

CRITICAL THINKING

Critical thinking is "reasonably and reflectively deciding what to believe or do."

(Ennis (1985))

Critical thinking is "the art of thinking about your thinking while you are thinking in order to make your thinking better: more clear, more accurate, or more defensible."

(Paul, Binker, Adamson, and Martin (1989))

"Critical thinking is best understood as the ability of thinkers to take charge of their own thinking. This requires that they develop sound criteria and standards for analyzing and assessing their own thinking and routinely use those criteria and standards to improve its quality."

(Elder, L. and Paul, R. "Critical Thinking: Why we must transform our teaching." Journal of Developmental Education 18:1, Fall 1994, 34-35.)

Uses of critical thinking:

- "underlies reading, writing, speaking, and listening . . . the basic elements of communication"
- "plays an important part in social change . . . institutions in any society - courts, governments, schools, businesses - are the products of a certain way of thinking."
- "helps us uncover bias and prejudice."
- "is a path to freedom from half-truths and deceptions."
- "the willingness to change one point of view as we continue to examine and re-examine ideas that may seem obvious. Such thinking takes time and the willingness to say three subversive words: I don't know."

Critical thinkers: distinguish between fact and opinion; ask questions; make detailed observations; uncover assumptions and define their terms; and make assertions based on sound logic and solid evidence.

(Ellis, D. Becoming a Master Student, 1997.)

DON'T BE RATIONAL; BE REASONABLE

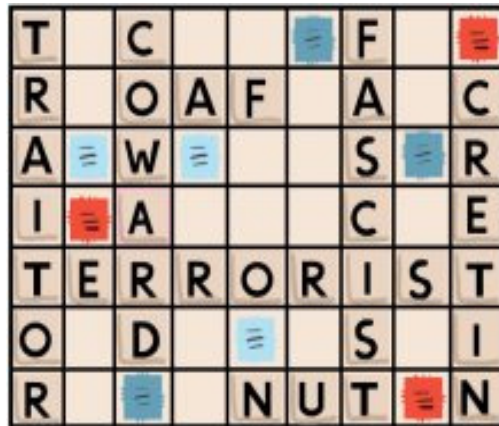
Why? I can think of several reasonable reasons:

- I am human, and no human can be completely rational all the time. If I attempt to be so, I will merely appear more foolish than people normally do [or I will appear to others as a cold, unreasoning, unflinching automaton *a la* Spok!].
- Rationality depends on tight chains of reasoning; so one weak link can break a chain of rationality. Reasonableness uses multiple chains to arrive at conclusions – some rational, some emotional; some data-based, some intuitive; some internally derived, some from external sources. Thus, reasonableness may not be as sharp and efficient, but it's more secure and less likely to lead to monstrous mistakes.
- Nobody likes a know-it-all

Adapted from: Weinberg, Gerald M. (2002). More secrets of consulting: The consultant's tool kit. New York, N.Y.: Dorset House Publishing. Page 16.

propaganda

Name Calling



"Bad names have played a tremendously powerful role in the history of the world and in our own individual development. They have ruined reputations, stirred men and women to outstanding accomplishments, sent others to prison cells, and made men mad enough to enter battle and slaughter their fellowmen. They have been and are applied to other people, groups, gangs, tribes, colleges, political parties, neighborhoods, states, sections of the country, nations, and races." (Institute for Propaganda Analysis, 1938)

The name-calling technique links a person, or idea, to a negative symbol. The propagandist who uses this technique hopes that the audience will reject the person or the idea on the basis of the negative symbol, instead of looking at the available evidence.

The most obvious type of name-calling involves bad names. For example, consider the following:

- Commie
- Fascist
- Pig
- Yuppie
- Fanatic
- Weirdo

According to the IPA, we should ask ourselves the following questions when we spot an example of name-calling.

- What does the name mean?
- Does the idea in question have a legitimate connection with the real meaning of the name?
- Is an idea that serves my best interests being dismissed through giving it a name I don't like?
- Leaving the name out of consideration, what are the merits of the idea itself?

OPEN YOUR MIND!

Learning to think critically



Bramwell Osula, Ph.D.

