

Week 6

The Parts of Thinking

Next week we focus on the assessment of thinking, on how to apply intellectual standards to the parts of thinking, we begin with a brief discussion of reasoning, the mental process the mind uses to make sense of whatever we seek to understand.

The standards (clarity, precision, accuracy, significance, relevance, completeness, logic, fairness, breadth, depth)

must be applied to

the elements (purposes, inferences, questions, concepts, points of view, implications, information, assumptions)

as we learn to develop

intellectual traits (intellectual humility, intellectual perseverance, intellectual autonomy, confidence in reason, intellectual integrity, intellectual empathy, intellectual courage, fairmindedness).

- Reasoning occurs whenever the mind draws conclusions on the basis of reasons.
- The less conscious we are of how we are thinking, the easier it is to make some mistake or error.

Reasoning is everywhere in human life

Practice:

Make a list of all the things you did today. Then, for each act, figure out the thinking that led you to act or guided you while acting. For example, when you left your house this morning, you may have stopped at the store for food. This act makes no sense unless you somehow had come to the conclusion that you needed some food. Then, while at the store, you bought a certain number of items. This action resulted from the tacit conclusion you came to that you needed some items and not others.

Realize that every time you make a decision, that decision represents a view or conclusion you reasoned to. For each action you identify, answer these two questions: (1) What exactly did I do? And (2) What thinking is presupposed in my behavior? Write out your answer or explain orally.

Reasoning has parts

Parts of thinking

Whenever we think, we think for a **purpose**

Within a **point of view**

Based on assumptions
Leading to implications and consequences
We use data, facts , and experiences
To make inferences and judgments
Based on concepts and theories
To answer a question or solve a problem

An everyday example: Jack and Jill

Jack: Flirting. . . flirting! I was not flirting!

Jill: What would you call it?

Jack: Being friendly. I was being friendly.

Jill: When a guy spends the whole evening focused on one girl, sits very close to her, looks at her in a romantic way, and periodically touches her in supposedly casual ways, he is engaged in what can only be called flirting.

Jack: And when a girl spends her whole evening watching everything her boyfriend does, collecting evidences as if preparing for a trial, a boyfriend who has always been faithful to her, she is engaged in what can only be called paranoia.

Jill: Paranoid! How dare you call me that!

Well, how else can I describe your behavior? You're obviously distrustful and insecure. You're accusing me without a good reason for doing so.

Jill: Don't act like this is the only time you have ever flirted. I have heard that you played the field before we got together.

Jack: And I have heard about your possessiveness and jealousy from your friends. I think you need to deal with your own problems before you attack me. If you ask me, I think you need counseling.

Jill: You're nothing but a typical male. You gauge your manhood on how many girls you can conquer. You're so focused on getting strokes for that male ego of yours that you can't see or admit what you're doing. If you aren't willing to change, I don't see how we can have a relationship!

Jack: I don't see how we can have a relationship either—not because I'm unfaithful but because you're paranoid. And unless I get an apology, I'm out of here!

Purpose

Problem

Conclusions

Facts

Assumptions

Concepts

Implications

Point of view

How the parts of thinking fit together

- Our purpose affects the manner in which we ask questions
- The manner in which we ask questions affects the information we gather
- The information we gather affects the way we interpret it
- The way we interpret information affects the way we conceptualize it
- The way we conceptualize information affects the assumption we make
- The assumptions we make affect the implications that follow from our thinking
- The implications that follow from our thinking affect the way we see things—our point of view.

Practice

Select an important conclusion that you have reasoned to—for example, your decision to go to NUTN. Identify the circumstances under which you made that decision and some of the inferences you made in the process (about the likely costs and advantages). State the likely implications of your decision, the consequences it has had and will have in your life, the information you took into account in deciding to go to NUTN, the way you expressed the question to yourself, and the way you looked at your life and your future (while reasoning through the question). See whether you can grasp the interrelationship of all these elements in your thinking.

Critical thinkers think to some purpose

- Susan Stebbing: “To think logically is to think relevantly to the purpose that initiated the thinking: all effective thinking is directed to an end.”
- One problem with human thinking is that we sometimes pursue contradictory ends.

