16.2)	621 (16.3)	714 (18.7)	707 (18.5)	804 (21.1)	Not available	3,816
United States	333 (12.7)	463 (17.7)	409 (15.6)	386 (14.8)	399 (15.3)	463 (17.7)	161 (6.2)	2,614
Total cases	2,302 (13.5)	2,922 (17.2)	2,630 (15.5)	2,658 (15.6)	2,547 (15.0)	3,079 (18.1)	868 (5.1)	17,009

^{*}Percentage of total cases in children ≤18 years of age (≤17 years of age for United Kingdom).

“I know that this slide is busy and difficult to read, but...”

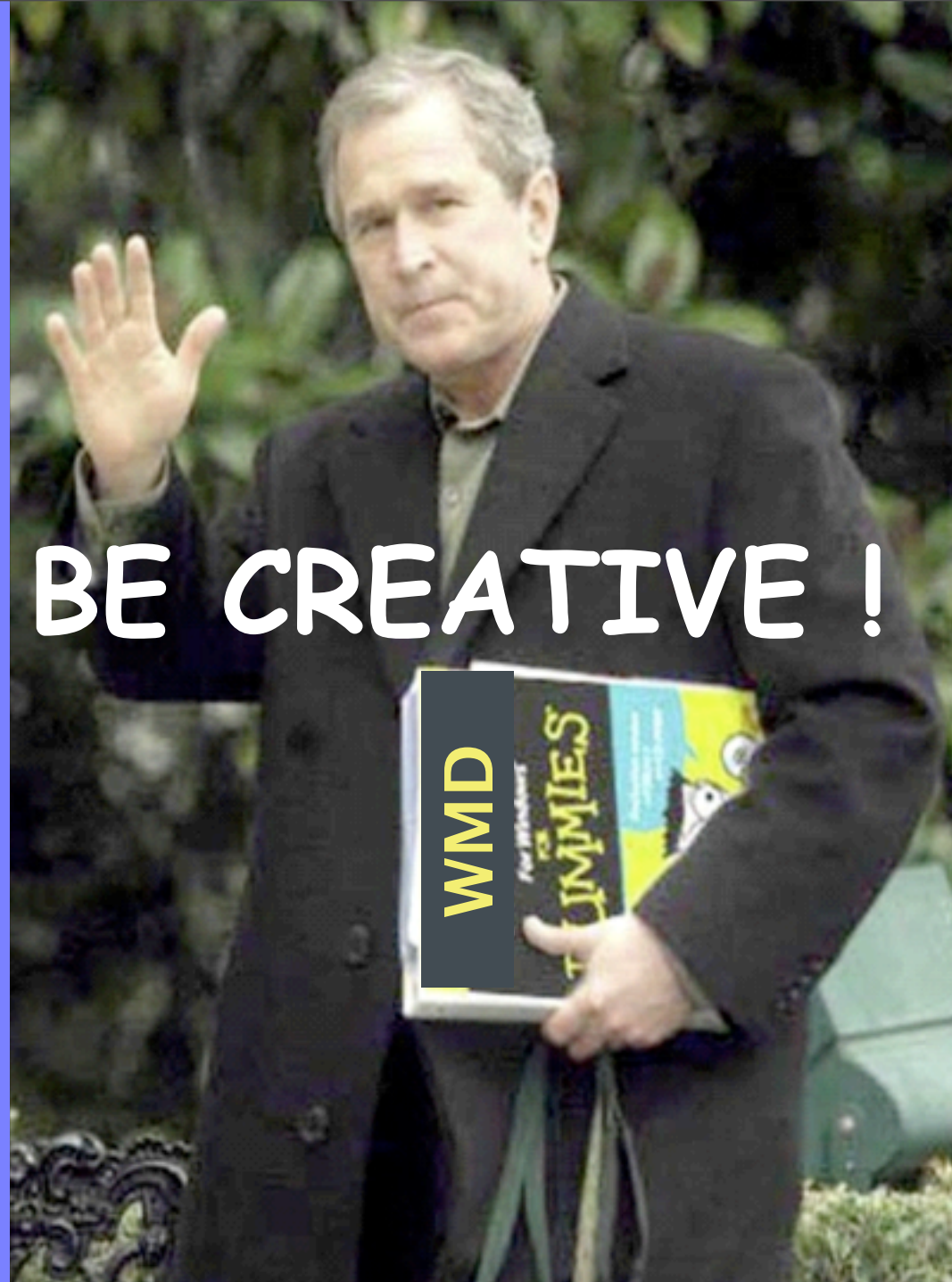
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Don't do this...ever !



BE CREATIVE !

