

Psychology 101

or 7 ± 2 Things about Psychology

Claudius Link

@realn2s

000: My Motivation

The major questions regarding technology
are not technical but human questions.

Peter Drucker





**You “*only*” need to change
Your attitude**

001: The Magical Number 7

Be warned,
never hard code numbers in your talk titles

Kevlin Henney

Samurai

Wonders of
the World

Colours of
a Rainbow

7

Days per Week

Deadly Sins

Ineffective Coding Habits

Not magic

Actually 2 limits

Cognitive Limit

Absolute Judgments
1d Stimuli

Not fixed

Short Term
Memory

Typical between 5-9

Described by
George A. Miller

In 1956

Chunks of
Information

Poll

How many bullet points were on the slide about:

- the Magical number seven?
- George A. Miller?

1 Samurai

2 Wonders of
the World

3 Colours of
a Rainbow

7

4 Days per Week

5 Deadly Sins

6 Ineffective Coding Habits

1 Not magic

2 Actually 2 limits

3 Cognitive Limit

4 Absolute Judgments
1d Stimuli

6 Not fixed

5 Short Term
Memory

7 Typical between 5-9

8 Described by
George A. Miller

9 In 1956

10 Chunks of
Information

Chunking

**A word means just what I choose it to mean
— neither more nor less**

Lewis Carroll

Chunking



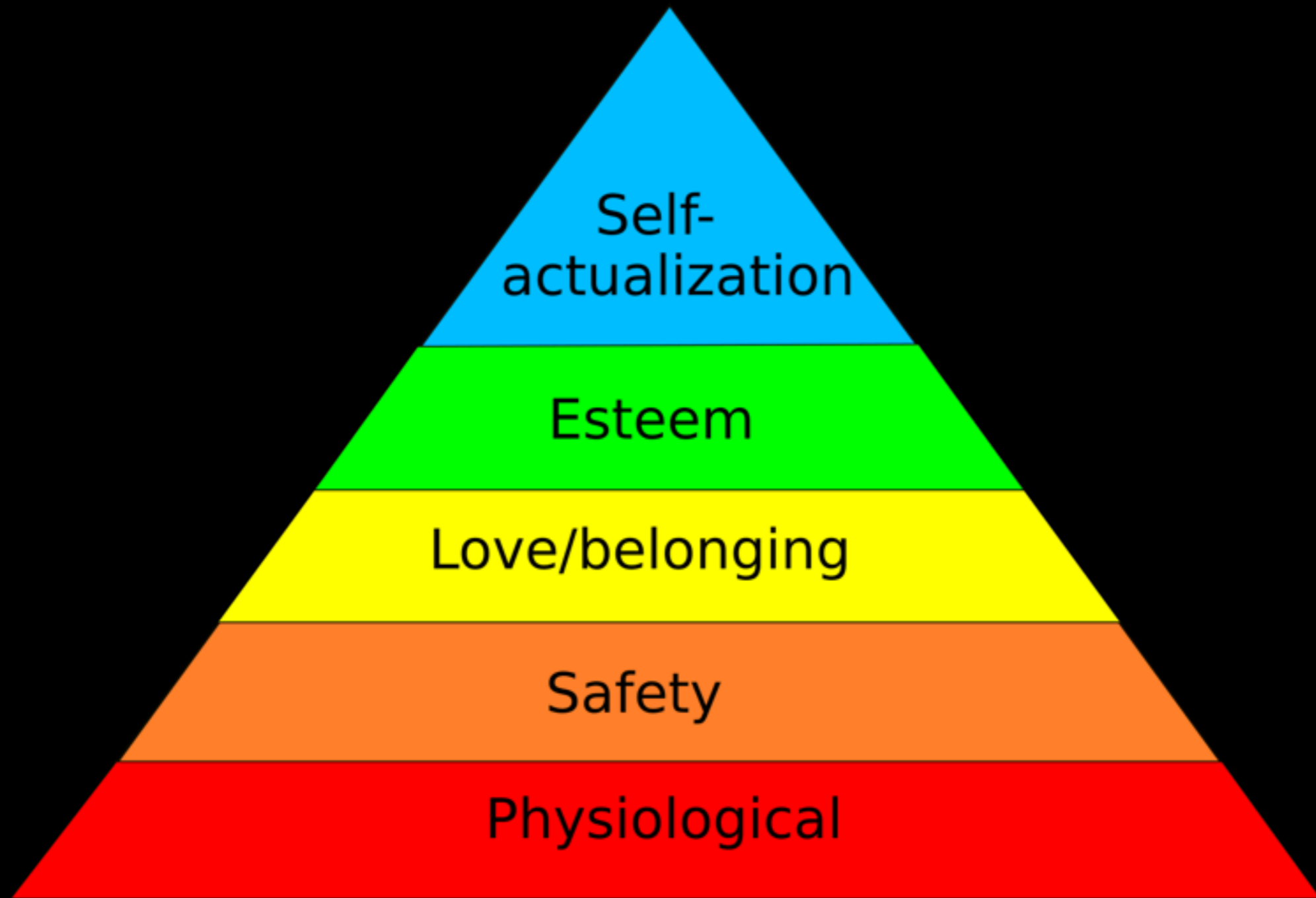
**1.e4 c5 2.Nf3 d6 3.d4
cxd4 4.Nxd4 Nf6 5.Nc3
a6 6.Be3 e6 7.g4 e5
8.Nf5 g6 9.g5 gxf5
10.exf5 d5 11.Qf3 d4**