Practice:

Identify five things you think about a lot. Then comment on how those things are tied to your fundamental purposes. For example, if you spend a considerable amount of time thinking about people with whom you would like to explore a relationship, one of our purposes is probably to find a meaningful relationship. Or, if you spend a lot of time thinking about your future, one of your purposes is probably to figure out how you can prepare yourself to succeed.

Critical thinkers take command of concepts

- We approach virtually everything in our experience as something that can be given meaning by the power of our mind to create a concept and to make inferences on the basis of it—hence to create further concepts.
- You must develop the ability to mentally “remove” this or that concept from the things named by the concept and try out alternative ideas. As general semanticists often say, “The word is not the thing.” If you are trapped in one set of concepts (ideas, words), you can think of things in only one way.

Practice

Do not look into a dictionary. Explain your understanding of each concept pair

1. Clever/cunning
2. Power/control
3. Love/ romance
4. Believe/ know
5. Socialize/ educate
6. Selfish/ self-motived
7. Friend/ acquaintance
8. Anger/ rage
9. Jealousy/ envy

Critical Thinkers access information

Inert information: taking into the mind information that, though memorized, we do not understand—despite the fact that we think we do.

Practice

What is the difference between a government of the people and a government for the people?

What is the difference between a government for the people and a government by the people?

What is the difference between a government by the people and a government of the people?

What exactly is meant by “the people”?

Activated ignorance

Taking into the mind, and actively using information that is false, although we think it is true.

Think of the consequences of the Nazi idea that Germans were the master race and Jews an inferior race.

Consider automobile drivers who are confident they can drive safely.

Practice:

When you were growing up, you probably picked up some activated ignorance from your peer group. Think of things you learned “the hard way.” (At one time I thought this was true. Now I know it is false.)

Activated Knowledge

Taking into the mind and actively using information that is true and, when understood insightfully, leads us by implication to more and more knowledge.

In search of facts: key questions

To what extent could I test the truth of this claim by direct experience?

To what extent is this belief consistent with what I know to be true or in which I have justified confidence?

How does the person who advances this claim support it?

Is there a definite system or procedure for assessing claims of this sort?

Does the acceptance of this information advance the vested interest of the person or group asserting it?

Is the person asserting this information made uncomfortable by having it questioned?

Practice

Decide whether the following claims are true or false. Explain your reasoning.

1. A friend of yours claims that astrology is accurate because he has used it to figure out why people he knew were behaving as they were. He also claims that you can use it to predict people's most likely behavior, including deciding whom it would make sense to marry (or not to marry).
2. You hear some say, "science should use statements from the Bible to help assess scientific findings because anything that contradicts the Bible (the word of God) must be false."
3. You read about a person who is reported to have returned from the dead as the result of being resuscitated after a heart attack. The person says there is definitely a spirit world because he met a spirit while he was dead.
4. You hear a woman say that no man can truly understand a woman because there is no way, as a man, that he can have the experience of a woman.

Critical thinkers distinguish between inferences and assumptions

Our inferences result from the assumptions we have made or are making practice

If it were noon, what might you infer?

If Jill is in the eighth grade?

If it were noon and you inferred that it was time for lunch, what did you assume?

If Jack comes to school with a bump on his head and you infer that he must have been hit, what did you assume?

If you come at me with a knife in your hand, what might I infer?

"I heard a scratch at the door. I got up to let the cat in." On what assumption is my inference based?

Situation: A man is lying in the gutter. Inference: That man needs help. Assumption?

Situation: A man is lying in the gutter. Inference: That man is a bum. Assumption?

You see a woman in a wheelchair. Inference? Assumption?

A police officer trails your car closely for several blocks. Inference? Assumption?

Critical thinkers think through implications

- The ability to distinguish between what a statement or situation actually implies and what people may merely (and wrongly) infer from it.

Every time you drive your car, one possible implication is. . . .

If you drink heavily and drive very fast on a crowded roadway in the rain, one probable implication is. . . .

"Why didn't you clean your room?" (asked calmly) implication?

"Why didn't you clean your room?" (shouted aggressively) implication?

Practice:

Think of a problem for which you need to find a solution or a decision you need to make.

1. The problem or decision I am facing is. . .
2. Some potential solutions to the problem or decisions I might make are. . .
3. For each of these solutions or decisions, some implications that would logically follow from my acting upon the solution or decision are. . .

Critical thinkers think across points of view

The best thinkers have a distinctive point of view concerning themselves. They see themselves as competent learners.