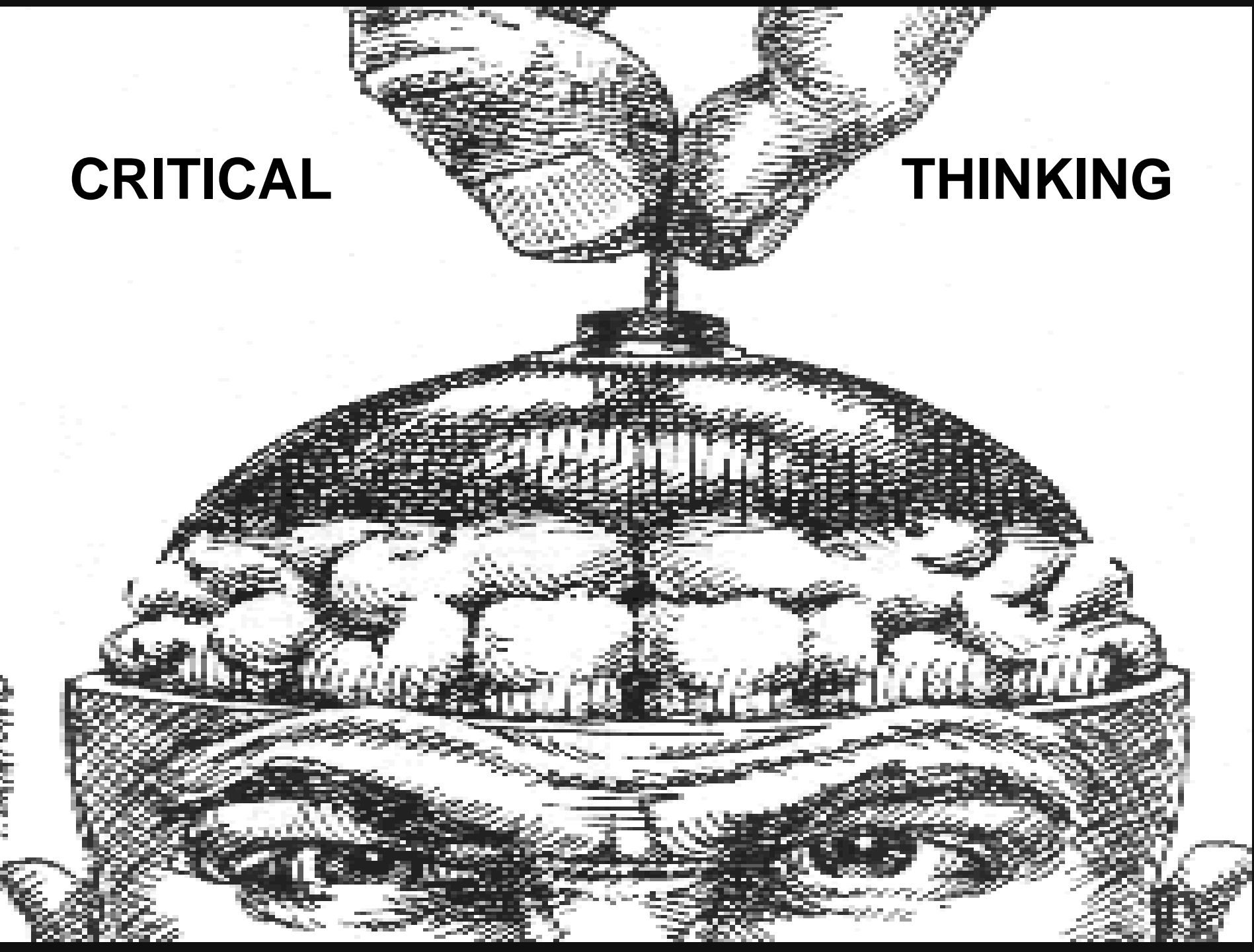
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Most people are followers of authority:
most do not question, are not curious.
Most people, therefore, do not think for
themselves, but rely on others to think for
them. Most people, therefore, do not think
critically.

