



# IAEVG International Conference 2024 – Riding the Wave of Change

12-14 November 2024  
Jyväskylä, Finland

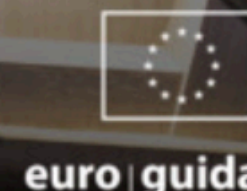
## Organisers



## In partnership with e.g.



FINNISH NATIONAL  
AGENCY FOR EDUCATION



Jean-Jacques Ruppert and Andreas Frey





**Andreas Frey**

**Rector**

**University of Applied Labour Studies  
of the Federal Employment Agency**

**HdBA**

**Hochschule der  
Bundesagentur für Arbeit**

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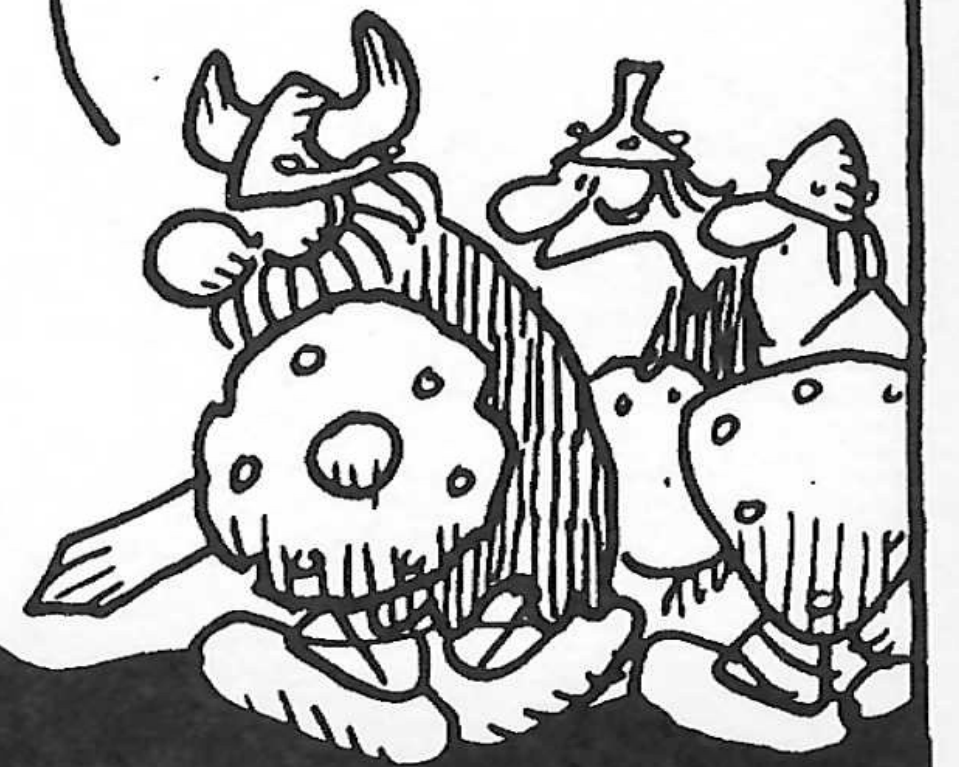
**University of Applied Labour Studies**



**CHARGE! DOWN WITH  
LUXEMBOURG!**



**DARN! WE  
WENT PAST  
IT AGAIN!!**







APPLIED VOCATIONAL PSYCHOLOGY &  
POLICY RESEARCH UNIT





SUPPORTING COUNSELEES' DECISION-MAKING  
THROUGH CRITICAL THINKING



# HEURISTICS



-VERSUSTHEMACHINES



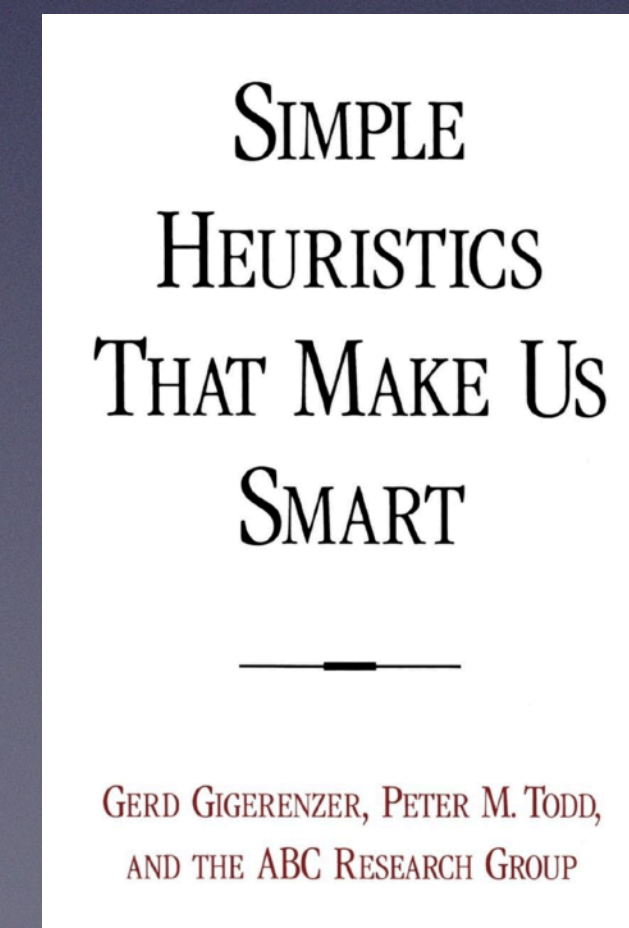
# ***“Simple”*** heuristics

“... fast and frugal”

“... they employ limited time, knowledge and computation”

“... ecological rationality”

“... bounded rationality”

