Chapter 7

The Standards for Thinking

O ne of the fundamentals of critical thinking is the ability to assess one's own reasoning. To be good at assessment requires that we consistently take apart our thinking and examine the parts with respect to standards of quality. We do this using criteria based on clarity, accuracy, precision, relevance, depth, breadth, logicalness, and significance. Critical thinkers recognize that, whenever they are reasoning, they reason to some purpose (element of reasoning). Implicit goals are built into their thought processes. But their reasoning is improved when they are clear (intellectual standard) about that purpose or goal. Similarly, to reason well, they need to know that, consciously or unconsciously, they are using information (element of reasoning) in thinking. But their reasoning improves if and when they make sure that the information they are using is accurate (intellectual standard).

Put another way, when we assess our reasoning, we want to know how well we are reasoning. We do not identify the elements of reasoning for the fun of it. Rather, we assess our reasoning using intellectual standards because we realize the negative consequences of failing to do so. In assessing our reasoning, then, we recommend these intellectual standards as minimal:

- Clarity
- Relevance
- Logicalness
- Accuracy
- Depth

- Significance

- Precision

- Breadth

- Fairness

These are not the only intellectual standards a person might use. They are simply among those that are most fundamental. In this respect, the elements of thought are more basic, because the eight elements we have identified are universal—present in all reasoning of all subjects in all cultures. On the one hand, one cannot reason with no information about no question from no point of view with no assumptions. On the other hand, there are a wide variety of intellectual standards from which to choose—such as credibility, predictability, feasibility, and completeness—that we don't use routinely in assessing reasoning.

As critical thinkers, then, we think about our thinking with these kinds of questions in mind: Am I being clear? Accurate? Precise? Relevant? Am I thinking logically? Am I dealing with a matter of significance? Is my thinking justifiable in context? Typically, we apply these standards to one or more elements.

Test the Idea
Beginning to Think About Intellectual Standards

Consider the list of intellectual standards below. Then try to identify times in your work when you have explicitly focused on them. For example, can you think of a time in a meeting where you focused on clarifying what someone was saying? Can you think of a time when you questioned the relevance of what someone was saying (e.g., "How is this relevant to the issue we are discussing?") Can you think of a time when you questioned the fairness of a potential decision?

Here are the standards to consider:

- Clarity
- Relevance
- Logicalness
- Accuracy
- Depth
- Significance
- Precision
- Breadth
- Fairness

Taking a Deeper Look at Universal Intellectual Standards

Thinking critically requires command of fundamental intellectual standards. Critical thinkers routinely ask questions that apply intellectual standards to thinking. The ultimate goal is for these questions to become so spontaneous in thinking that they form a natural part of our inner voice, guiding us to better and better reasoning. In this section, we focus on the standards and questions that apply across the various facets of your life.

Clarity

Questions that focus on clarity include:

- Could you elaborate on that point?

- Could you express that point in another way?

- Could you give me an illustration?

- Could you give me an example?

- Let me state in my own words what I think you just said. Tell me if I am clear about your meaning.

Clarity is a gateway standard. If a statement is unclear, we cannot determine whether it is accurate or relevant. In fact, we cannot tell anything about it because we don't yet know what is being said. For example, the question "What can be done about the education system in America?" is unclear. To adequately address the question, we would need a clearer understanding of what the person asking the question is considering the "problem" to be. A clearer question might be, "What can educators do to ensure that students learn the skills and abilities that help them function successfully on the job and in their daily decision-making?" This question, because of its increased clarity, provides a better guide to thinking. It lays out in a more definitive way the intellectual task at hand.

Test the Idea
Converting Unclear Thoughts to Clear Thoughts

Can you convert an unclear thought to one that is clear? Suppose you are engaged in a discussion about welfare and one person says, "Let's face it—welfare is corrupt!" What does this mean? What could it mean?

It could mean some very different things. It could mean, "The very idea of giving people goods and services they have not personally earned is equivalent to stealing money from those who have earned it" (a moral claim). Or it could mean, "The welfare laws have so many loopholes that people are receiving money and services that were not envisioned

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when the laws were initially formulated" (a legal claim). Or it could mean, "The people who receive welfare so often lie and cheat to falsify the documents they submit that they should be thrown in jail" (a claim about the ethical character of the recipients).

Now, take this statement: "She is a good employee." This statement is unclear. Because we don't know the context within which this statement is being made, we aren't sure in what way "she" is "good." Formulate three possible meanings of this statement.

Now take the statement, "He is a jerk." Again, formulate three possible different meanings of this statement.

When you become skilled in differentiating what is clear and what is unclear, you will find that much of the time we are unclear both about what we are thinking and about what we are saying.