Perenyi Attack

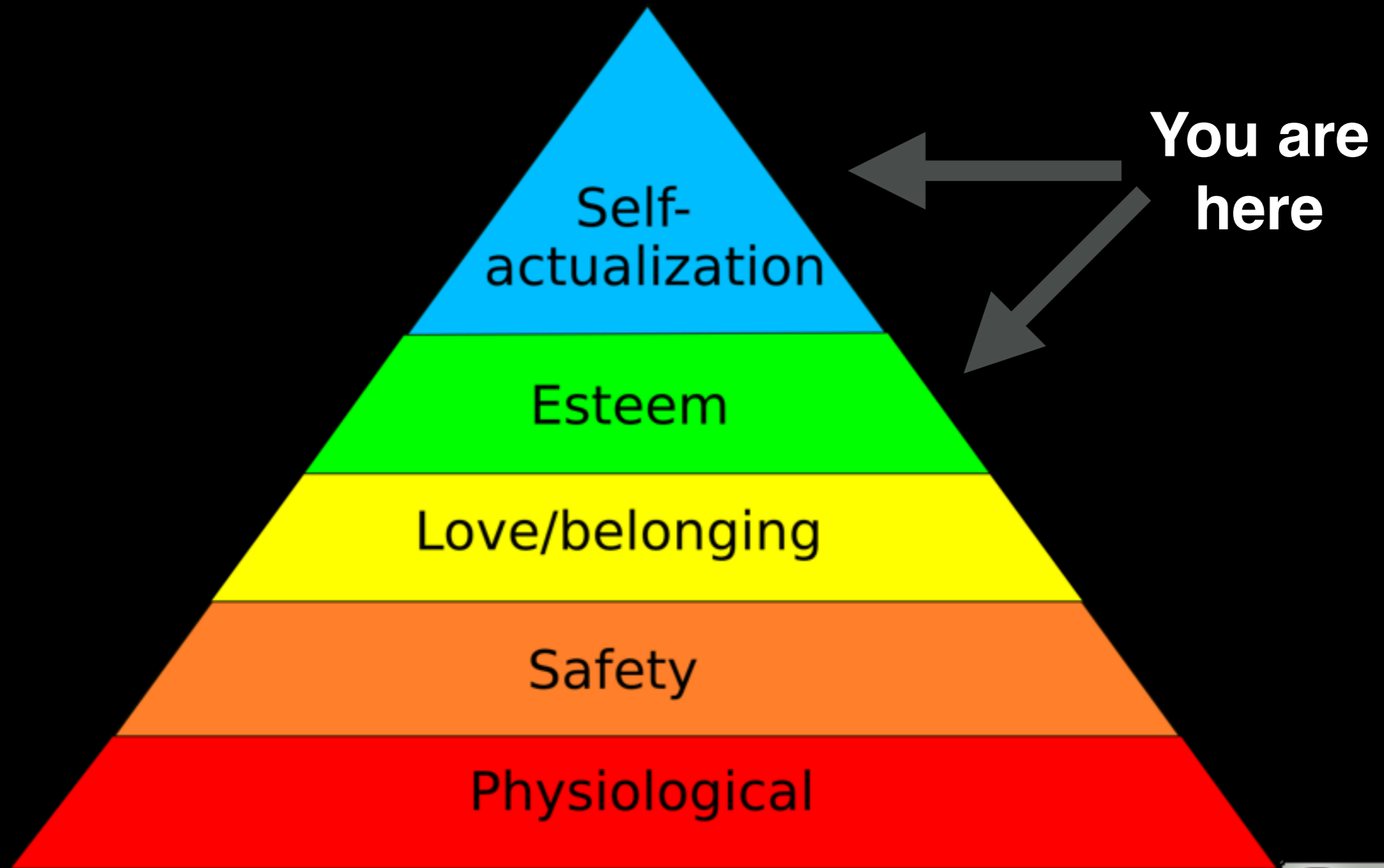
Edit	Insert	Slide	Format	Arrange
Undo				⌘Z
Redo				⇧⌘Z
Cut				⌘X
Copy				⌘C
Paste				⌘V
Paste and Match Style			⇧⇧	⌘V
Paste Formula Results				
Delete				
Clear All				
Duplicate Selection				⌘D
Select All				⌘A
Deselect All				⇧⌘A
Select Parent				⌘↶
Remove Highlights and Comments				
Find				▶
Spelling and Grammar				▶
Substitutions				▶
Transformations				▶
Speech				▶
Start Dictation...				fn fn
Emoji & Symbols				^⌘Space