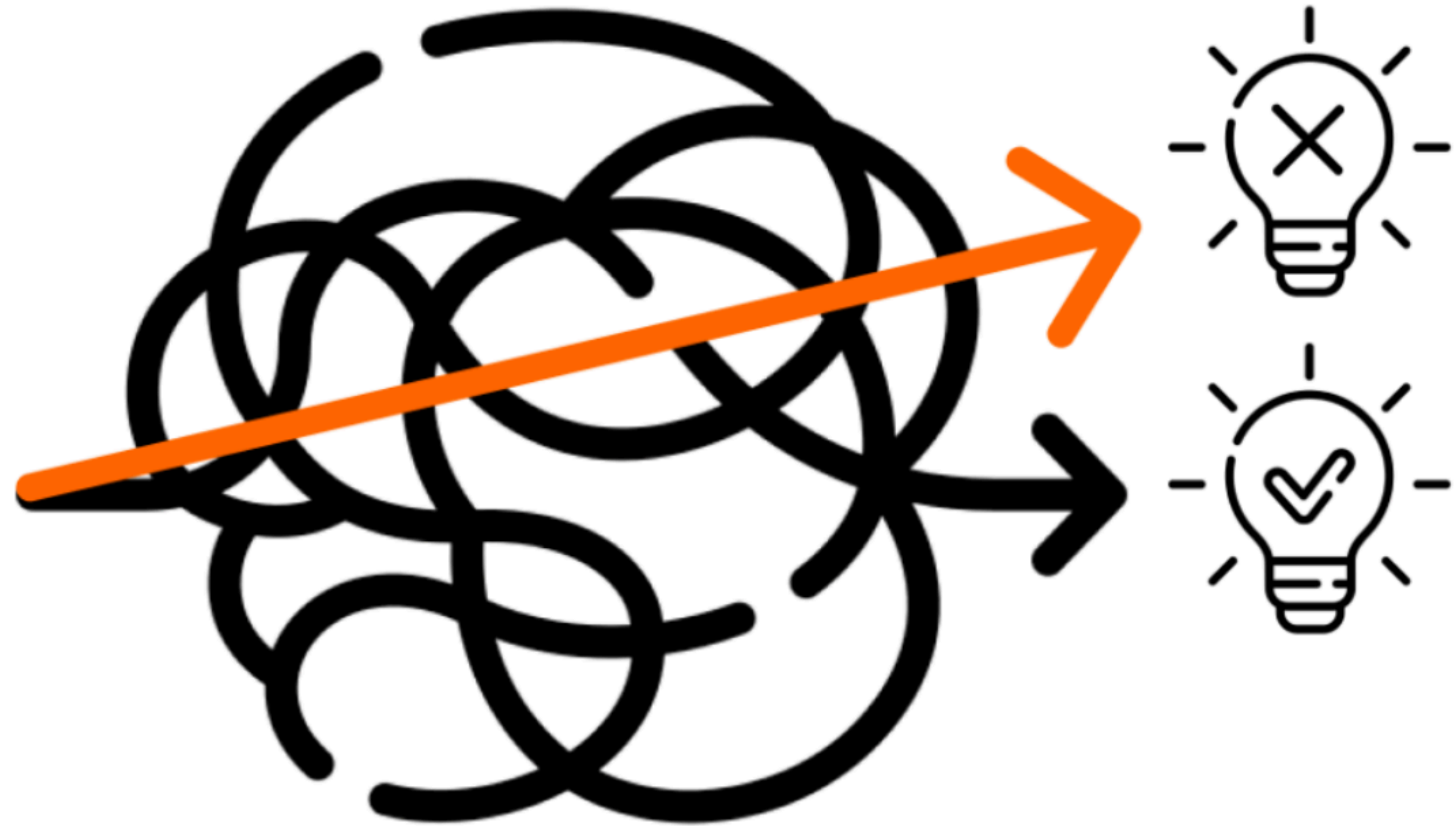


**Gigerenzer & Todd**  
(1999)



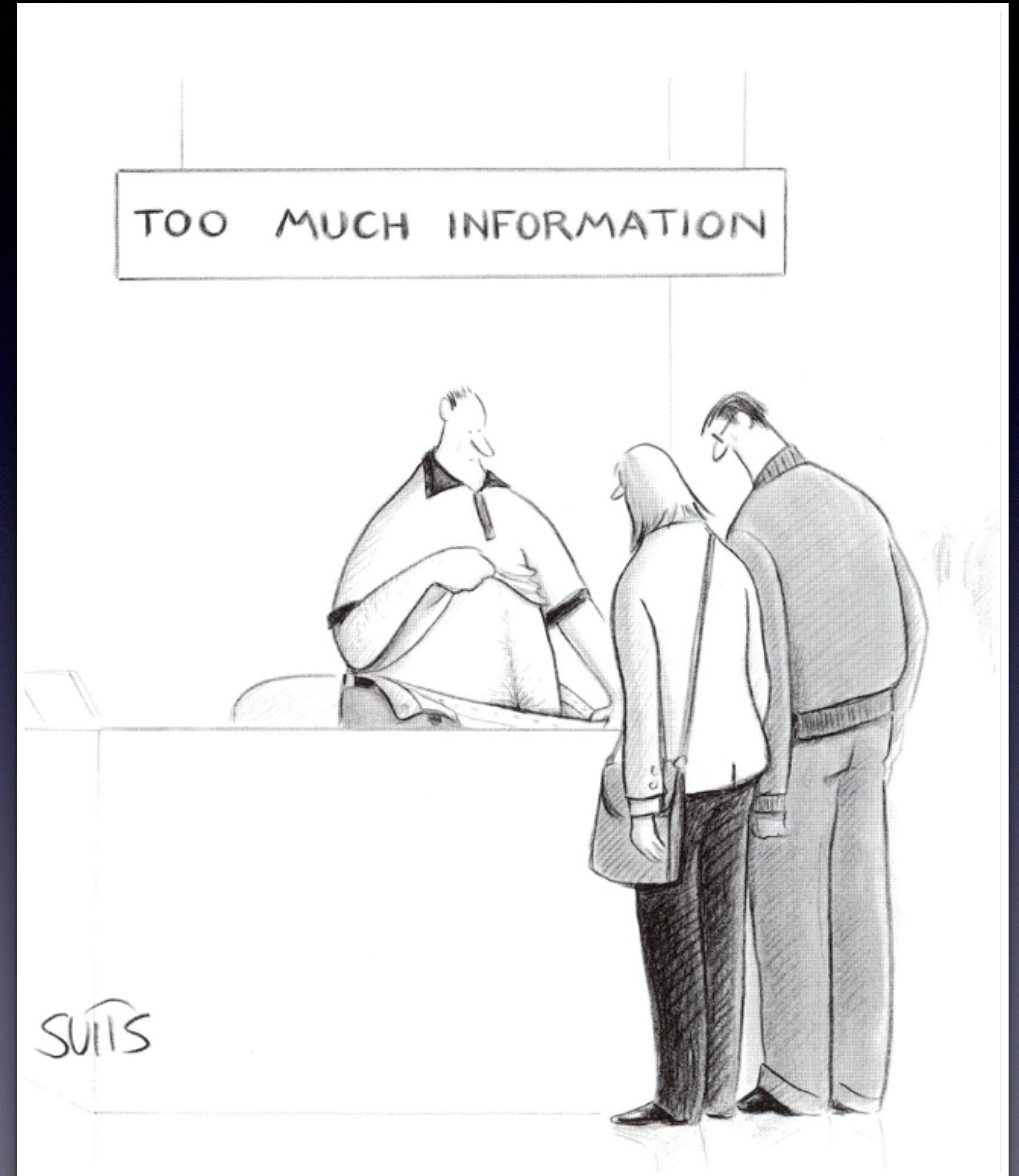




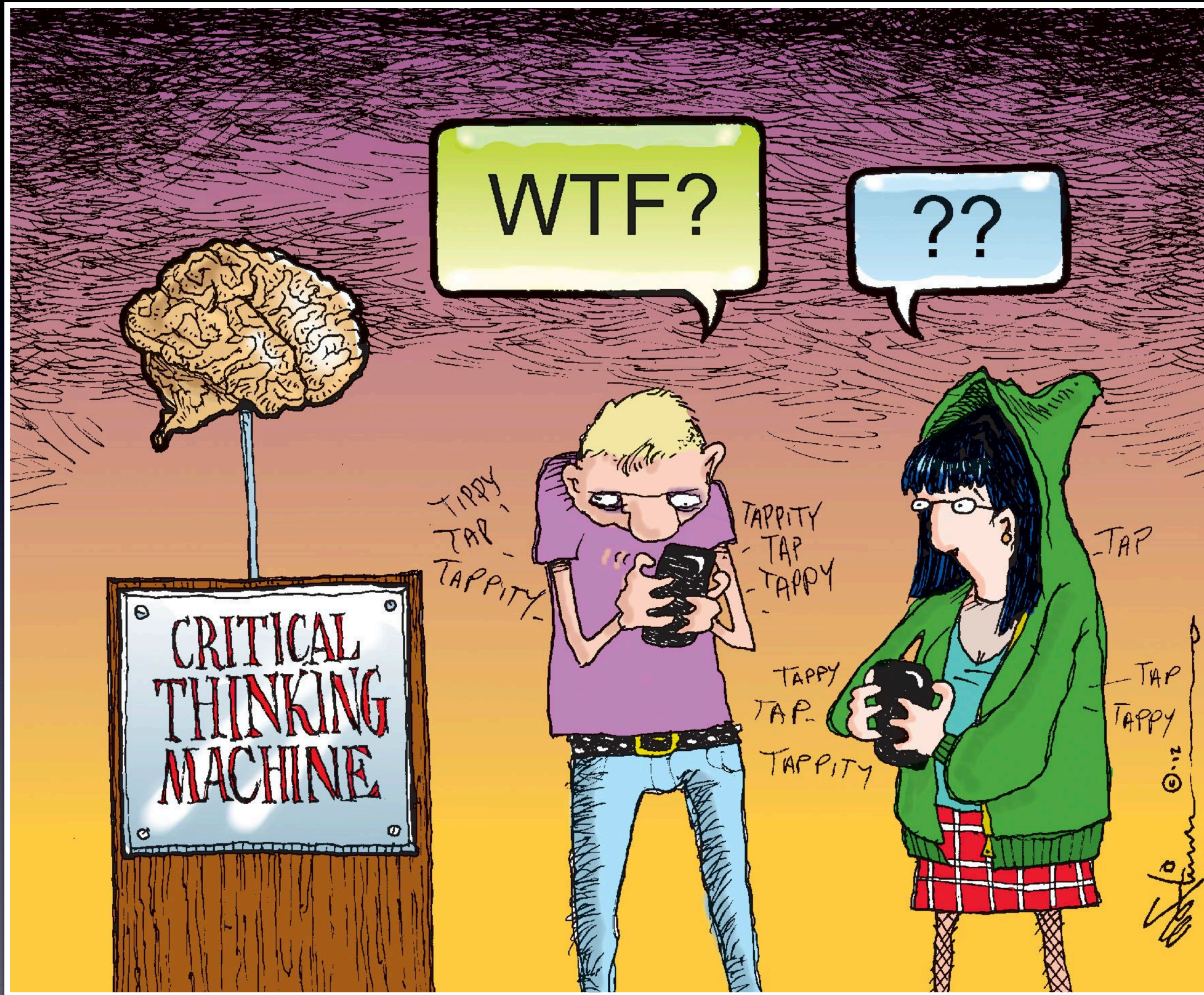




# Information overload

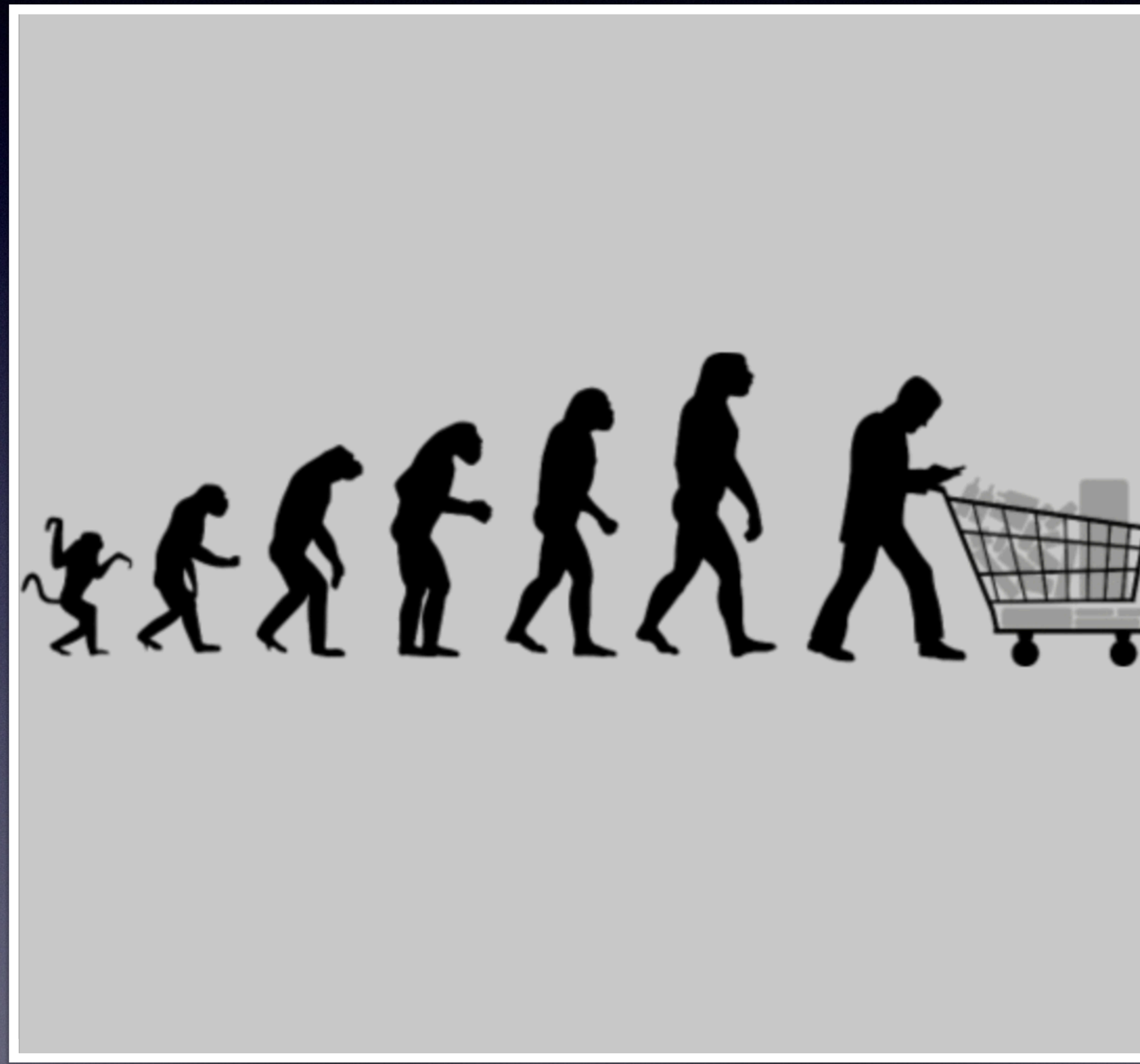








# HOMO CONSUMENS



Socialist Humanism: An International Symposium  
Garden City, NY: Doubleday, 1965, pp. vii-xiii.



**“Life is the art of  
drawing sufficient  
conclusions from  
insufficient premises.”**

Samuel **BUTLER**, English writer  
(1835-1902)

