Summary (from the agenda web page):

Critical thinkers know how to evaluate massive amounts of information filled with sophisticated rhetoric designed to sway their decisions.

In today’s world bombarded with instant information, learn how to filter out bias, recognize misrepresentations, and teach others how to distinguish bias from fact.
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Classical conception of OBJECTIVITY

Two senses:

(1) as a way that a fact or a statement can be TRUE

“It is objectively true that ________”
- true independent of a subject's biases, beliefs, feelings, worldview, etc.

(2) as a property of a person's (or group's) JUDGMENT

“We need someone who can give an objective assessment of the merits of this policy proposal.”
- neutral, impartial, unbiased, etc.
OBJECTIVE FACTS

(1) (objective truth)

(2) (objective judgment)

that are accessible to us through observation and scientific inquiry

that can serve as a basis for further inferences about the world, and distinguish between competing hypotheses or theories

Suggests a model of critical thinking as FILTERING.

Learning to distinguish truth from falsity, objective facts from biased opinion.

The nuggets are buried in the muck of rhetoric and misrepresentation.

Your job, as a critical thinker, is to identify and extract those nuggets.
"I'm sorry, Juanita, your answer was correct, but Kevin shouted his incorrect answer over yours, so he gets the points."
Is this classical ideal objectivity still relevant to your work? Is it naive! Outdated! … is it missing something important!

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"I remember looking at her and thinking, 'She's totally lying.' At the same time, I remember something in my mind saying, 'And that doesn't matter.'" - David Blais, recalling the words of the gun he had spent 10 months teaching. It was something he chose. "I
Post-truth politics (also called post-factual politics) is a political culture in which debate is framed largely by appeals to emotion disconnected from the details of policy, and by the repeated assertion of talking points to which factual rebuttals are ignored.

Post-truth differs from traditional contesting and falsifying of truth by rendering it of "secondary" importance. While this has been described as a contemporary problem, there is a possibility that it has long been a part of political life, but was less notable before the advent of the Internet.
Political commentators have identified post-truth politics as ascendant in American, Australian, British, Chinese, Indian, Japanese, Russian and Turkish politics, as well as in other areas of debate, driven by a combination of the 24-hour news cycle, false balance in news reporting, and the increasing ubiquity of social media.

In 2016, "post-truth" was chosen as the Oxford Dictionaries' Word of the Year, due to its prevalence in the context of that year's Brexit referendum and U.S. presidential election.
Persuasion in a “Post-Truth” World

To make progress on ideologically or politically sticky issues, social action organizations must redesign their messaging to do more than celebrate; they must use smart storytelling and call to actions that don’t require them to switch for their values.

By Amy Campbell, Lauren Cohen, & Anne Hornaday | Jan. 25, 2017

WIN BIGLY
PERSUASION IN A WORLD WHERE FACTS DON’T MATTER
SCOTT ADAMS

PRE-SUASION
A Revolutionary Way to Influence and Persuade

PRINCIPLES OF PERSUASION (POP) Workshop™
Discussion: What Do We Think of This?

Classical models of objectivity, good argumentation and critical thinking are **psychologically naive**.

**People are fundamentally irrational.** They are motivated more by feelings, emotions and group identities than facts and arguments.

To be effective at changing hearts and minds, you need to study the **psychology of persuasion**, not logic and argumentation.

In a world where all authorities are viewed as biased and partisan, the concept of an “objective fact” has no meaning or utility.
An approach to critical thinking education that is **NOT psychologically naive**, yet does not throw out the baby with the bathwater.

i.e one that **RETAINS** the core principles of the classical conception of objectivity.

**WHAT WE NEED**

**Essential Skills for Critical Thinking**

1. Understand **GOOD REASONING**
2. Understand and manage **OBSTACLES to good reasoning**
3. Acquire the **BACKGROUND KNOWLEDGE** that is necessary for critical thinking
Essential Skills for Critical Thinking

1. Understand **GOOD REASONING**

2. Understand and manage **OBSTACLES to good reasoning**

3. Acquire the **BACKGROUND KNOWLEDGE** that is necessary for critical thinking

   This has been the focus of most of my speaking and consulting work.

   **Example:**
   “To Err is Human: Cognitive Biases and Critical Thinking in the Auditing Process”
   
   Canadian Audit and Accountability Foundation
   - annual conference in Toronto

   There are **HUNDREDS** of documented cognitive biases

How we ought to reason

Cognitive biases typically operate UNCONSCIOUSLY

> 95% of our brain’s cognitive activity occurs below the surface of conscious awareness

Let’s look at an example: “PAREIDOLIA”
Visual pareidolia - seeing meaningful images in ambiguous stimuli

“Backmasking”

Audio pareidolia - hearing meaningful speech in ambiguous stimuli

“Backmasking”

1980s - panic over subliminal satanic messages in rock music
“Backmasking”

Led Zeppelin's "Stairway to Heaven"

Play Forward

Forward: If there's a bristle in your hedgerow, don't be alarmed now, it's just a spring vise for the May queen. Yes, there are two paths you can go by, but in the long run there's still time to change the road you're on.

Play in Reverse

Show / Hide Reverse Lyrics

K - start and stop  J - shuttle back  L - shuttle forward
Whenever possible, our brains impose structure and meaning on the information it is trying to process.

Ambiguities in interpretation are resolved unconsciously.

The world that we consciously experience is not “raw” data — it is already a product of unconscious information processing.
Opens up the possibility that different people can experience the world in very different ways and not to be aware of it.

Illustrates some important psychological principles.

WHITE and GOLD?

BLUE and BLACK?
Your brain is making an assumption about the ambient lighting conditions, based on other cues in the image.