010: Motivation

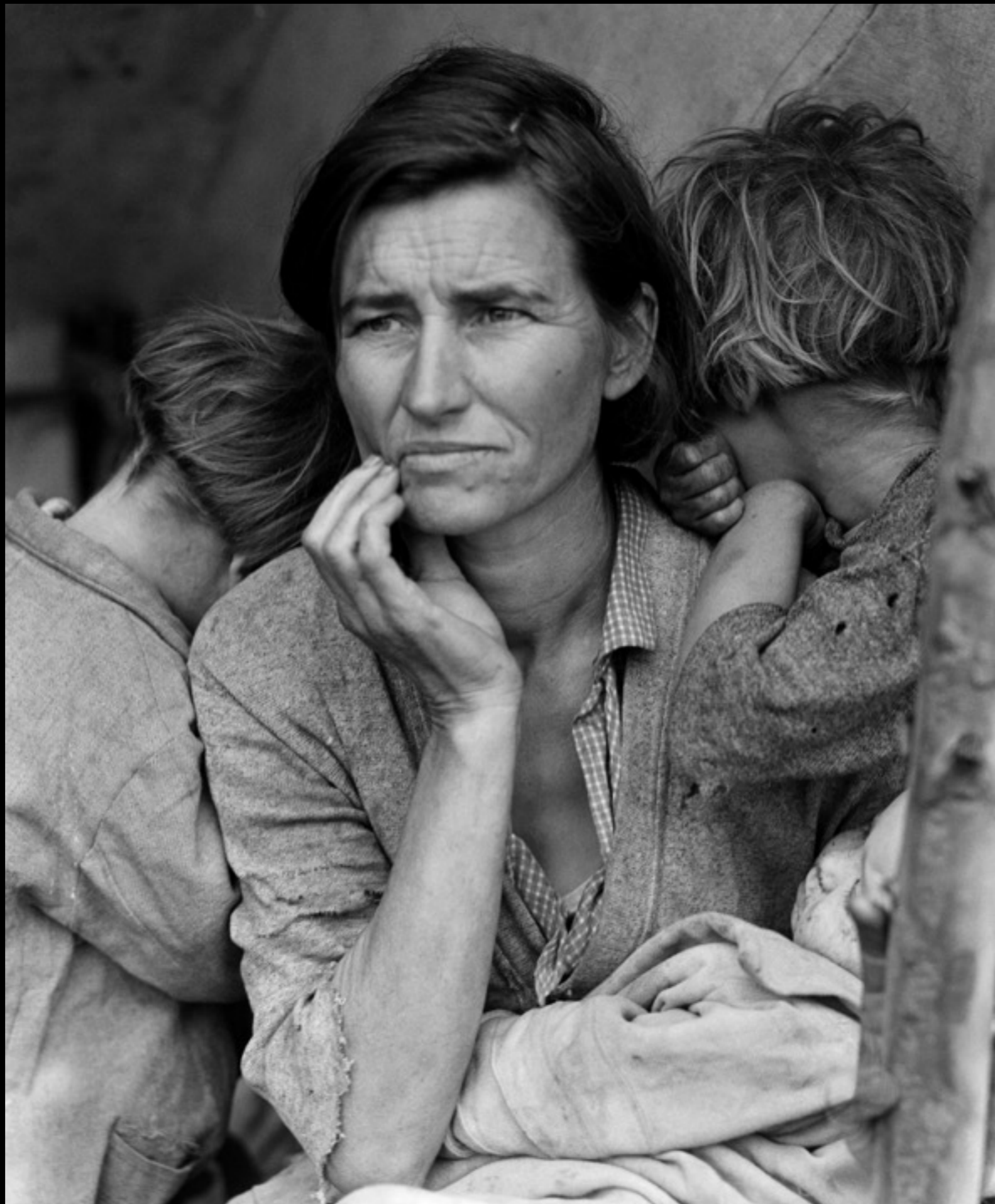
Maslow's Hierarchy of Needs



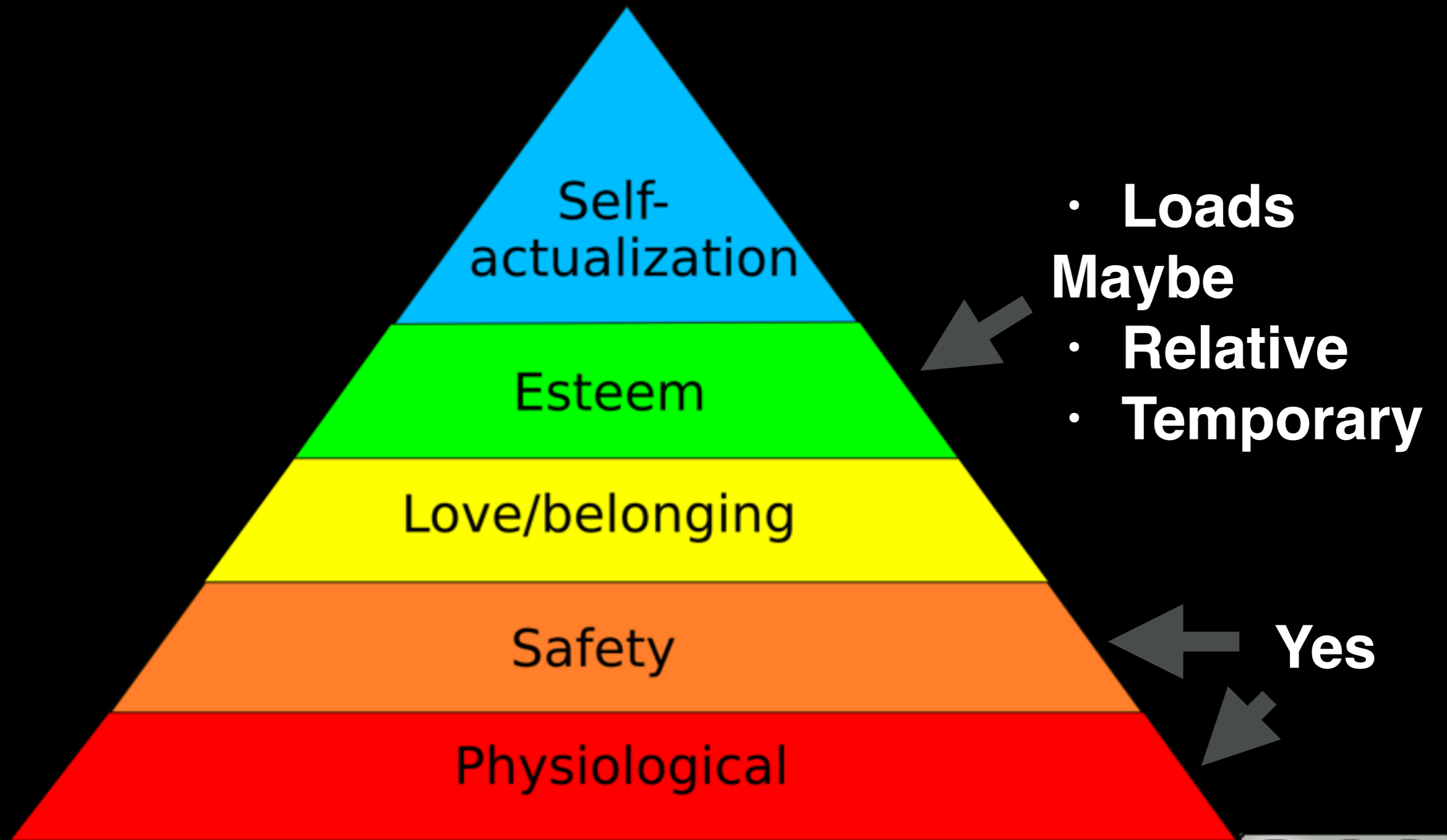
Maslow's Hierarchy of Needs



Does Money Motivate?



Motivation by Money



011: Ignorance

Poll

- Who drives a car?
- Who is an above-average driver?

Dunning–Kruger Effect

Unskilled and Unaware of It