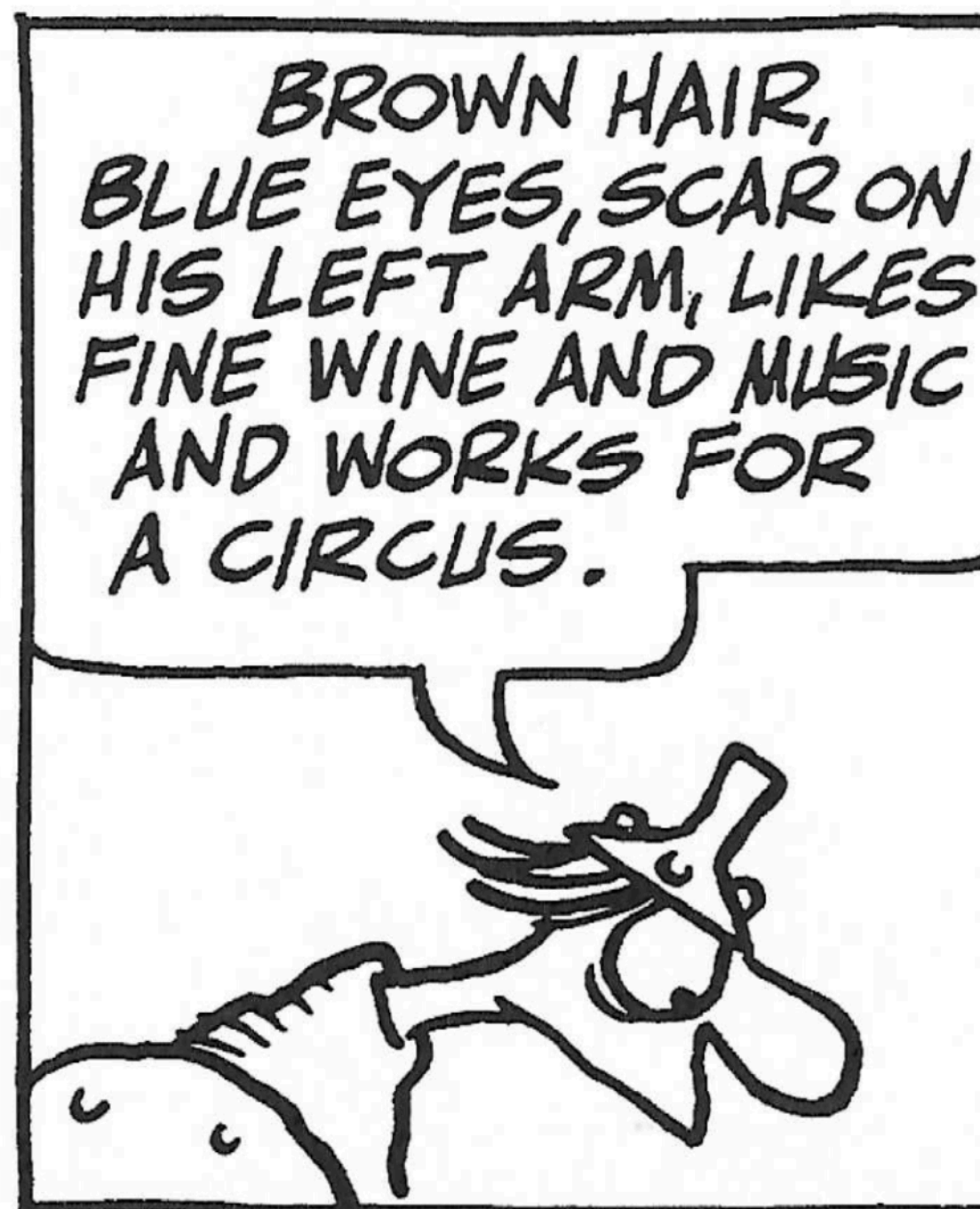


WHAT DO  
YOU MAKE  
OF IT?

OFFHAND, I'D SAY WE  
WERE TRACKING A  
BALLET DANCER

DICK BROWNE-  
2-24





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I think that ...

*I am of the view that ...*

I mean that ...

I BELIEVE THAT ...

My thoughts on ...

**My opinion on ...**

I assume that ...

I AM CONVINCED THAT ...

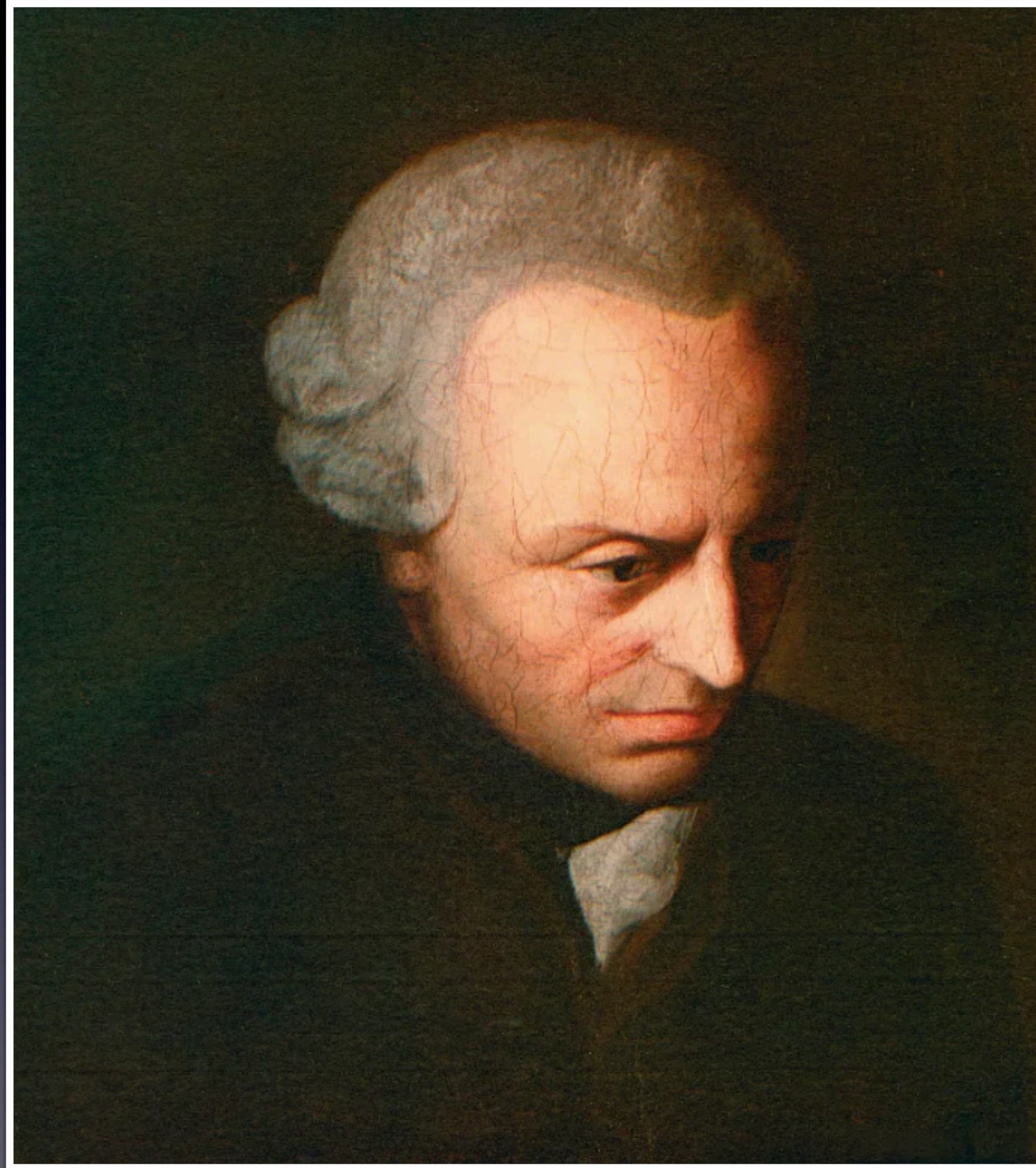


“I **think** that ...”



“I **know** that ...”