Clarifying a Problem You Face at Work

Now take a problem you are currently facing at work. Write down the problem as clearly as possible. Then see if you can reformulate the problem so that it is even clearer. Reformulate the problem until you are very clear about the issue you are facing.

Accuracy

Questions focusing on making thinking more accurate include:

- Is that really true?

- How could we check to see if that is accurate?

- How could we find out if that is true?

A statement may be clear but not accurate, as in, "Most dogs weigh more than 300 pounds." To be accurate is to represent something in accordance with the way it actually is. People often present or describe things or events in a way that is not in accordance with the way things actually are. People frequently misrepresent or falsely describe things, especially when they have a vested interest in the description. Advertisers often do this to keep a buyer from seeing the weaknesses in a product. If an advertisement states, "Our water is 100% pure" when, in fact, the water contains trace amounts of chemicals such as chlorine and lead, it is inaccurate. If an advertisement says, "this bread contains 100% whole wheat" when the whole wheat has been bleached and enriched and the bread contains many additives, the advertisement is inaccurate.

Good thinkers listen carefully to statements and, when there is reason for skepticism, question whether what they hear is true and accurate. In the same way, they question the extent to which what they read is correct, when asserted as fact.

Critical thinking, then, implies a healthy skepticism about public descriptions as to what is and is not fact.

At the same time, because we tend to think from a narrow, self-serving perspective, assessing ideas for accuracy can be difficult. We naturally tend to believe that our thoughts are automatically accurate just because they are ours, and therefore that the thoughts of those who disagree with us are inaccurate. We also fail to question statements that others make that conform to what we already believe, while we tend to question statements that conflict with our views. But as critical thinkers, we force ourselves to accurately assess our own views as well as those of others. We do this even if it means facing deficiencies in our thinking.

Test the Idea
Recognizing Inaccurate Statements

Can you identify a statement that you heard recently that was clear but inaccurate? You will find an abundance of examples in everyday statements that people often make in praise or criticism. People in general have a tendency to make two kinds of inaccurate statements: false positives about the people they personally like (these would be untrue positive statements about people they like) and false negatives about the people they personally dislike (untrue negative things about people they don't like). Politically motivated statements tend to follow a similar pattern. See if you can think of an example of an inaccurate statement from your recent experience. Write out your answer.

In Search of the Facts

One of the most important critical thinking skills is the skill of assessing the accuracy of "factual" claims (someone's assertion that such-and-so is a fact).

In an ad in the *New York Times* (Nov. 29, 1999, p. A15), a coalition of 60 nonprofit organizations accused the World Trade Organization (a coalition of 134 nation states) of operating in secret, undermining democratic institutions and the environment. In the process of doing this, the nonprofit coalition argued that the working class and the poor have not significantly benefited as a result of the last 20 years of rapid expansion of global trade. They alleged, among other things, the following facts:

1. "American CEOs are now paid, on average, 419 times more than line workers, and the ratio is increasing."
2. "Median hourly wages for workers are down by 10% in the last 10 years."
3. "The top 20% of the U.S. population owns 84.6% of the country's wealth."
4. "The wealth of the world's 475 billionaires now equals the annual incomes of more than 50% of the world population combined."

Using whatever sources you can find (including the Website of the Turning Point Project, the nonprofit coalition, www.turnpoint.org), discuss the probable accuracy of the factual claims. For example, visit the Web site of the World Trade Organization (www.wto.org). They might challenge some of the facts alleged or advance facts of their own that put the charges of the nonprofit coalition into a different perspective.

Precision

Questions focusing on making thinking more precise include:

- Could you give me more details?

- Could you be more specific?

A statement can be both clear and accurate but not precise, as in "Jack is overweight." (We don't know how overweight Jack is—1 pound or 500 pounds.) To be precise is to give the details needed for someone to understand exactly what is meant. Some situations don't call for detail. If you ask, "Is there any milk in the refrigerator?" and I answer "Yes," both the question and the answer are probably precise enough for the circumstance (though it might be relevant to specify how much milk is there). Or imagine that you are ill and go to the doctor. He wouldn't say, "Take 1.4876946 antibiotic pills twice per day." This level of specificity, or precision, would be beyond that which is useful in the situation.

In many situations, however, specifics are essential to good thinking. Let's say that your friend is having financial problems and asks you, "What should I do about my situation?" In this case, you want to probe her thinking for specifics. Without the full specifics, you could not help her. You might ask questions such as, "What precisely is the problem? What exactly are the variables that bear on the problem? What are some possible solutions to the problem-in detail?