**In order to attain the impossible,
one must attempt the absurd.**

Miguel de Cervantes

**It's what you learn after you know it all
that counts.**

John Wooden

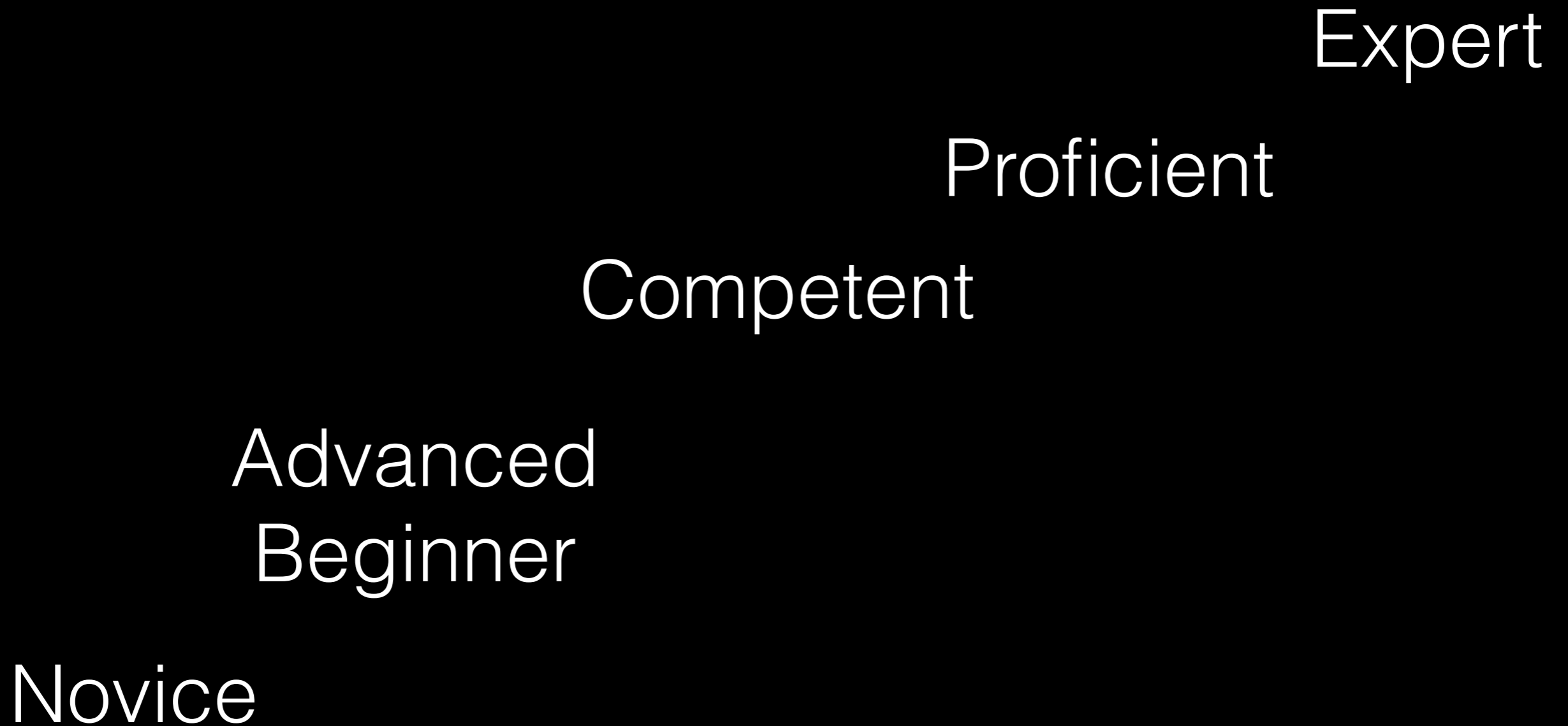
100: More Ignorance

The Five Orders of Ignorance
















- Meta-Ignorance ✓
- Lack of Process
- Lack of Awareness
- Lack of Knowledge
- Lack of Ignorance