**Immanuel Kant**

(1724 -1804)



For Kant, "*meaning*" refers to a subjectively as well as objectively insufficient belief,

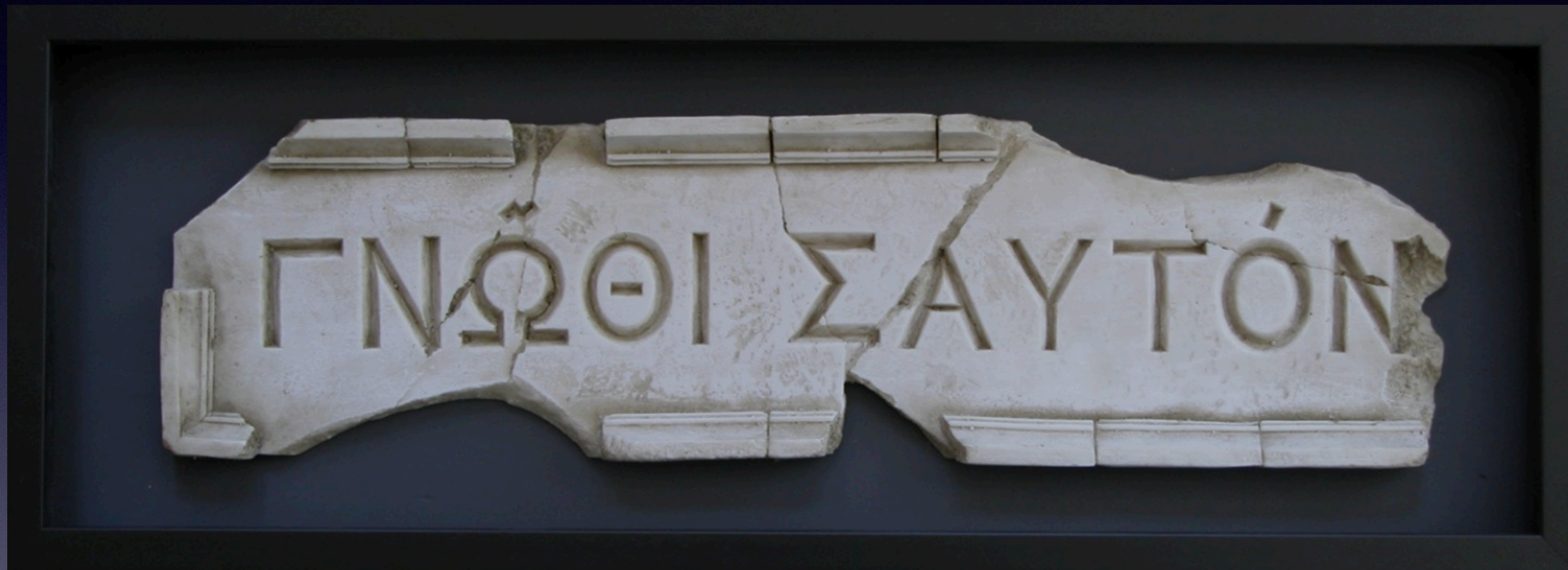
while "*believing*" refers to a belief that is subjectively sufficient but objectively insufficient.

Finally, "*knowing*" is the highest level: the subjectively and objectively sufficient belief.



What do we actually  
**know** about ourselves  
and our world?







# WHO AM I?

I am free to consciously determine my own behaviour.	1	2	3	4	5	My behaviour is determined by factors or internal events beyond my conscious control.
Humans are basically rational, directing their behaviour through reason.	1	2	3	4	5	Human beings are basically irrational, with no logic or reason directing behaviour.
Human behaviour is best understood by looking at the whole person.	1	2	3	4	5	Human behaviour is best understood by looking at each aspect as a separate element.
An individual's behaviour is best understood by trying to understand their world from their point of view.	1	2	3	4	5	An individual's behaviour is best understood by looking objectively at it from an external point of view.
Human personality is learned.	1	2	3	4	5	Human personality is inborn.
People generate their own behaviour internally.	1	2	3	4	5	People's behaviour is a set of responses to external stimuli.
The basic motivation for human behaviour is positive, growth-enhancing, moving towards self-fulfilment.	1	2	3	4	5	The basic motivation for human behaviour is to maintain internal balance by meeting basic needs e.g. comfort, food.



"One of the most important books I've ever read—an indispensable guide to thinking clearly about the world." —**Bill Gates**

# FACT FUL NESS



Ten Reasons  
We're Wrong About  
the World—and Why  
Things Are Better  
Than You Think

**Hans Rosling** with **Ola Rosling** and  
**Anna Rosling Rönnlund**



# gapminder.org

## You are probably wrong about



Domestic work



Global warming



Plastic in oceans



Life satisfaction



Global  
collaborations



Extreme poverty

We have tested thousands of people and they were systematically wrong about all this.



BESTSELLING AUTHOR OF *EVERYBODY LIES*

Seth Stephens-Davidowitz

'Seth Stephens-Davidowitz  
is as good a data storyteller  
as I have ever met'

STEVEN LEVITT, CO-AUTHOR,  
*FREAKONOMICS*



Using Data  
Instead of Instinct  
to Make Better  
Choices

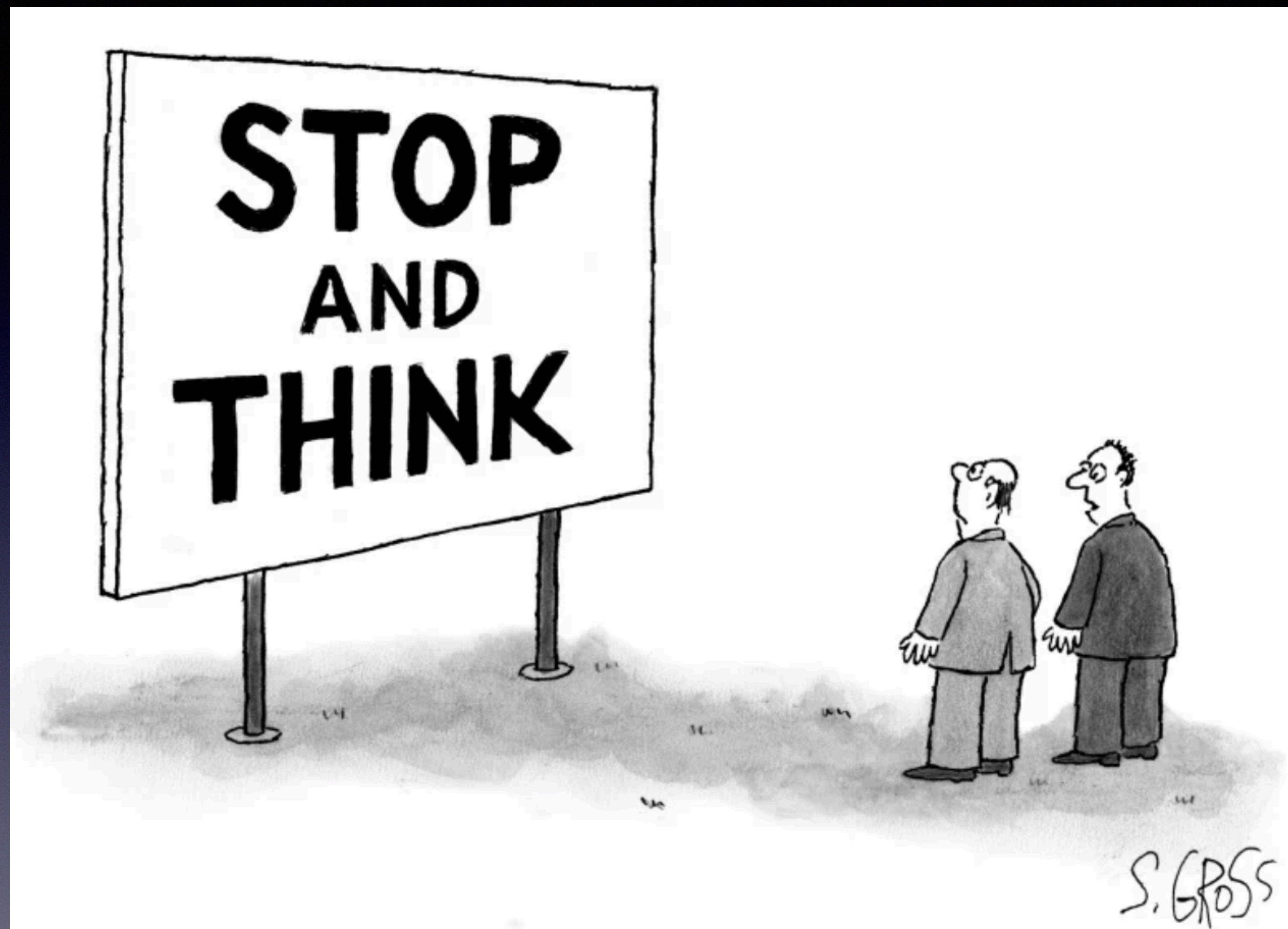
BLOOMSBURY



A dramatic, high-contrast image of a stormy sky. Dark, heavy clouds are illuminated from within by bright, jagged lightning bolts. The overall color palette is dominated by deep blues and greys, with bright white and yellow highlights from the lightning. The word "DOUBTS" is centered in a large, black, serif font.