WMD



Scaffolding



Dr. Rob Silver

35

Saturday, May 6, 17

Pathogenesis of PI-IBS

Mucosal Inflammation



Enteric nerve dysfunction



sensory activation



Visceral hypersensitivity



Decreased bowel waves



Small bowel bacterial overgrowth



Altered transit time



Disturbed motility



Pathogenesis of PI-IBS

Mucosal Inflammation

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Enteric nerve dysfunction

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Small bowel bacterial overgrowth



Overdiagnosis of malaria in patients with severe febrile illness in Tanzania: a prospective study

Hugh Reyburn, Redempta Mbatia, Chris Drakeley, Ilona Carneiro, Emmanuel Mwakasungula, Ombeni Mwerinde, Kapalala Saganda, John Shao, Andrew Kitua, Raimos Olomi, Brian M Greenwood, Christopher J M Whitty

BMJ 2004;329:1212

Abstract

Objective To study the diagnosis and outcomes in people admitted to hospital with a diagnosis of severe malaria in areas with differing intensities of malaria transmission.

Design Prospective observational study of children and adults over the course a year.

Setting 10 hospitals in north east Tanzania.

Participants 17 313 patients were admitted to hospital; of these 4474 (2851 children aged under 5 years) fulfilled criteria for severe disease.

Main outcome measure Details of the treatment given and outcome. Altitudes of residence (a proxy for transmission intensity) measured with a global positioning system.

Results Blood film microscopy showed that 2062 (46.1%) of people treated for malaria had *Plasmodium falciparum* (slide positive). The proportion of slide positive cases fell with increasing age and increasing altitude of residence. Among 1086 patients aged ≥ 5 years who lived above 600 metres, only 338 (31.1%) were slide positive, while in children < 5 years living in areas of intense transmission (< 600 metres) most (958/1392 68.8%) were slide positive. Among 2375 people who

of district hospitals in Africa identified several problems with the organisation and planning of care.^{4,5}

Given the high proportion of admissions attributed to malaria, overdiagnosis of malaria and consequent neglect of alternative diagnoses could lead to avoidable morbidity and mortality. In addition, overdiagnosis burdens health services with costs they can ill afford.⁶ Unreliable hospital data hamper health service planning and make progress towards targets such as those set by the Roll Back Malaria initiative impossible to assess. The spread of drug resistance means that there is a need to move to considerably more expensive drugs, but if a large proportion of the people treated for malaria do not have the disease this will substantially increase the costs of change.

Accuracy of hospital diagnosis of malaria is likely to depend on the epidemiological probability of the disease (defined by intensity of malaria transmission and age of patients) and is important as most of the population of sub-Saharan Africa live in areas of low or moderate malaria transmission.⁷ We prospectively examined the diagnosis and outcome in all patients admitted and treated for severe or potentially complicated malaria during one year in 10 hospitals serving people for areas with

Overdiagnosis of malaria in patients with severe febrile illness in Tanzania: a prospective study

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Given the high proportion of admissions attributed to malaria, overdiagnosis of malaria and consequent neglect of

N=4,450 slides in 10 hospitals
40% false positive blood films

Main outcome measure Details of the treatment given and outcome. Altitudes of residence (a proxy for transmission intensity) measured with a global positioning system.

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Summary :Data Presentation

- Data should be legible and minimal
- Graphs are often better than tables
- Scaffolding works well
- Confidence intervals should be kept confidential

Slide preparation: prose

- Death from boredom →
read every word on your
slides , or...

Slide preparation: prose

- Death from boredom →
read every word on your
slides , or...
- Bullets: phrases, *not* sentences

Slide preparation: prose

- Death from boredom →
read every word on your
slides , or...
- Bullets: phrases, *not* sentences
- Keep prepositions private

Slide preparation: prose

- Death from boredom →
read every word on your
slides , or...
- Bullets: phrases, *not* sentences
- Keep prepositions private
- *Never* more than 6 lines/slide

The rule of 6's

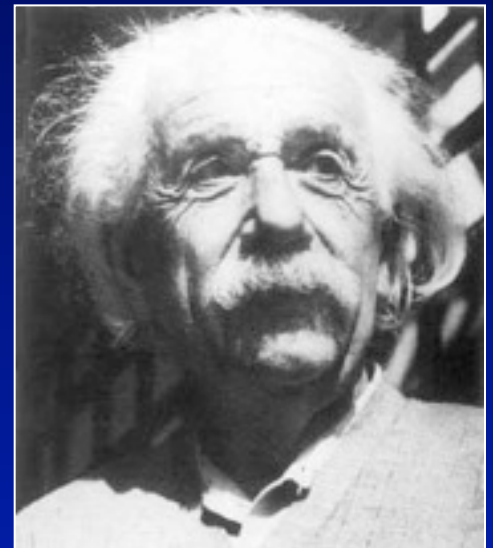
6 words across

X

6 lines down

**“Imagination is
more important
than knowledge”**

**Albert Einstein
1879-1955**



6 problems with this slide !