101: Learning

Dreyfus Model of Skill Acquisition



	Novice	Advanced Beginner	Competent	Proficient	Expert
Needs	Monitoring Rules Feedback	Guidelines Experiments	Real world exposure	Practice Reflection	Drive to expand Knowledge and Experience
How	Checklists Classroom learning “Best Practices”	Simulations Games Q&A	Field trips Case studies Shadowing	Peer-to-peer Mentoring	“outside” thinking Exploration

	Novice	Advanced Beginner	Competent	Proficient	Expert
Novice					
Advanced Beginner					
Competent					
Proficient					
Expert					

110: Doubt

**I'm a creep, I'm a weirdo.
What the hell am I doing here?
I don't belong here.**

Radiohead – Creep Lyrics

Impostor Syndrom

Two out of five successful people
consider themselves frauds

111: Thinking

Task

LEFT

upper

left

lower

right

LOWER

RIGHT

upper

RIGHT

UPPER

left

lower

LEFT

LOWER

right

upper

Thinking, Fast & Slow

Systems 1

Active

Instantaneous

Fast

Effortless

System 2

Inactive

Delayed

Slow

Hard

The Monkey Business Illusion

Daniel J. Simons

**DON'T
MAKE
ME
THINK**



Meaning

*Don't require me
to activate
System 2*

Steve Krug

Adaption

Estimate in 5 seconds

$$8*7*6*5*4*3*2*1$$

Expected 40320

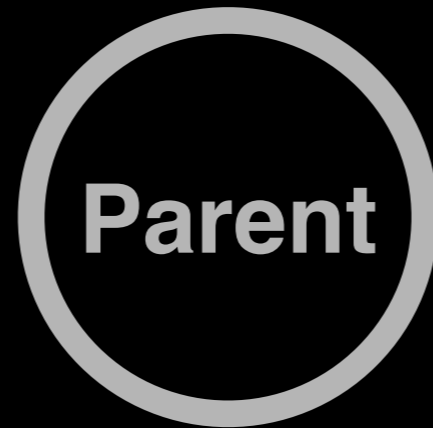
Actual 2250

111+1: Interactions

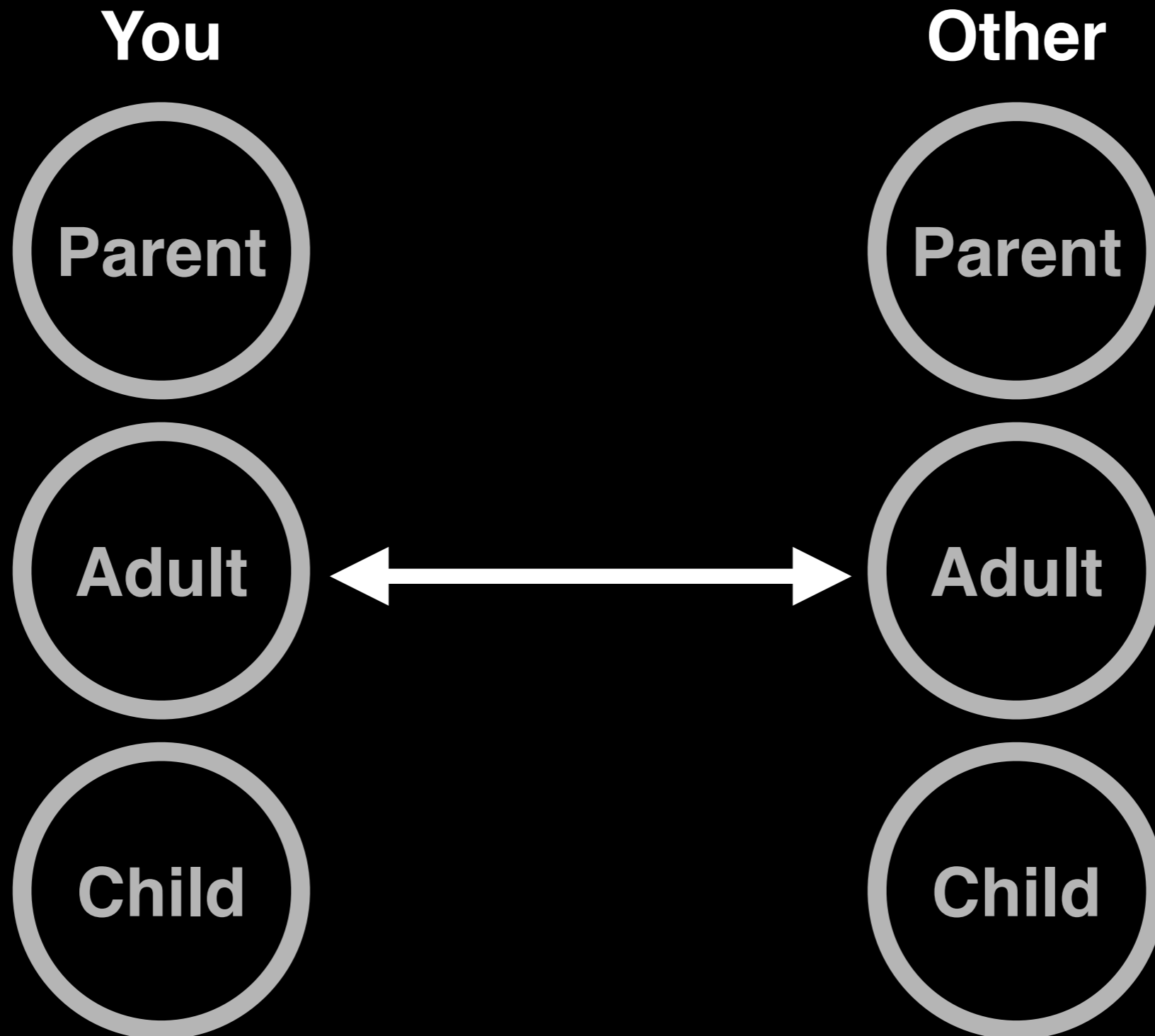
Transactional Analysis (TA)