~(Steven D. Schafersman, 1991)

CRITICAL

THINKING



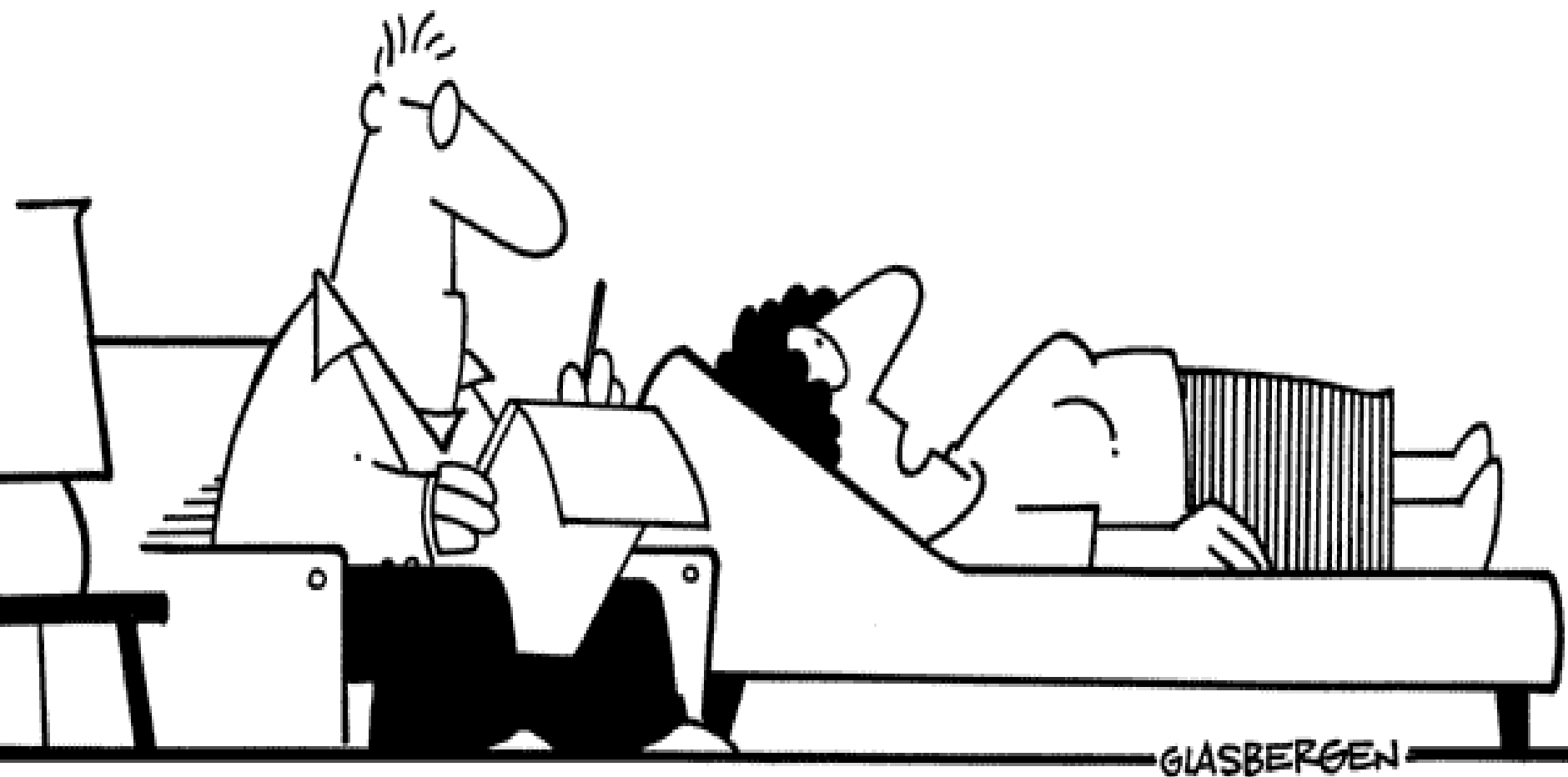
THE DYING ART OF THINKING

"5% think,
10% think they think,
85% would rather die than think."

~ Anonymous

THE TWO SIDES OF “CRITICAL”

- The *common sense* use: "negative or fault-finding." (The Jerry Springer Show)
- The *critical thinking* use: "involving or exercising skilled judgment or observation." (the legal profession)



“I’d like to learn how to be less critical. My mouth has been classified as a weapon of mass destruction.”

“Teachers complain about students who arrive at school with strong convictions but not enough knowledge to argue persuasively for their beliefs. ... Having opinions without knowledge is not of much value; not knowing the difference between them is a positive indicator of ignorance.”

-- *Diane Ravitch, The Schools We Deserve, p. 8*

A blurred background image of a classroom. In the center, a teacher in a blue shirt is pointing at a student's work. To the left, a student in a red shirt is looking towards the teacher. To the right, another student in a blue shirt is looking towards the teacher. The background shows other students and classroom furniture, all out of focus.