DOUBTS





*"It sort of makes you stop and think, doesn't it."*



# Immanuel Kant and the Enlightenment



# SAPERE AUDE !

*Epistularum Liber Primus*

Quintus Horatius Flaccus

(65-8 BC)



**“Have the courage to use  
your own understanding!”**





**“It is so comfortable to be immature. If I have a book to serve as my understanding, a pastor to serve as my conscience, a physician to determine my diet and so forth, I need not trouble myself. I need not think, if I can only pay - others will easily undertake the irksome work for me.”**

**Immanuel Kant**

»*Answering the question: What is Enlightenment?*« in:

»*Berlinische Monatsschrift*«, December issue 1784, pp. 481-494



**What is  
“thinking”?**



**“activity of using your mind  
to consider something”**



**What is  
“critical thinking”?**



# **The ability to think critically**

**“Critical thinking is the use of those cognitive skills or strategies that increase the likelihood of a desired outcome.”**

**“It is thinking that is deliberate, rational and goal orientated.”**

**Diane F. Halpern**

Critical Thinking Across The Curriculum: A Brief Edition of Thought and Knowledge.  
Mahwah NJ; Lawrence Erlbaum Associates (1997)



**“Critical thinking is the process of evaluation or categorisation in terms of some previously accepted standards ... this seems to involve attitude plus knowledge of facts plus some thinking skills.”**

**B. Russell** (1872-1970)

In E. **d'Angelo**: *The teaching of critical thinking*, Gruner, Amsterdam (1971)



**Attitude + Knowledge + Thinking Skills**

**=**

**CRITICAL THINKING**

**B. Russell** (1872-1970)

In E. **d'Angelo**: *The teaching of critical thinking*, Gruner, Amsterdam (1971)



**‘I would rather openly proclaim to people, based on my knowledge of nature, what is good for them, even if no one understands it, and thus, by agreeing to nonsense, draw the thunderous applause of the crowd to myself.’**



**“Critical thinking requires knowledge *and* courage.**

**Neither is sufficient in itself.**

**Knowing but not daring is smart but cowardly.**

**Daring without knowing is bold but unwise - it makes  
one vulnerable to propaganda and fake news.”**

**G. Gigerenzer:** *When all is just a click away. Is critical thinking obsolete in the digital age?*

In R.J. Sternberg and D.H. Halpern (Eds.): *Critical thinking in psychology*, Cambridge University Press (2020)



**CAN YOU  
ACTUALLY  
TEACH  
CRITICAL  
THINKING?**



# Thinking, fast and slow



DANIEL  
KAHNEMAN

NOBEL LAUREATE IN ECONOMICS

'Certainly the most important  
psychologist alive today'

STEVEN PINKER



**A bat and a ball cost \$1.10 in total.**

**The bat costs \$1.00 more than the ball.**

**How much does the ball cost?**



**The most common answer: \$0.10**

**But then the bat alone would cost \$1.10,  
and the ball another 10 cents.**

**That makes \$1.20 in total.**



**The correct answer:**

**The ball costs 5 cents, the bat \$1.05.**

**That makes \$1.10 in total.**



# **Why do so many people give the wrong answer?**

**It seems intuitively correct to answer 10 cents. And  
many people would rather trust their intuition than  
think logically in unsuitable moments.**



**System 1 thinking: fast**

**System 2 thinking: slow**



**Do good thinking  
strategies lead  
counselees to take  
better decisions?**



**Yes ... but only if we  
succeed in getting  
counselees to think  
slowly**



WHAT DO YOU THINK  
OF ASTROLOGY?

A LOT OF RUBBISH!  
WE LEOS AREN'T THAT  
EASILY FOOLED!





YOU'RE IN A BUSINESS WHERE YOU  
MAKE A LOT OF ENEMIES !



DICK  
BROWNE  
3-13

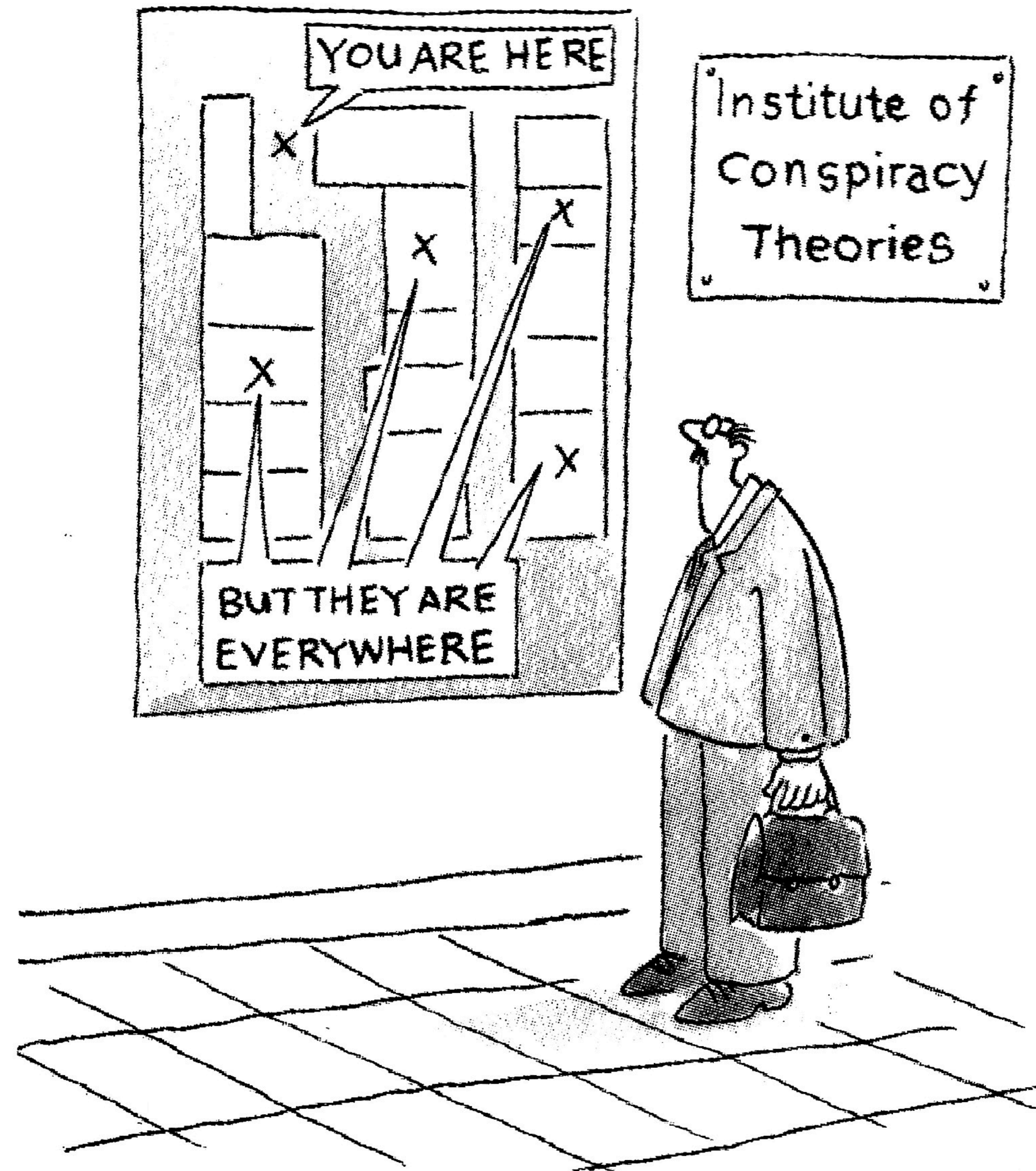
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HOW DID SHE KNOW THAT ?