I'm OK, you're OK

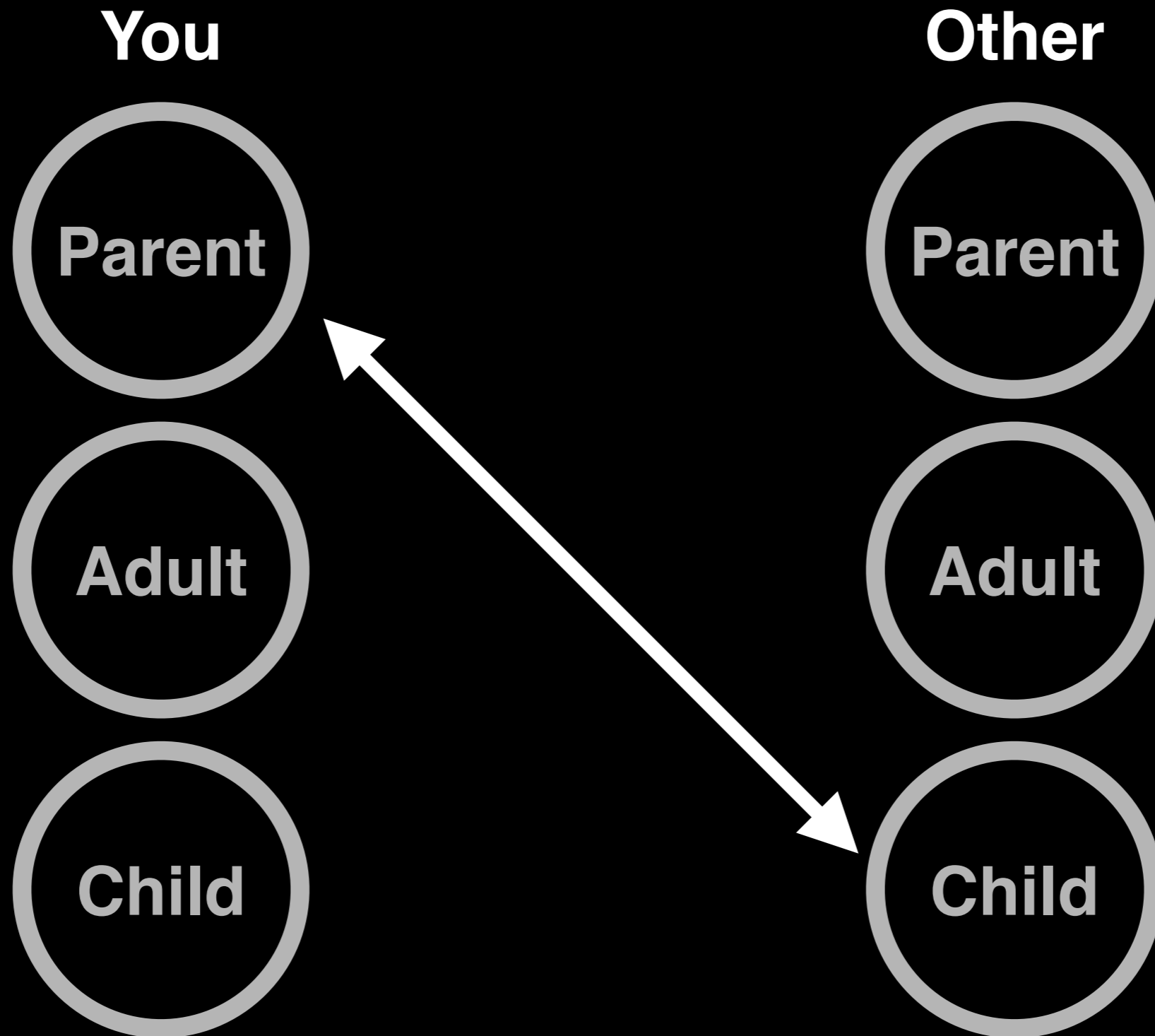
TA: Ego-States



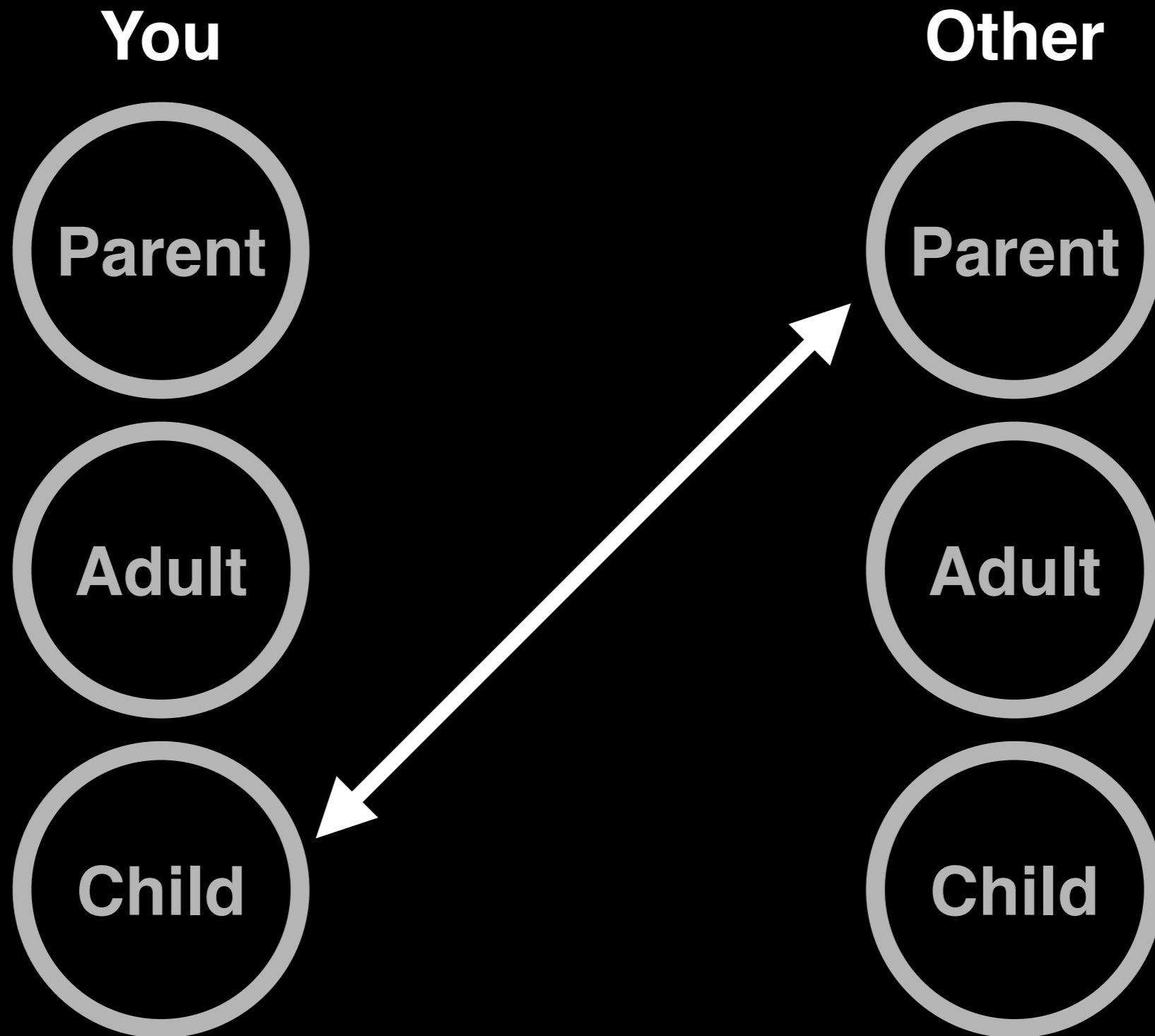
TA: States



TA: States

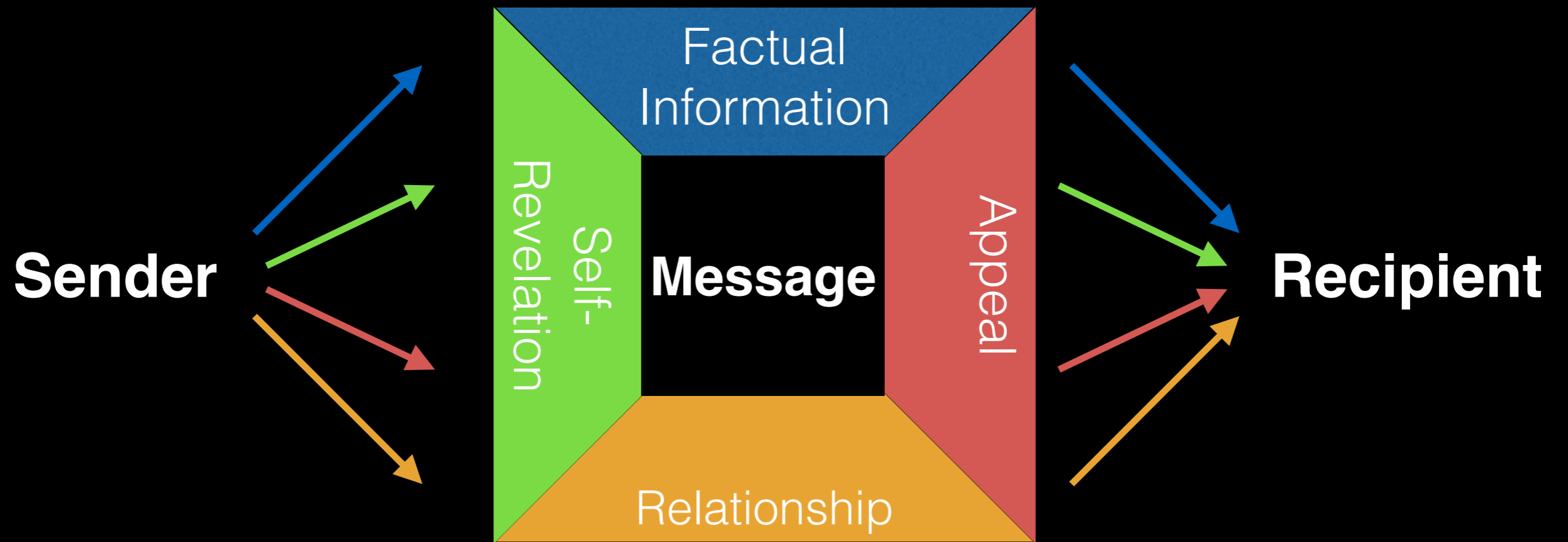


TA: States



111+2: Communication

Four-Sides of a Message