"We should be teaching students *how* to think.
Instead, we are teaching them *what* to think."

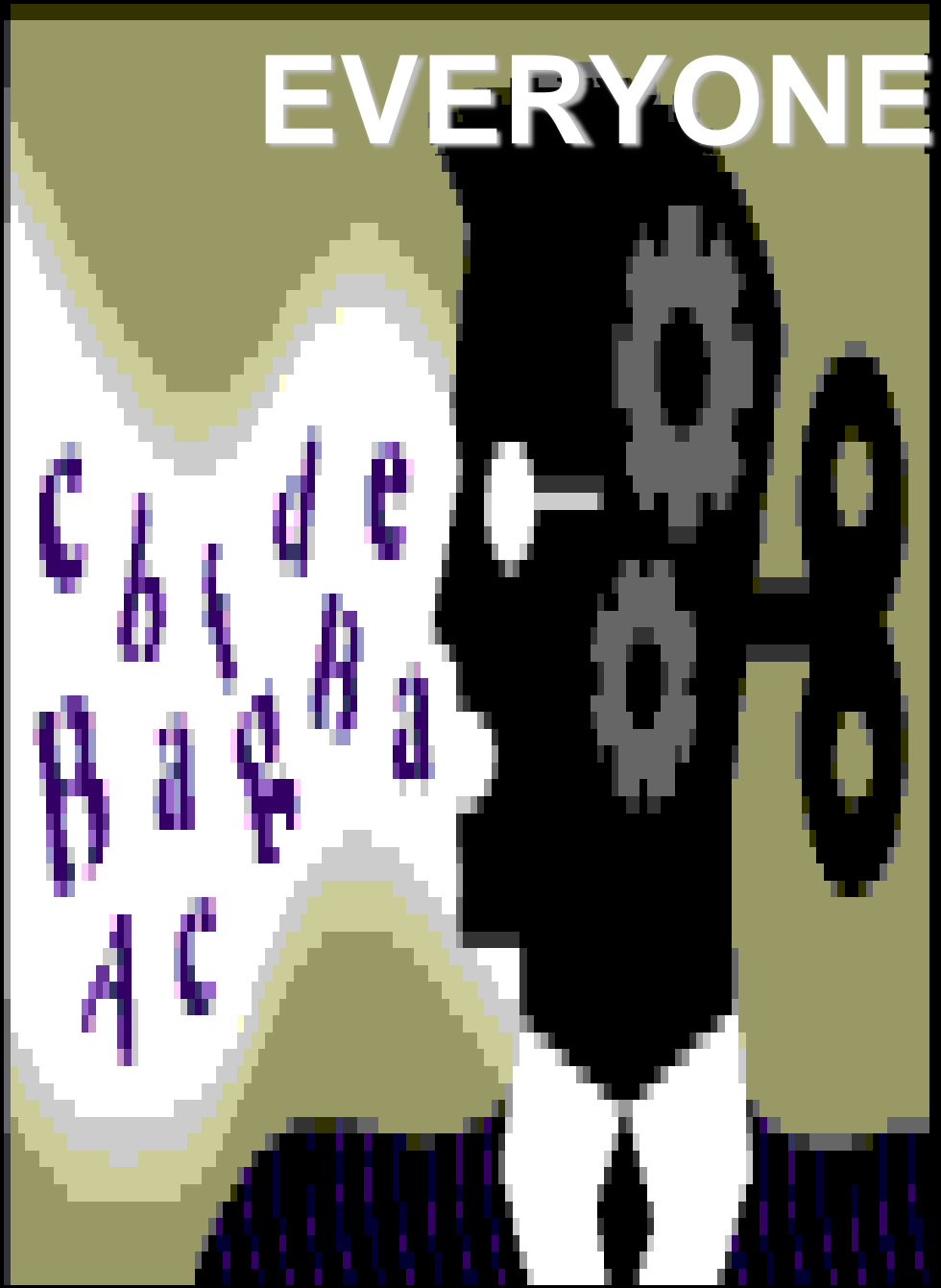
(Clement and Lochhead, 1980, Cognitive Process Instruction.)