This unconscious judgment affects how you perceive the colors.

This is what the dress looks like in the catalog.
Some writers have suggested this kind of model to explain why different political groups differ so consistently in how they interpret media information and make judgments.

It’s because they’re experiencing reality in fundamentally different ways.

NOTE:

On ethical and political matters, this perspective makes it harder to judge one side as obviously more rational or more correct than the other.

Is there a political equivalent of this - the “objective facts of the matter” - to resolve disputes?

Discussion:

Are there aspects of your job where you see these kinds of “worldview differences”?

Are there ways that different people/groups/constituencies seem to interpret events and information from fundamentally different perspectives, ways that resist change by appeals to logic, facts and argument?
Critical Thinking for the 21st Century

You need a curriculum that includes training in a WIDER set of skills and background knowledge than logic and argument literacy.

Need to include (among others) …

PSYCHOLOGY  RHETORIC  STRATEGIC
COMMUNICATION

Need many different TOOLS in your CRITICAL THINKING TOOLBOX

An example:

Cultural Cognition of Risk

“Cultural Cognition of Risk”

Hierarchy

Individualism  Communitarianism

Egalitarianism
**“Cultural Cognition of Risk”**

- **Hierarchy**
- **Egalitarianism**
- **Communitarianism**
- **Individualism**

**Cultural Dimensions**

- More libertarian, individual, freedom-oriented
- More welfarist, collectivist, socialist, group-oriented
- More traditionalist, social/religious conservative
- Anti-tradition, anti-hierarchy, equality oriented

**Sample Survey Questions**

- We have gone too far in pushing equal rights in this country.
- The government should stop telling people how to live their lives.
- It’s society's responsibility to ensure that everyone’s basic needs are met.
- Our society would be better off if the distribution of wealth was more equal.
People in these quadrants are members of distinct cultural groups with a distinct cultural identity.

**Hierarchy**

**Egalitarianism**

**Communitarianism**

**Individualism**

Cultural Cognition

Within these groups, members are predisposed to agree with claims that (they perceive as) affirming their membership in the group ...

... and to disagree with claims that (they perceive as) challenging their membership in the group.

Example: “Climate change is a serious risk”

- **Hierarchical individualist**
  - **NO:** it's a LOW RISK

- **Egalitarian communitarian**
  - **YES:** it's a HIGH RISK
Green = low risk  Red = high risk

Hierarchy

Egalitarianism

Communitarianism

Hierarchical individualist

Gays military/gay parenting
Abortion procedure
use of military force/domestic anti-terrorism policies

Egalitarian individualist

Environment: climate, nuclear
Guns
/Gun Control

Gays military/gay parenting
Abortion procedure
use of military force/domestic anti-terrorism policies

Hierarchical communitarian

Egalitarian communitarian

Standard Left-Right Surveys Work as Well

Probability of Agreeing with Claim X

distinct cultural groups

Very Liberal
Strong Democrat
Liberal
Democrat
Moderate
Independent
Conservative
Republican
Very Conservative
Strong Republican

Important: We also use cultural cognition to judge who is a reliable authority

Question:
Is this scientist an expert on global warming?

Position: Professor of Meteorology, MIT
Education: PhD, Harvard
Memberships:
• American Meteorological Society
• National Academy of Sciences
Now: Give some subjects a claim that the expert endorses …

“It is now beyond reasonable scientific dispute that human activity is causing global warming and other dangerous forms of climate change …”

… and ask them to answer whether they think he’s an expert or not.

Important: We also use cultural cognition to judge who is a reliable authority.

And give another group of subjects a different quote …

“Judged by conventional scientific standards, it is premature to conclude that human CO2 emissions — so-called greenhouse gases — cause global warming …”

… and ask them to answer whether they think he’s an expert or not.

Result: Judgments of expertise are determined by the cultural norms of the group.
Important: These judgments are not due to ignorance or lack of scientific literacy.

**“Climate science literacy”: item response theory**

In fact, increasing climate science literacy MAGNIFIES the POLARIZATION!

Important: These judgments are not due to ignorance or lack of scientific literacy.

Indeed, simply asking people to be objective and use reason ...

... MAGNIFIES THE POLARIZATION!
Cultural Cognition: Upshot

When a claim becomes **entangled** or coupled with the core beliefs of a cultural group’s **identity**, it becomes **highly resistant to change** by traditional “rational” means:

- facts
- evidence
- argument
- statements of consensus opinion

NOTE: not all claims are like this.

e.g. “Is nanotechnology a high risk or low risk technology?”

- There are few if any cultural associations with this technology.
- Consequently, people are much more open to having their judgments shaped by evidence, scientific consensus, etc.

The Persuasion Challenge: Decoupling

The persuasion challenge is this:

Are there ways to **decouple** the claim or policy issue from these cultural identity beliefs?

If so, then we may be able influence those beliefs **without triggering** a defensive reaction.
Some proposed decoupling/debiasing strategies to deal with identity-protecting cultural cognition:

1. Reinforce identity and self-esteem
2. Share opinions and discover differences
3. Present both sides, don’t stack the deck
4. Look for arguments “across the aisle”
5. Go local

This is an example of JUST ONE set of tools in a 21st Century CRITICAL THINKING TOOLBOX

Cultural Cognition of Risk

- basic mechanisms
- debiasing strategies

CRITICAL THINKING

Objective Analysis for Today’s World

kevindelaplante.com

THANK YOU!
Some References:


Backmasking (jeffmilner.com/backmasking)

The dress illusion (http://pensees.pascallisch.net/?p=1885)

The Cultural Cognition Project: Yale Law School
Lead researcher: Dan Kahan (www.culturalcognition.net/)