Test the Idea
Recognizing when Precision is Needed

Can you think of a recent situation at work or at home in which you needed more details to figure something out, a circumstance in which, because you didn't have the details, you experienced some negative consequences? For example, have you ever been given directions to someone's house, directions that seemed precise enough at the time? Yet when you tried to find the person's house, you got lost because of lack of details in the directions?

First identify a situation in which the details and specifics were important (for example, in buying a house, a computer, or a car). Then identify the negative consequences that resulted because you didn't get the details you needed to think well in the situation.

Relevance

Questions focusing on relevance include:

- How is this idea connected to the question?

- How does that bear on the issue?

- How does this idea relate to this other idea?

- How does your question relate to the issue we are dealing with?

A statement can be clear, accurate, and precise, but not relevant to the question at issue. For example, students often think the amount of effort they put into a course should contribute to raising their grade in the course. Often, however, effort does not measure the quality of student learning and therefore is irrelevant to the grade. Something is relevant when it is directly connected with and bears upon the issue at hand. Something is also relevant when it is pertinent or applicable to a problem we are trying to solve. Irrelevant thinking encourages us to consider what we should set aside. Thinking that is relevant stays on track. People are often irrelevant in their thinking because they lack discipline in thinking. They don't know how to analyze an issue for what truly bears on it. Therefore, they aren't able to effectively think their way through the problems and issues they face.

Test the Idea
Recognizing Irrelevant Statements

Can you identify a statement you heard recently that was clear, accurate, and sufficiently precise, but irrelevant to the circumstance, problem, or issue? Though we all sometimes stray from a question or task, we need to be sensitive to when failure to stay on task may have a significant negative implication.

Identify, first, circumstances in which people tend to introduce irrelevant considerations into a discussion (for example, in meetings, in response to questions in class, in everyday dialogue when they have a hidden agenda—or simply want to get control of the conversation for some reason).

Depth

Questions focusing on depth of thought include:

- How does your answer address the complexities in the question?

- How are you taking into account the problems in the question?

- How are you dealing with the most significant factors in the problem?

We think deeply when we get beneath the surface of an issue or problem, identify the complexities inherent in it, and then deal with those complexities in an intellectually responsible way. Even when we think deeply and deal well with the complexities in a question, we may find the question difficult to address. Still, our thinking will work better for us when we can recognize complicated questions and address each area of complexity in it.

A statement can be clear, accurate, precise, and relevant, but superficial—lacking in depth. Let's say you are asked what should be done about the problem of drug use in America and you answer by saying, "Just say no." This slogan, which was for several years used to discourage children and teens from using drugs, is clear, accurate, precise, and relevant. Nevertheless, it lacks depth because it treats an extremely complex issue superficially—i.e. it hardly addresses the pervasive problem of drug use among people in our culture. It does not address the history of the problem, the politics of the problem, the economics of the problem, the psychology of addiction, and so on.

Test the Idea
Recognizing Superficial Approaches

Identify a problem you have experienced at work where the solutions presented to the problem were superficial in nature. If decisions were made based on this surface thinking, what were the consequences that followed from the decision? If final decisions have not yet been made on this issue, try to think of some implications (or potential consequences) of following the superficial thinking that has been presented to deal with the problem.

Breadth

Questions focusing on making thinking broader include:

- Do we need to consider another point of view?

- Is there another way to look at this question?

- What would this look like from a conservative standpoint?

- What would this look like from the point of view of…?

A line of reasoning may be clear, accurate, precise, relevant, and deep, but lack breadth. Examples are arguments from either the conservative or the liberal standpoint that get deeply into an issue but show insight into only one side of the question.

When we consider the issue at hand from every relevant viewpoint, we think in a broad way. When multiple points of view are pertinent to the issue, yet we fail to give due consideration to those perspectives, we think myopically, or narrow-mindedly. We do not try to understand alternative, or opposing, viewpoints.

Humans are frequently guilty of narrow-mindedness for many reasons: limited education, innate socio-centrism, natural selfishness, self-deception, and intellectual arrogance. Points of view that significantly disagree with our own often threaten us. It's much easier to ignore perspectives with which we disagree than to consider them, when we know at some level that to consider them would mean to be forced to reconsider our views.