SLE CLINICAL PRESENTATIONS

1. ARTHRITIS

2. BUTTERFLY RASH

3. RAYNAUDS

4. PERICARDITIS

5. PLEURITIS



SLE Clinical Presentation

- Arthritis
- Butterfly rash
- Raynauds
- Pericarditis
- Pleuritis

Don't forget
on your slides

Don't forget
to bold the text
on your slides

Slide preparation: prose

- Largest font possible

Slide preparation: prose

- Largest font possible
- Use lower case only

Slide preparation: prose

- Largest font possible
- Use lower case only
- Three colours **MAX**

Slide preparation: prose

- Largest font possible
- Use lower case only
- Three colours **MAX**
- **Red is just rong (dark backgrnd)**

Slide preparation: prose

- Largest font possible
- Use lower case only
- Three colours **MAX**
- **Red is just rong (dark backgrnd)**
- **Black is bad**

Slide preparation: prose

- Largest font possible
- Use lower case only
- Three colours **MAX**
- **Red is just rong** (dark backgrnd)
- **Black is bad**
- No distracting “do-dads”

3 Font rules

number: 1-2 ;max 3

size: \geq 30 point

type: non-seraf

Geneva

Times new roman

Arial

Geneva

~~Times new roman~~

Arial



Watch the clock, please!

1 word/data slide per min.

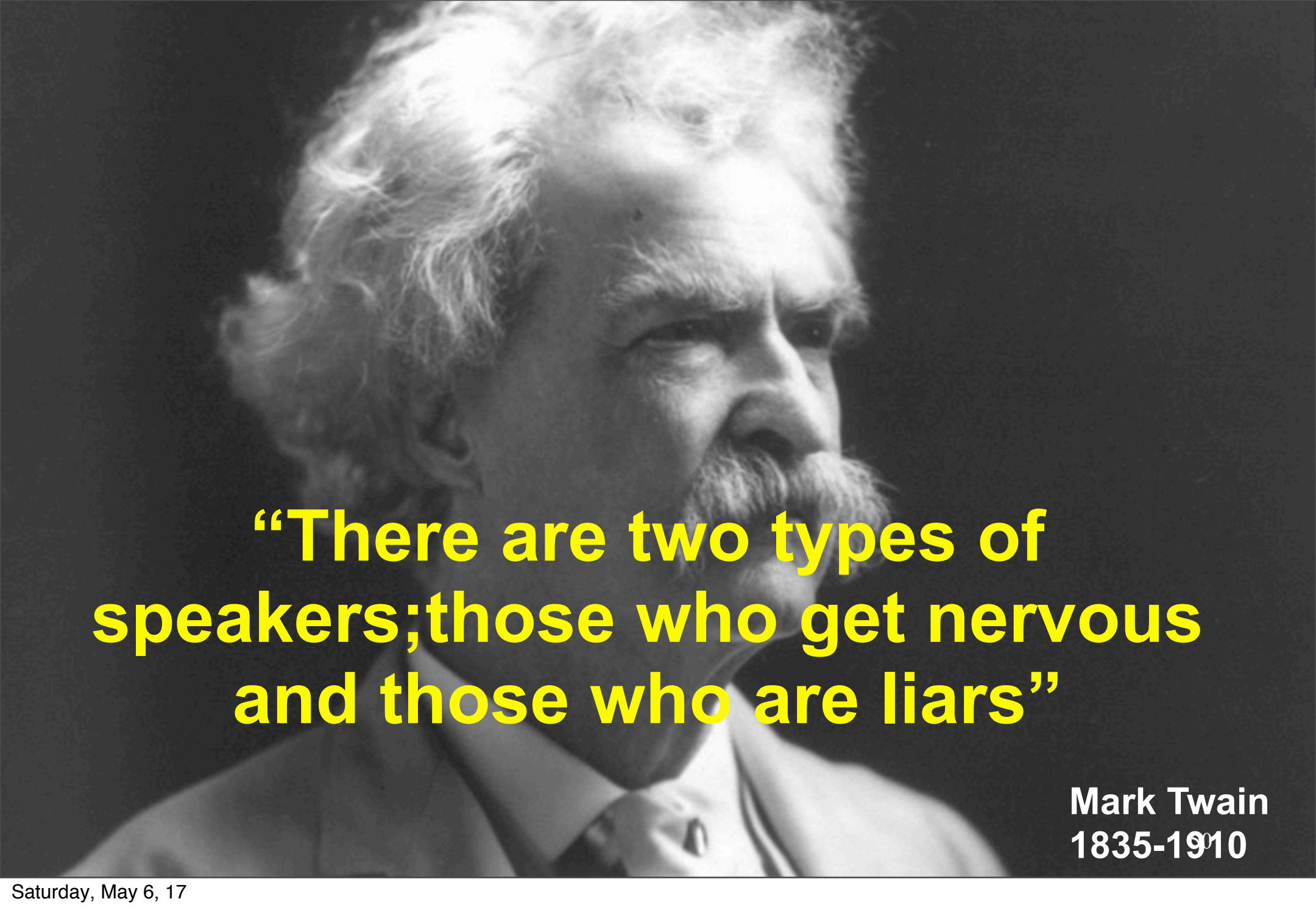


The learning environment

- Go early!:
 - projector function
 - picture size, shape
 - lighting

The learning environment

- Go early!:
 - projector function
 - picture size, shape
 - lighting
- Pointer (tremor, waver)

A black and white portrait of Mark Twain, showing him from the chest up. He has white, wavy hair and a prominent white mustache. He is looking slightly to the right of the camera with a serious expression. He is wearing a dark suit jacket over a light-colored shirt and a dark tie.