IT'S A  
GIFT !









***“Yes they can control the weather. It’s ridiculous for anyone to lie and say it can’t be done.”***

**Marjorie Taylor Greene**

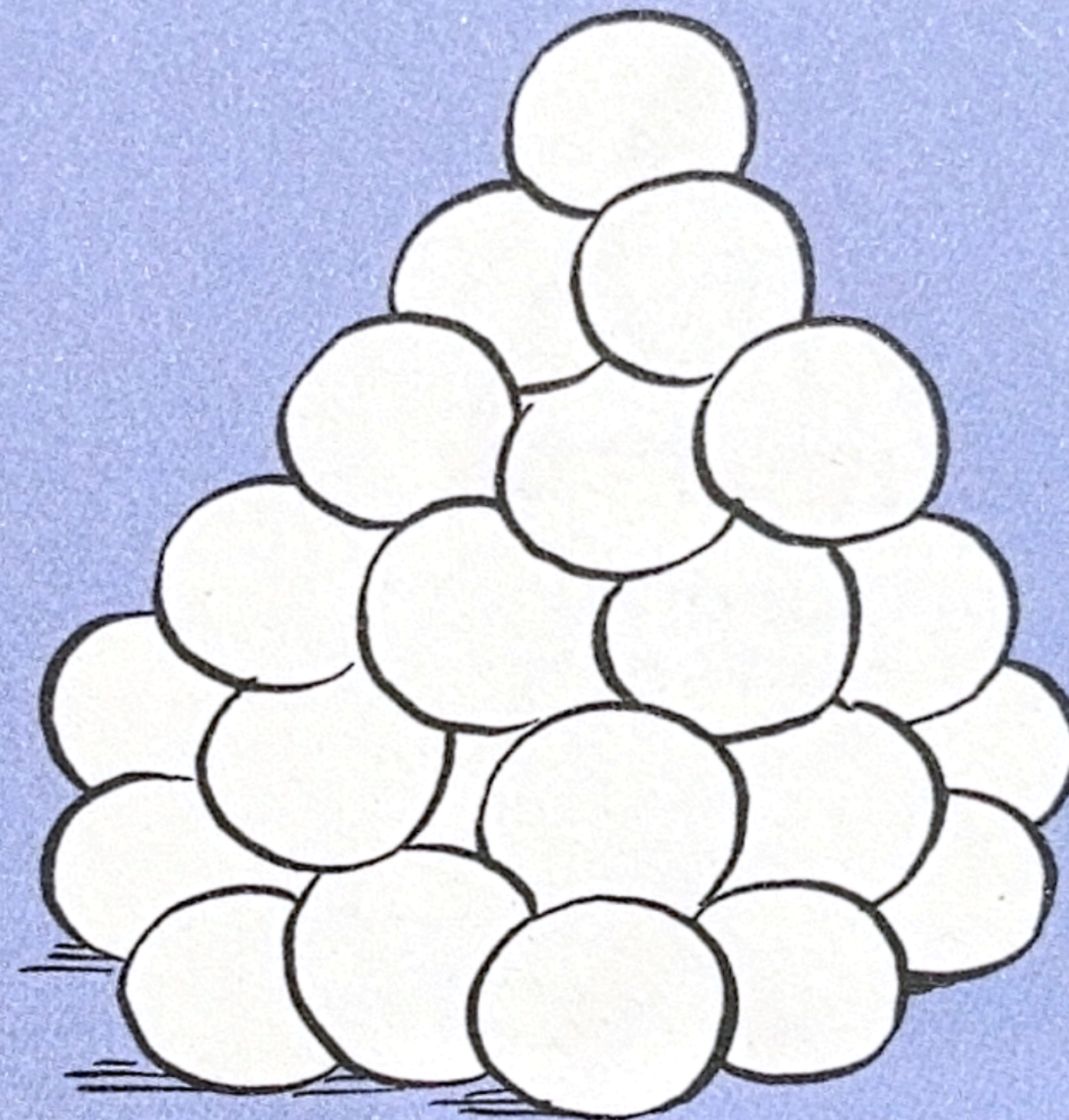
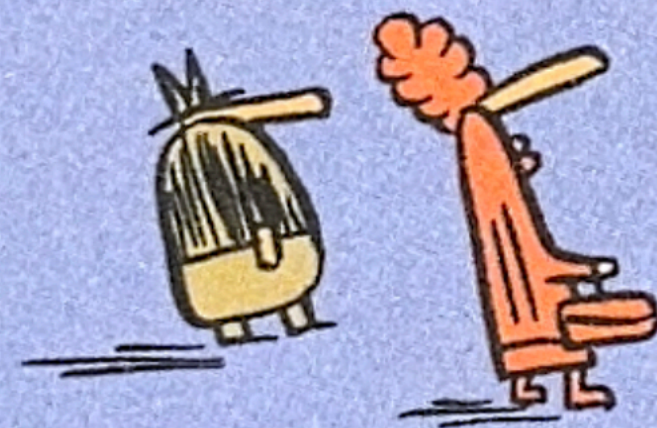
on



October 10, 2024



Well, it does  
not have any  
effect on  
me !