THE TWO GOALS OF EDUCATION

1. **“WHAT to think?”**: So obvious that instructors and students focus most of their energies and efforts on transmitting and acquiring basic knowledge. - *Can be so overwhelming that students and teachers have time for little else.*
2. **“HOW to think?”**: This is *critical thinking* and is often so subtle that instructors fail to recognize it - *and students fail to realize its absence!*

EVERYONE THINKS ...

But much of our thinking, left to itself, is biased, distorted, partial, uninformed, or downright prejudiced.



CHARACTERISTICS OF A GOOD CRITICAL THINKER

- Can strip a verbal argument of irrelevancies and phrase it in its essential terms.
- Habitually questions one's own views and attempts to understand the assumptions that are critical to those views and the implications of the views.

CRITICAL THINKING – TWO DISTINCT ACTIVITIES

- **Analysis:** Understanding an argument
- **Criticism:** Evaluating the truth of an argument.

THE SMALLEST UNIT OF MEANING

Critical thinking is NOT concerned with the claim, the sentence, or the belief. Rather, the smallest unit of meaning is **THE ARGUMENT.**

STOP WASTING YOUR TIME!

- Don't get caught up in wasteful and irrelevant talk by agreeing and disagreeing on theses (claims or beliefs).
- The aim of critical thinking is to *construct a set of reasons that adequately support a belief* (a thesis, a claim) and **DO SO BETTER THAN SOME OTHER SET.**

BARRIERS TO CRITICAL THINKING 1: EGOCENTRISM

This requires that we:

- Recognize the impact of **self-interested thinking** on our thinking .
- Understand the peril of **self-serving bias**.

BARRIERS TO CRITICAL THINKING 2: SOCIOCENTRISM

This requires that we:

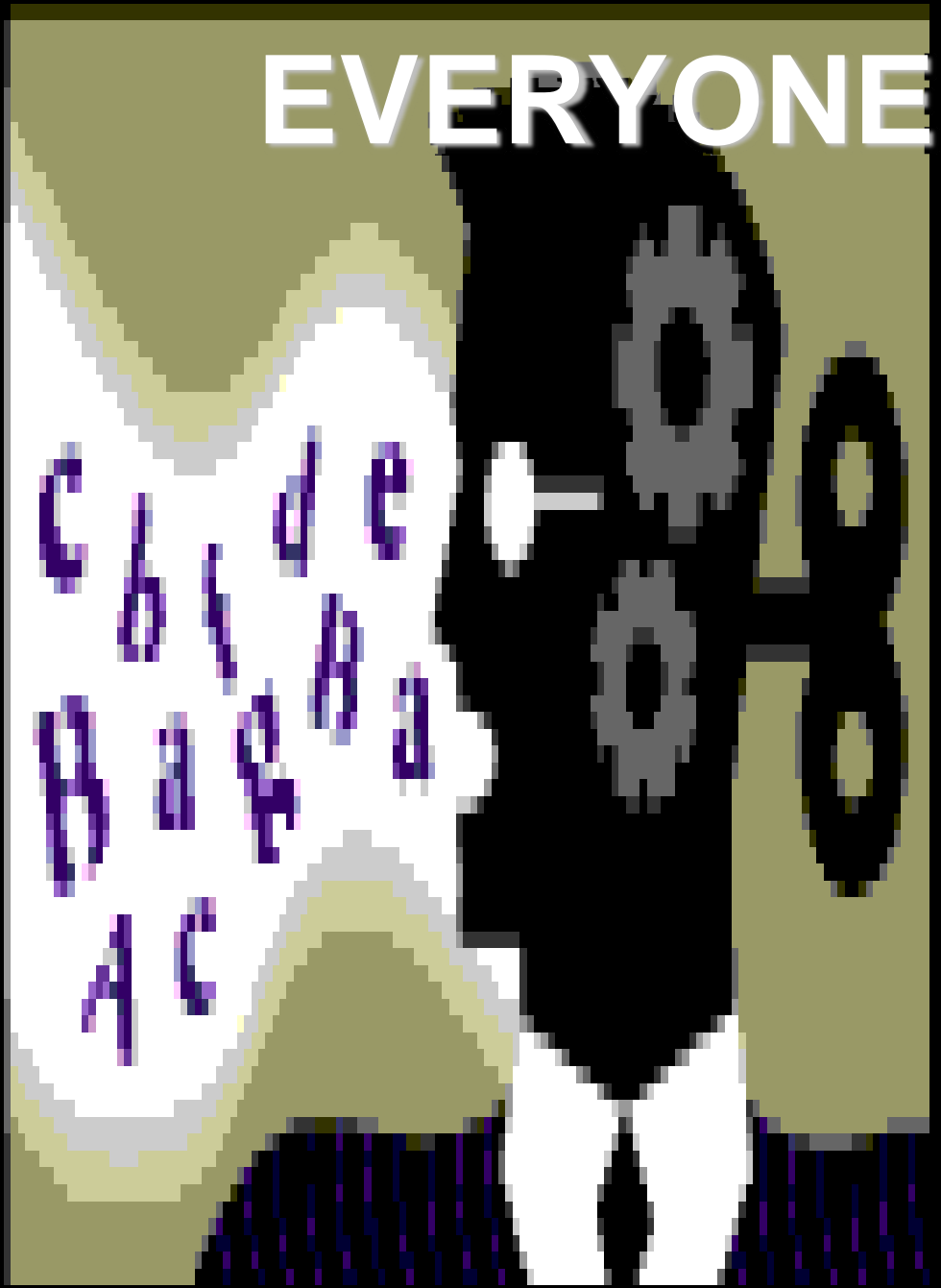
- Grasp the danger posed by **group bias**.
- Understand the risks associated with the **herd instinct** or conformism.