**“There are two types of
speakers; those who get nervous
and those who are liars”**

**Mark Twain
1835-1910**



WAISBLASS/COULTHARD

"Does it come on disk?"



**What do you mean, “ take
two tablets and call me in the
morning?”**

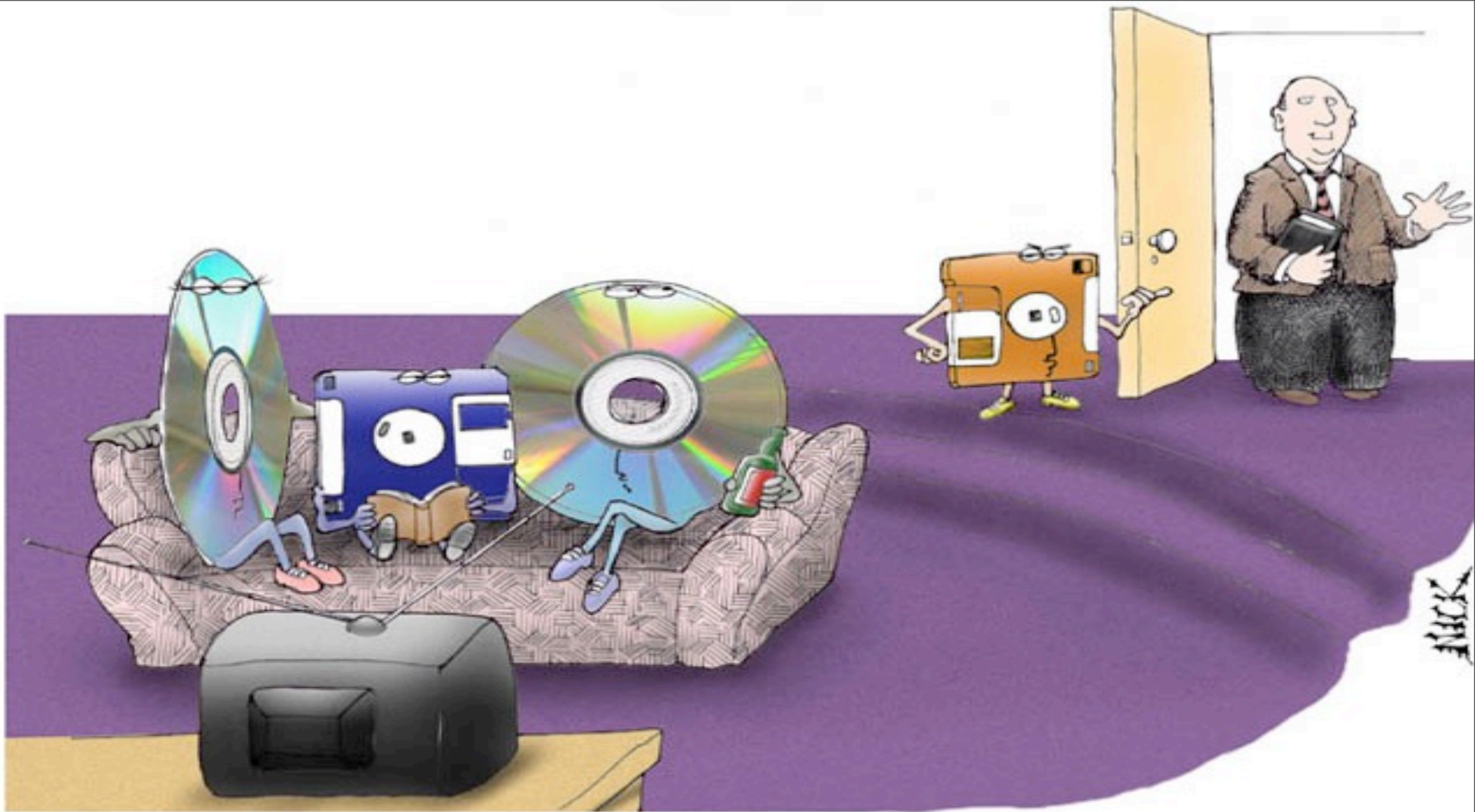
Herman Cartoons...Jim Unger



**What do you mean, “ take
two tablets and call me in the
morning?”**

Keystone's Cartoon Rules

- ❖ *Always* read the caption
- ❖ *Must* be relevant to presentation
- ❖ Enlarge the caption print
- ❖ Ideal use: introducing a topic



“The guy at the door wants to know if we’ve all been saved?”



Shit happens



‘A backup plan & a backup to the backup’...



Shit happens



‘A backup plan & a backup to the backup’...

- **memory stick**



Shit happens



‘A backup plan & a backup to the backup’...