THE GLOBULI MONUMENT



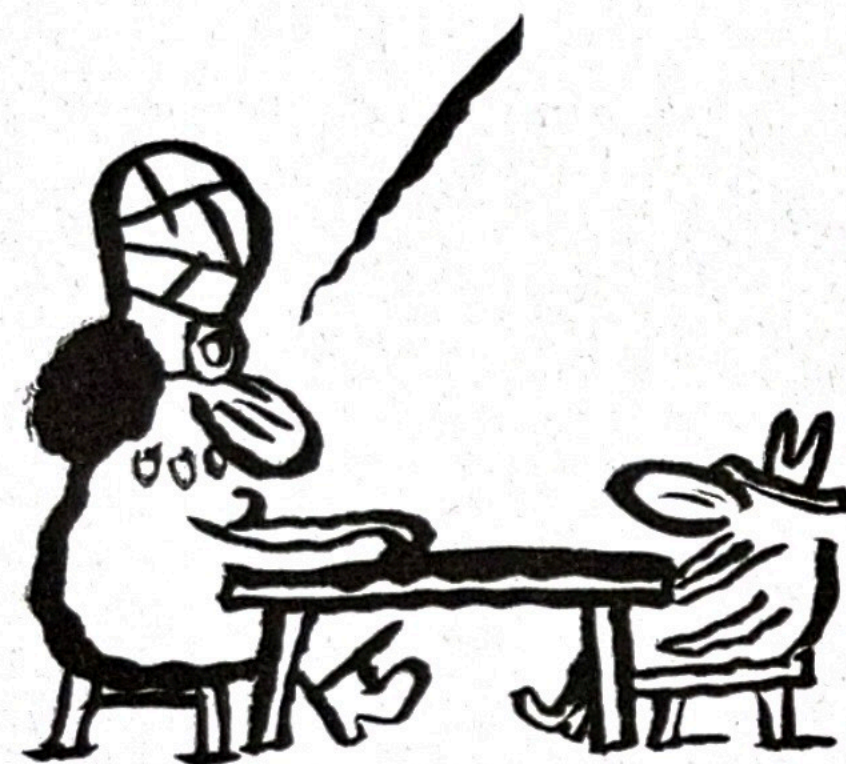
mini Calko,

THERE'S NOTHING  
YOU CAN'T ACHIEVE  
IF YOU REALLY  
WANT TO

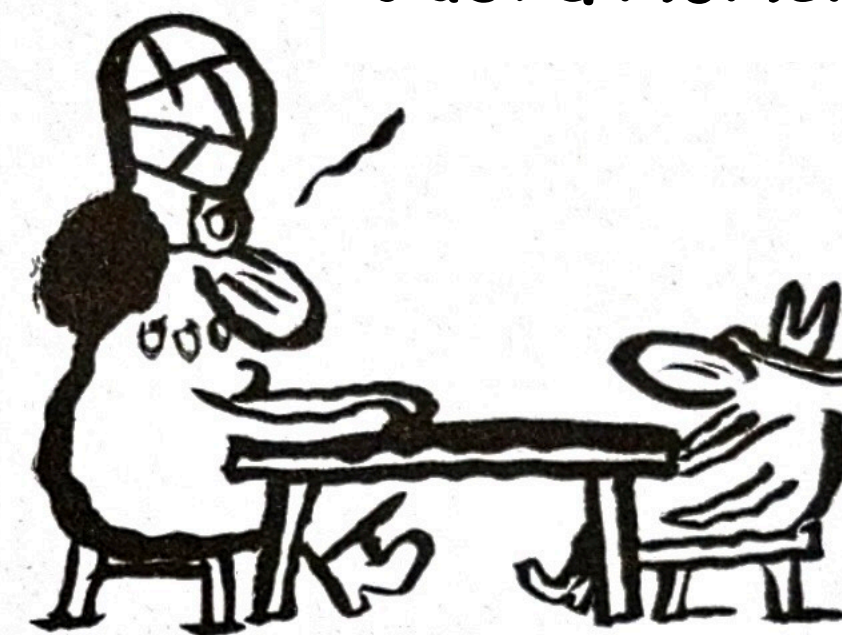




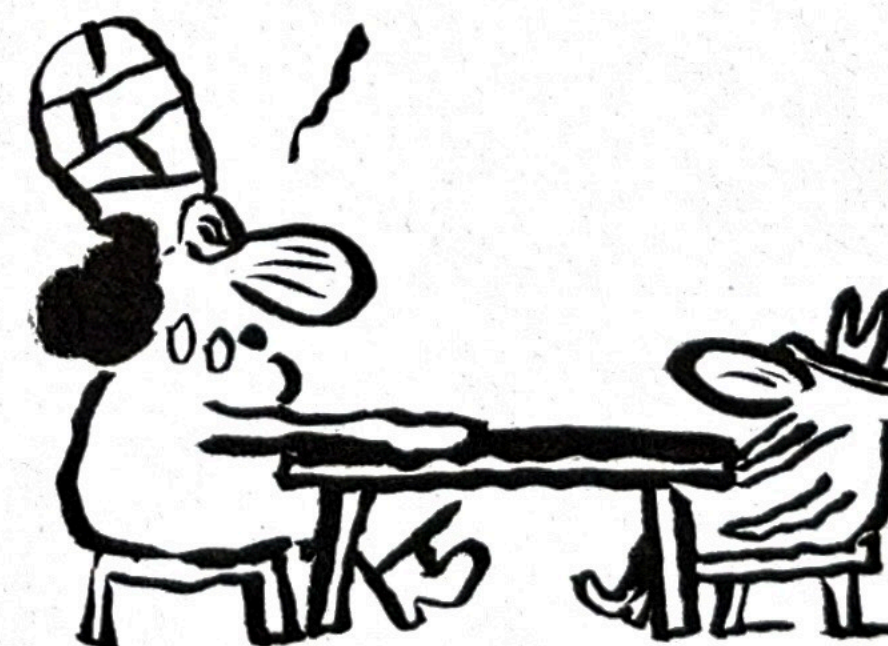
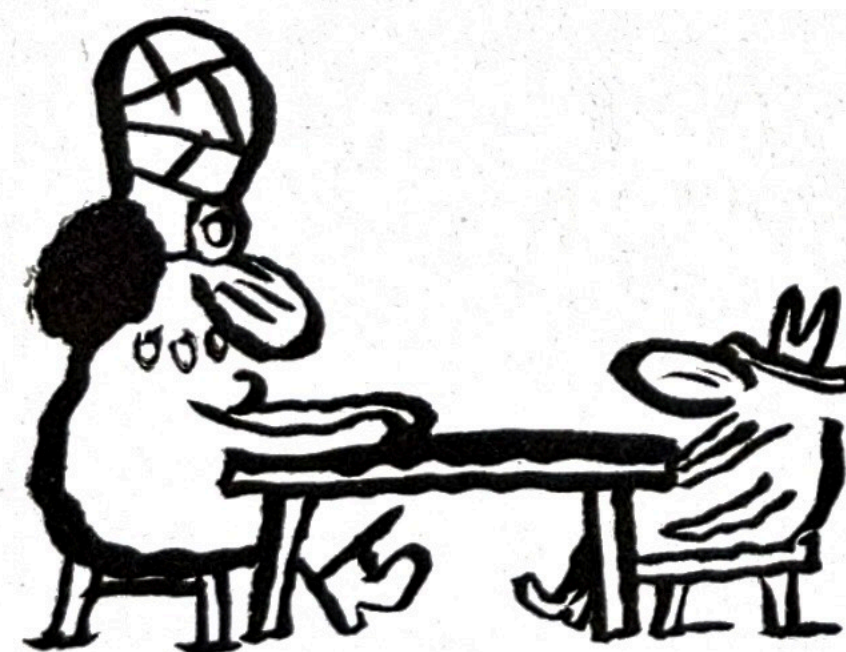
Your wife is about to speak to  
you from beyond the grave.



Just a moment.



She is on the phone  
with her mother.



mahler



ΑΡΙΣΤΟΤΕΛΟΥΣ  
ΠΕΡΙ ΖΩΩΝ ΙΣΤΟΡΙΑΣ.  
**ARISTOTELIS**  
**HISTORIA**  
de Animalibus.

**IVLIO CÆSARE SCALIGERO**  
Interprete, cum eiusdem Commentarijs.

**PHILIPPVS JACOBVS MAVSSACVS,**  
*in Senatu Tolosano Consiliarius Regius, ex Bibliotheca paterna opus à multis  
abhinc annis expetitur primus vulgavit & restituit, additis  
Prolegomenis & Animaduersionibus.*

**ACCEDIT FRAGMENTVM QVOD DECIMVS HISTORIARVM**  
*inscribitur, multò quàm antea emendatius & auctius.*

**ADDITI PRÆTEREA INDICES, VNVS AVCTORVM QVI IN OPERE**  
*citantur & emendantur, aliter rerum & verborum notabilium.*



**TOLOSÆ,**  
Typis Raymundi Colomerij, Typographi Regij.  
**M. DC. XIX.**

*Cum Privilegio Christianissimi Francorum & Navarra Regi.*





# Question:

**“Who would you rather let decide your guilt or innocence?”**

**People who can think critically or those who tend to jump to conclusions and are easily deceived by misleading information?”**

**Diane F. Halpern**

Critical Thinking Across The Curriculum: A Brief Edition of Thought and Knowledge.

Mahwah NJ; Lawrence Erlbaum Associates (1997)



**Thank you for  
your  
attention.**

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