BARRIERS TO CRITICAL THINKING 3: ASSUMPTIONS

- Recognize that some assumptions are warranted by the fact that we have good reasons to believe them.
- Recognize that an unwarranted assumption is something we take for granted without good reason.

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ARGUMENTUM AD POPULUM

("appeal to the people")

Attempting to convince by appealing to the natural desire we all have to be included, or liked, or recognized.

1. **Appeal to Common Practice:** "Hey, everyone speeds. So speeding isn't wrong".
2. **The Fallacy of Popularity:** "Reliable opinion polls show that 70% of all Americans favor the death penalty. If so many people are in favor of it, it has to be right.

ARGUMENT AGAINST THE PERSON (AD HOMINEM)

Attacking the source of an argument instead of the argument itself.

Abusive: Craig says that the government should spend more money on education because doing so would result in a more productive workforce. But Craig is a bleeding-heart, liberal from Seattle -- so you know that his opinion is worthless. (*“Get personal; who cares about the argument!”*)

From Hypocrisy: You've claimed that smoking is bad for one's health; but you smoke too. (*“Practice what you preach!”*)

OVERGENERALIZING

Coming to a conclusion without enough supporting data.

1. We hear about many teenagers using drugs and alcohol, then conclude that the younger generation is going "to pot."
2. We've found school uninteresting and conclude that we will never like to study.
3. We find two red spots on our nose and conclude we have cancer ("catastrophizing").