- **memory stick**
- **Charged laptop & power cord**



Shit happens



‘A backup plan & a backup to the backup’...

- memory stick
- Charged laptop & power cord
- pdf copy of your presentation

Motivation

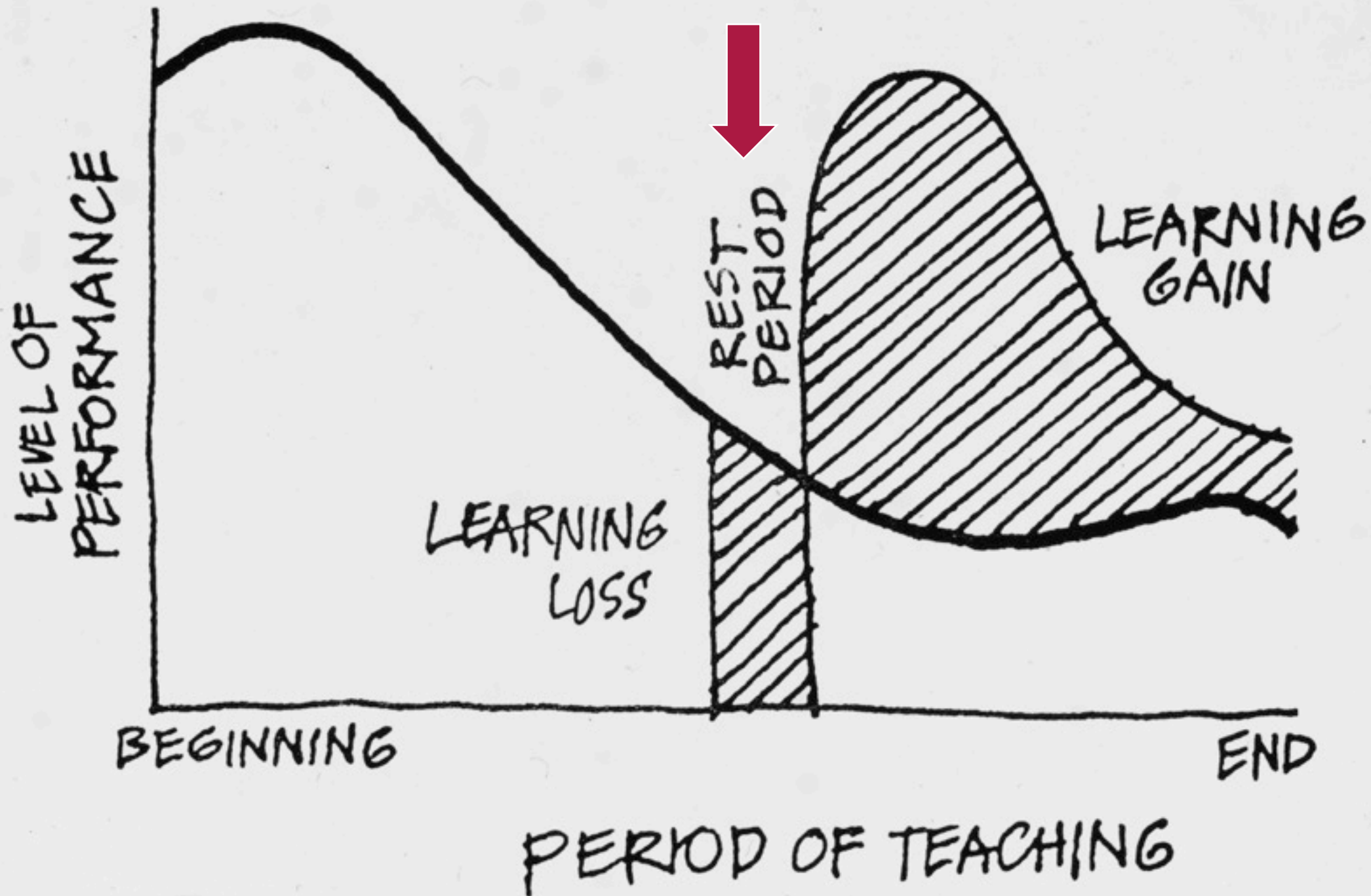
Feedback

Framework

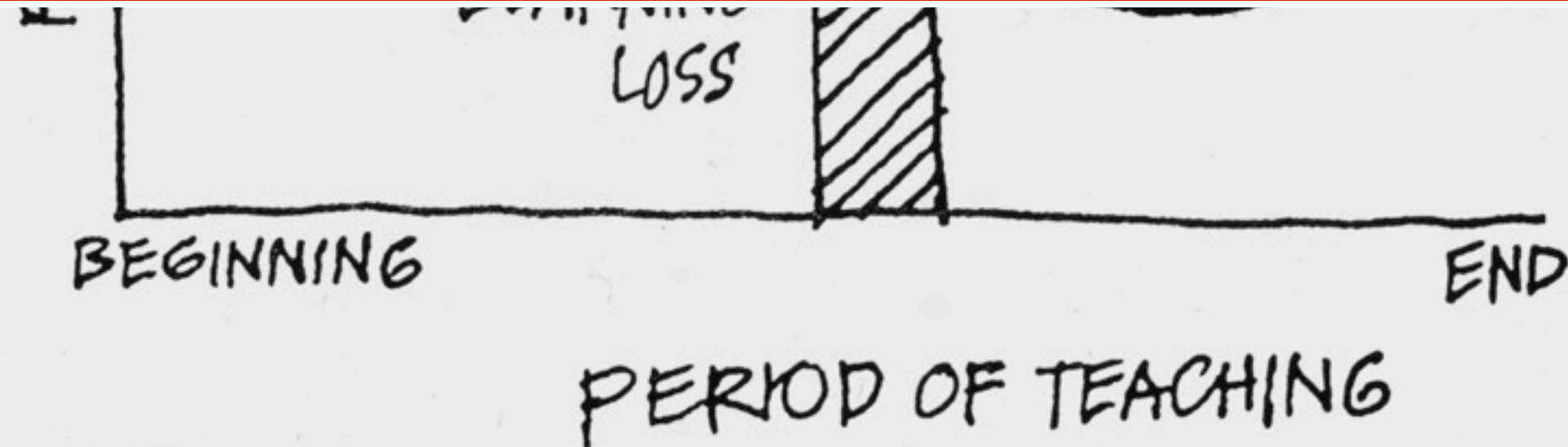
Intermission

Information





10 minute rule



Intermission: every 10 minutes

1. Vary teaching strategy:

- interactive
- anecdote
- case

2. Rest periods:

- review
- cartoon, quotation, quiz
-

Intermission: every 10 minutes

1. Vary teaching strategy:

- interactive
- anecdote
- case

2. Rest periods:

- review
- cartoon, quotation, quiz
- uncontrolled vomiting, coughing

“There is nothing in the Christian Bible, Torah ,or Qur’an that says that a question period must come at the end of a lecture”

J.S.Keystone 2001