Extra: Biases

Availability Heuristic



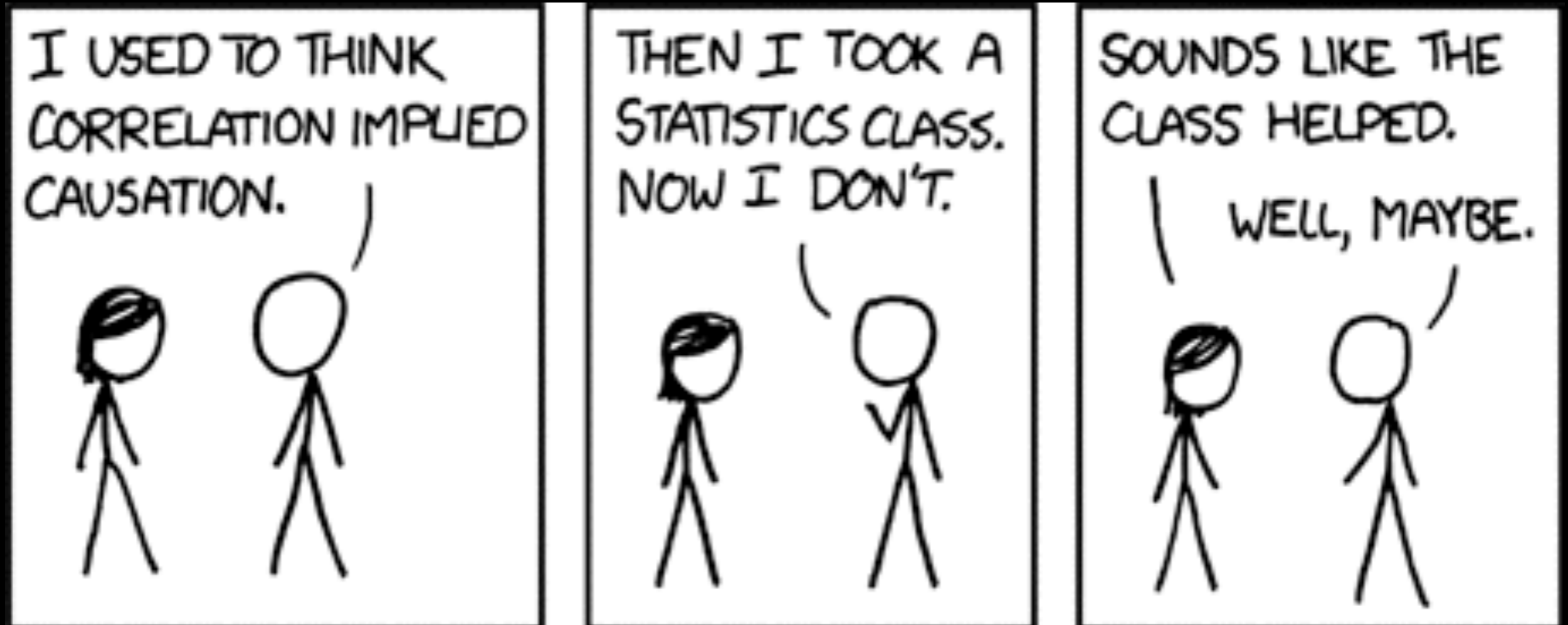
http://commons.wikimedia.org/wiki/File:Black_Swan_RWD2.jpg



It's tough to make predictions,
especially about the future

Yogi Berra

Confirmation Bias



Anchoring and Adaption



Adaption

Estimate in 5 seconds

Group A:

$$8*7*6*5*4*3*2*1$$

$$\rightarrow 2250$$

40320

Anchoring

Estimate in 5 seconds

Group A:

$$8*7*6*5*4*3*2*1$$

→ 2250

Group B:

$$1*2*3*4*5*6*7*8$$

→ 512

40320

Halo Effect



Conclusion

Müller-Lyer Illusion