Let's say, for example, that you like to watch/listen to TV in the bedroom as a way of falling to sleep. But let's say that your spouse has difficulty falling to sleep while the TV is on. The question at issue, then, is "Should you have the TV on in the bedroom while you and your spouse are falling asleep?" It is easy enough to rationalize your "need" to have the TV on every night while falling asleep, by saying such things to your spouse as "It is impossible for me to fall asleep without the TV on. And, after all, I really don't ask that much of you. Besides, you don't seem to have any real problem falling to sleep with the TV on." Yet both your viewpoint and your spouse's are relevant to the question at issue. When you recognize your spouse's viewpoint as relevant, and then intellectually empathize with it—when you enter her/his way of thinking so as to *actually understand* it—you will be thinking broadly about the issue. You will realize common consideration would require you to come to an agreement that fully takes into account both ways of looking at the situation. But if you don't force yourself to enter her/his viewpoint, you do not have to change your self-serving behavior. One of the primary mechanisms the mind uses to avoid giving up what it wants is unconsciously to refuse to enter viewpoints that differ from its own.

Test the Idea
Thinking Broadly About an Issue

Take the question, "Is abortion morally justified?" Some argue that abortion is not morally justifiable, and others argue that it is. Try to state and elaborate on each of these points of view in detail. Articulate each point of view objectively, regardless of your personal views. Present each point of view in such a way that a person who actually takes that position would assess it as accurate. Each line of reasoning should be clear, accurate, precise, relevant, and deep. Try not to take a position on the issue yourself.

Logicalness

Questions that focus on making thinking more logical include:

- Does all of this fit together logically?

- Does this really make sense?

- Does that follow from what you said?

- How does that follow from the evidence?
- Before, you implied this, and now you are saying that. I don't see how both can be true.

When we think, we bring together a variety of thoughts in some order. When the combined thoughts are mutually supporting and make sense in combination, the thinking is logical. When the combination is not mutually supporting, is contradictory in some sense, or does not make sense, the combination is not logical. Because humans often maintain conflicting beliefs without being aware that we are doing so, it is not unusual to find inconsistencies in human life and thought.

Let's say we know, by looking at standardized tests of students in schools and the actual work they are able to produce, that for the most part students are deficient in basic academic skills such as reading, writing, speaking, and the core disciplines such as math, science, and history. Despite this evidence, teachers often conclude that there is nothing they can do to change their instruction to improve student learning (and in fact that there is nothing fundamentally wrong with the way they teach). Given the evidence, this conclusion seems illogical. The conclusion doesn't seem to follow from the facts.

Let's take another example. Say that you know a person who has had a heart attack, and her doctors have told her she must be careful what she eats. Yet she concludes that what she eats really doesn't matter. Given the evidence, her conclusion is illogical. It doesn't make sense.

Test the Idea
Recognizing Illogical Thinking

Identify a situation at work where decisions made seemed to be based on illogical thinking—thinking that didn't make sense to you.

1. What was the situation?
2. What was the thinking in the situation that you consider to be illogical? Why do you think it was illogical?
3. What were some consequences that followed from the illogical thinking?

Significance

Questions that focus on making thinking more significant include:

- What is the most significant information we need to address this issue?
- How is that fact important in context?
- Which of these questions is the most significant?
- Which of these ideas or concepts is the most important?

When we reason through issues, we want to concentrate on the most important information (relevant to the issue) in our reasoning and take into account the most important ideas or concepts. Too often we fail in our thinking because we do not recognize that, though many ideas may be relevant to an issue, it does not follow that all are equally important. In a similar way, we often fail to ask the most important questions and are trapped by thinking only in terms of superficial questions, questions of little weight. In college, for example, few students focus on important questions such as, "What does it mean to be an educated person? What do I need to do to become educated?" Instead, students tend to ask questions such as, "What do I need to do to get an "A" in this course? How many pages does this paper have to be? What do I have to do to satisfy this professor?"

In our work, we too often focus on that which is pressing, at the expense of focusing on that which is significant. In our personal lives, we also often focus on the trivial mundane details, rather than the important bigger picture of our lives. Very few people, for example, have seriously thought about questions such as:

- What is the most important thing I could do in my life?

- What are the most important things I should try to accomplish this week, this month, this year?

- How can I help my children become kind, caring, contributing members of society?

- How can I best relate to my spouse so that she understands the deep love I feel for her?

- How can I keep my mind focused on the things that matter most to me (rather than the unimportant trivial details)?

Test the Idea
Focusing on Significance in Thinking

Think about your life, about the way you spend your time, in terms of the amount of time you spend on significant versus trivial things. As you do so, write the answers to these questions:

1. What is the most important goal or purpose you should focus on at this point in your life? Why is this purpose important? How much time do you spend focused on it?

2. What are the most trivial or superficial things you spend time focused on (things such as your appearance, impressing your friends or colleagues, spending money on things you don't need, chatting about insignificant things at parties, and the like)?

3. What can you do to reduce the amount of time you spend on the trivial, and increase the amount of time you spend on the significant?