Motivation



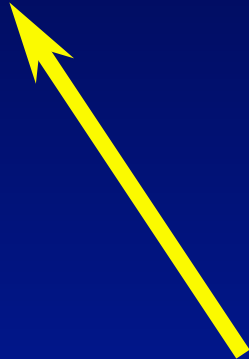
Framework



Information



Intermission



Feedback



Feedback

What is the most effective way to poison the learning environment during large group teaching?



Call on an individual

Encouraging feedback: *set the ground rules!*

DON'T

- × call on an individual
- × 'put down' a dumb question
- × ask answerer *next* question

Encouraging feedback

DO:

- ✓ praise correct answers
- ✓ praise good questions
- ✓ encourage group responses

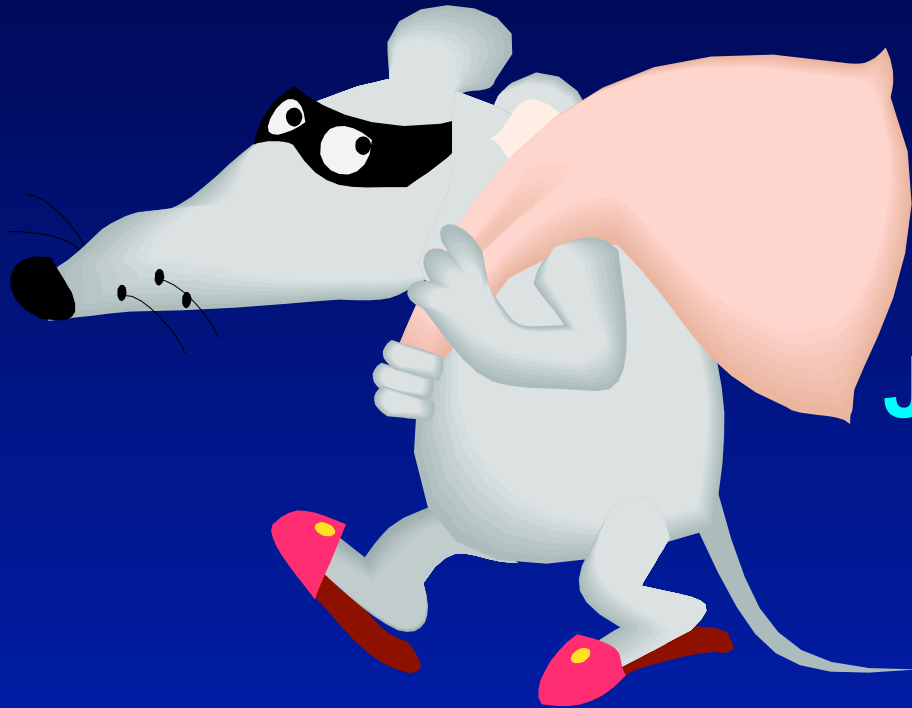
Ask yourself 5 questions

- I. Is the level of my talk appropriate to *this* audience ?
- II. Have I motivated my audience to listen and learn...will it stick?
- III. Have I kept my audience engaged?
- IV. Have I put in too much information?
- V. Have I summarized my key points?