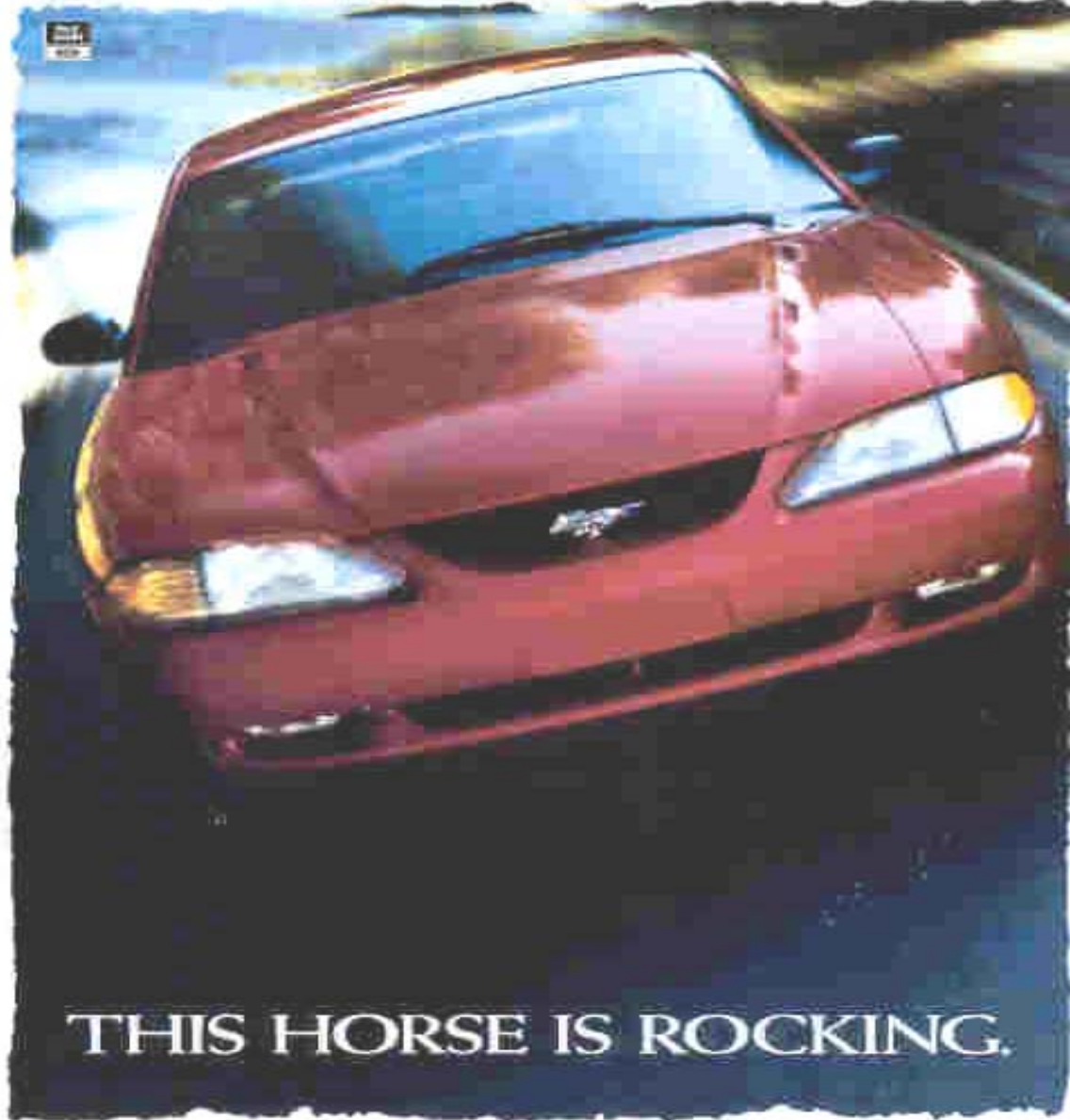
MUSTANG DREAMS!

Sex Appeal?

In the Ford Mustang ad the lonely accountant buys a Mustang, and suddenly girls chase him down the street.

Nobody thinks that will happen, right?

Well, sales of Mustangs went up in correlation to the ad campaign.



MUSTANG GT

HAVE YOU DRIVEN A FORD LATELY?



THE DREAMLIKE PROMISE

- "When was the last time you felt this comfortable in a relationship?" ~ (An ad for sneakers)
- "You can love it without getting your heart broken." ~ (An ad for a car)
- "Until I find a real man, I'll settle for a real smoke." ~ (A woman in a cigarette ad)

TOUCHY TOPICS & SORE POINTS

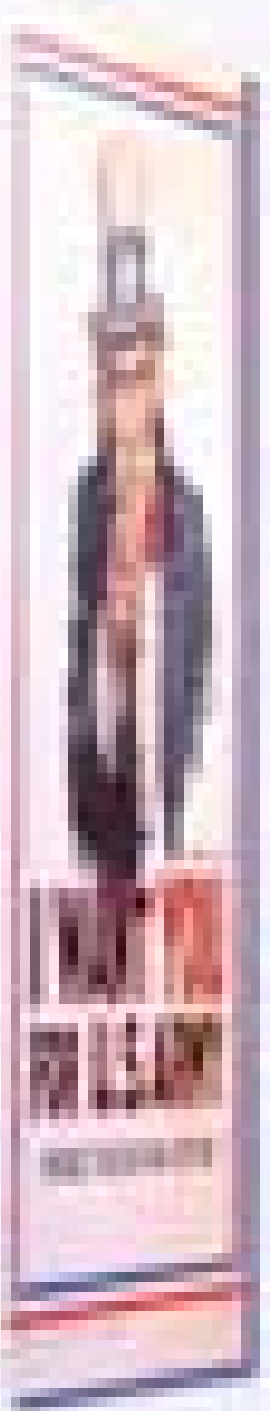
The stuff that can set our minds reeling and mess up our thinking.