**There is no one way
to teach a class and
no one style that
suits everyone**

J.R.Aronson

If you can't be creative, steal your ideas from someone who is!

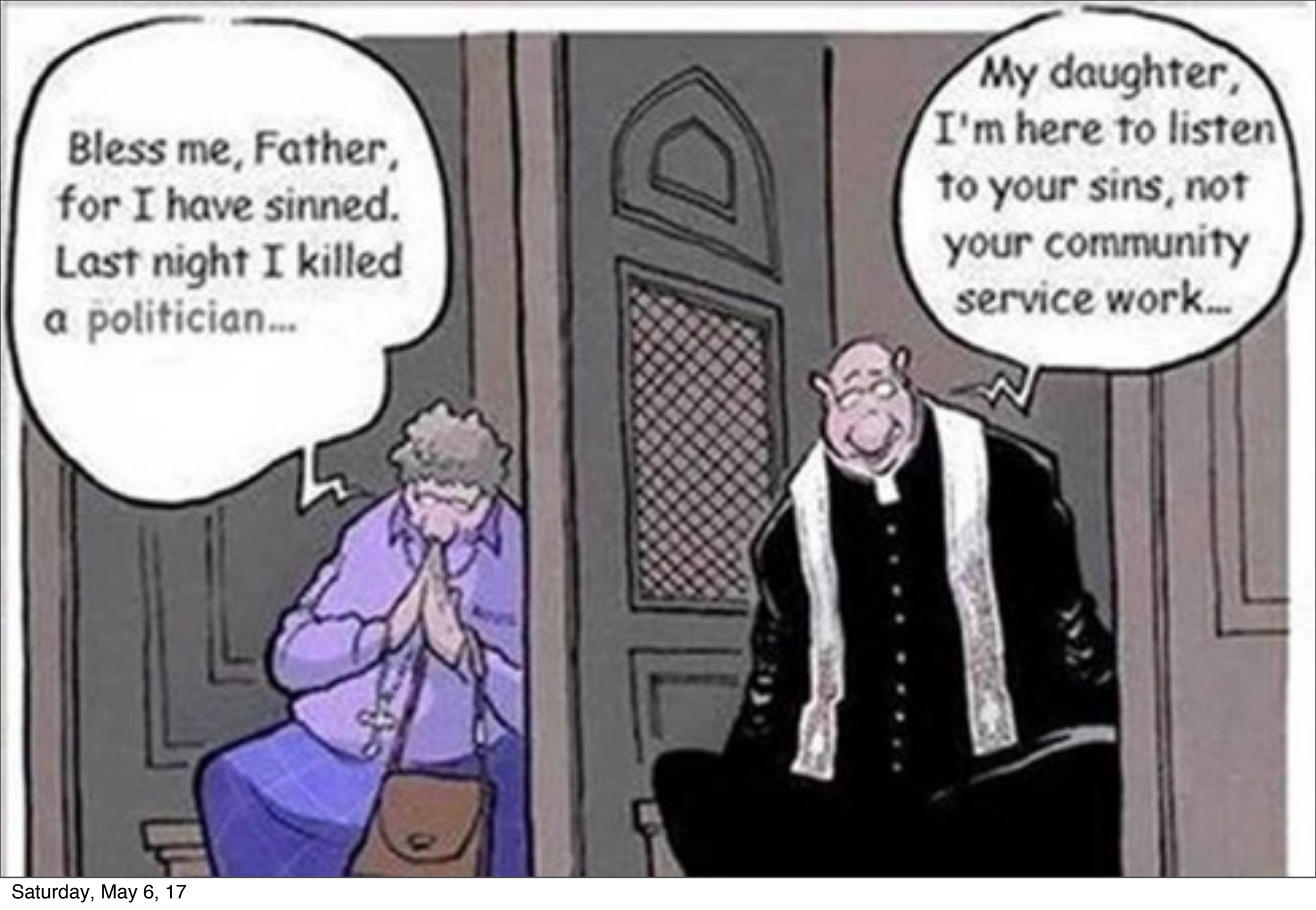


J.S.Keystone
1943-



A close-up photograph of Donald Trump's face. He has a serious, intense expression with his mouth wide open as if shouting or speaking loudly. His eyes are squinted, and his teeth are visible. A light blue speech bubble originates from his mouth and points towards the right side of the frame. The background is dark and out of focus, with some warm, orange-toned light visible on the right.