- Making a mistake or being surprised may shut down your brain for a moment;
- Being laughed at or treated with disrespect may infuriate you;
- Being envious or jealous may distract your thoughts.

It is important to understand what is happening to our thinking in these situations, in order to gain some control and peace of mind.

I heard that ...





"The world needs leaders ...
who possess opinions and a will ...
who will not lose their individuality
in a crowd ...
who will not say they do it 'because
everybody else does it'
...

I WANT YOU

... who are not ashamed or afraid to stand
for the Truth when it is unpopular;

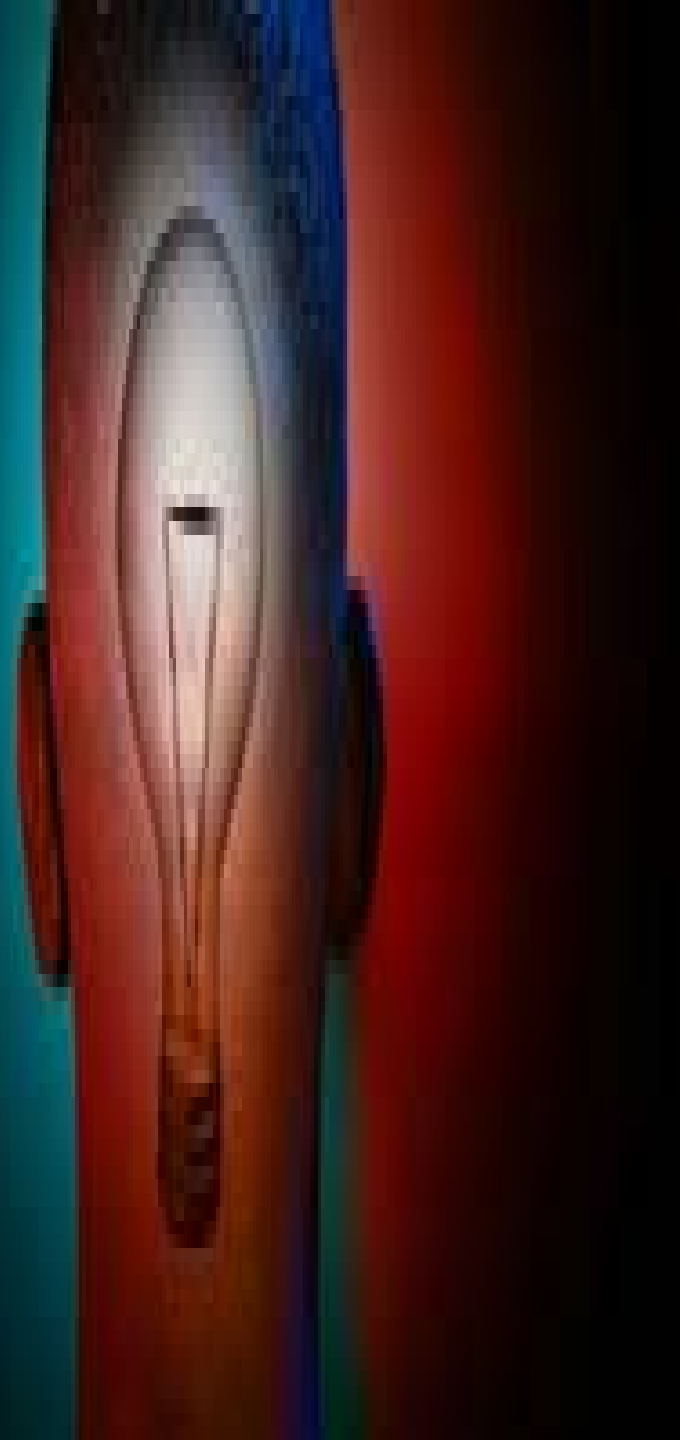
...

who can say 'no' with emphasis,
although the rest of the world says 'yes.'“

~ Ted Engstrom, 1976

CHARACTERISTICS OF CRITICAL THINKERS

- Are honest with themselves
- Resist manipulation
- Look for connections between subjects
- Are intellectually independent
- Ask questions
- Base judgments on evidence
- Overcome confusion



Critical Thinking

Please give us your [feedback](#).