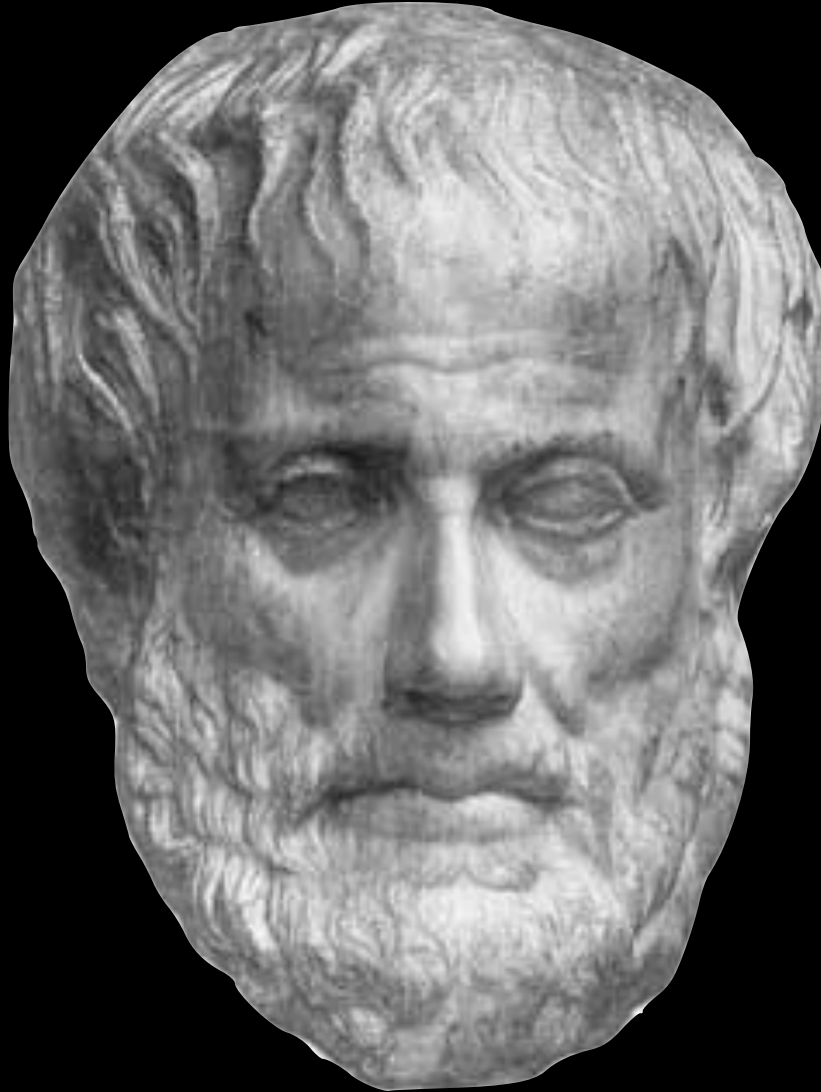
**Originality is only
Undetected plagiarism**



Bless me, Father,
for I have sinned.
Last night I killed
a politician...

My daughter,
I'm here to listen
to your sins, not
your community
service work...

Aristotle 384-322 BCE



Aristotle's Rhetoric: Book III, Ch.19

- ✓ “indicate the aim of the speech
- ✓ excite the required state of emotion in your hearers
- ✓ a touch of surprise contributes to liveliness,
- ✓ and refresh their memories ”

Aristotle's Rhetoric: Book III, Ch.19

- ✓ excite the required state of emotion in your hearers
- ✓ a touch of surprise contributes to liveliness,
- ✓ and refresh their memories ”

Aristotle's Rhetoric: Book III, Ch.19

Outline your objectives

- ✓ **excite the required state of emotion in your hearers**
- ✓ **a touch of surprise contributes to liveliness,**
- ✓ **and refresh their memories ”**

Aristotle's Rhetoric: Book III, Ch.19

Outline your objectives

- ✓ a touch of surprise contributes to liveliness,
- ✓ and refresh their memories ”

Aristotle's Rhetoric: Book III, Ch.19

Outline your objectives

Be enthusiastic and passionate

- ✓ **a touch of surprise contributes to liveliness,**
- ✓ **and refresh their memories ”**

Aristotle's Rhetoric: Book III, Ch.19

Outline your objectives

Be enthusiastic and passionate

✓ and refresh their memories ”

Aristotle's Rhetoric: Book III, Ch.19

Outline your objectives

Be enthusiastic and passionate

Give learning breaks

✓ and refresh their memories ”

Aristotle's Rhetoric: Book III, Ch.19

Outline your objectives

Be enthusiastic and passionate

Give learning breaks

Aristotle's Rhetoric: Book III, Ch.19

Outline your objectives

Be enthusiastic and passionate

Give learning breaks

Summarize your key points

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Further Reading

- **Weissman J. *The power Presenter* Wiley, New Jersey 2009**
 - **Heath C.& Heath D. *Made to Stick* Random House NY 2007**
- Newble DI, Cannon R. *A handbook for medical teachers*. 4th ed. Dordrecht, Netherlands: Kluwer Academic, 2001.
 - Gibbs G, Habeshaw T. *Preparing to teach*. Bristol: Technical and Educational Services, 1989.
 - Bligh DA. *What's the use of lectures?* San Francisco: Jossey-Bass, 2000.
 - Brown G, Manogue M. AMEE medical education guide No 22: refreshing lecturing: a guide for lecturers. *Medical Teacher* 2001;23:231-44.