Fairness

Questions that focus on ensuring that thinking is fair include:

- Is my thinking justified given the evidence?
- Am I taking into account the weight of the evidence that others might advance in the situation?
- Are these assumptions justified?
- Is my purpose fair given the implications of my behavior?
- Is the manner in which I am addressing the problem fair—or is my vested interest keeping me from considering the problem from alternative viewpoints?
- Am I using concepts justifiably, or am I using them unfairly in other to manipulate someone (and selfishly get what I want)?

When we think through problems, we want to make sure that our thinking is justified. To be justified is to think fairly in context. In other words, it is to think in accord with reason. If you are vigilant in using the other intellectual standards covered thus far in the chapter you will (by implication) satisfy the standard of fairness. We include fairness in its own section because of the powerful nature of self-deception in human thinking. For example, we often deceive ourselves into thinking that we are being fair and justified in our thinking when in fact we are refusing to consider significant relevant information that would cause us to change our view (and therefore not pursue our selfish interest). We often pursue unfair purposes in order to get what we want even if we have to hurt others to get it. We often use concepts in an unjustified way in order to manipulate people. And we often make unjustified assumptions, unsupported by facts, which then lead to faulty inferences.

Let's focus on an example where the problem is unjustified thinking owing to ignoring relevant facts. Let's say, for instance, that Kristi and Abbey share the same office. Kristi is cold natured and Abbey is warm-natured. During the winter, Abbey likes to have the window in the office open while Kristi likes to keep it closed. But Abbey insists that it's "extremely uncomfortable" with the window closed. The information she is using in her reasoning all centers around her own point of view—that she is hot, that she can't work effectively if she's hot, that if Kristi is cold she can wear a sweater. But the fact is that Abbey is not justified in her thinking. She refuses to enter Kristi's point of view, to consider information supporting Kristi's perspective, because to do so would mean that she would have to give something up. She would have to adopt a more reasonable, or fair, point of view.

When we reason to conclusions, we want to check to make sure that the assumptions we are using to come to those conclusions are justifiable given the facts of the situation. For example, all of our prejudices and stereotypes function as assumptions in thinking. And no prejudices and stereotypes are justifiable given their very nature. For example, we often make broad sweeping generalizations such as:

- Liberals are soft on crime
- Elderly people aren't interested in sex
- Young men are only interested in sex
- Jocks are cool
- Blondes are dumb
- Cheerleaders are airheads
- Intellectuals are nerds

The problem with assumptions like these is that they cause us to make basic—and often serious—mistakes in thinking. Because they aren't justifiable, they cause us to prejudge situations and people and draw faulty inferences—or conclusions—about them. For example, if we believe that all intellectuals are nerds, whenever we meet an intellectual we will infer that he or she is a nerd (and act unfairly toward the person).

In sum, justifiability, or fairness, is an important standard in thinking because it forces us to see how we are distorting our thinking in order to achieve our self-serving ends (or to see how others are distorting their thinking to achieve selfish ends).

Test the Idea
Are You Always Fair?

All of us want to see ourselves as imminently fair. Yet because we are by nature self-serving, we are not always able to consider the rights and needs of others in equivalent terms as we do our own. Indeed, one of the most difficult things for people to do is identify times when they are unfair. Yet highly skilled thinkers, aware of this human tendency, routinely search for problems in their thinking.

In the spirit of this idea, try to think of several times in the past few weeks where you were not fair. You are looking for situations where your behavior was selfish or self-serving and as a result, you negated another person's desires or rights. You placed your desires first. Remember that the more examples you can think of, the better. Also remember that, because of our native egocentrism, we are highly motivated to hide our unfair thoughts and behavior. Try not to fall into this trap.

Bringing Together the Elements of Reasoning and the Intellectual Standards

We have considered the elements of reasoning and the importance of being able to take them apart, to analyze them so we can begin to recognize flaws in our thinking. We also have introduced the intellectual standards as tools for assessment. Now let us look at how the intellectual standards are used to assess the elements of reason (Table 7.1 & Figure 7.1).

| **Table 7.1**	Powerful questions are implied by the intellectual standards. Critical thinkers routinely ask them.

Clarity

Could you elaborate?
Could you illustrate what you mean?
Could you give me an example?

Accuracy

How could we check on that?
How could we find out if that is true?
How could we verify or test that?

Precision

Could you be more specific?
Could you give me more details?
Could you be more exact?

Depth

What factors make this a difficult problem?
What are some of the complexities of this question?
What are some of the difficulties we need to deal with?

Relevance

How does that relate to the problem?
How does that bear on the question?
How does that help us with the issue?

Logicalness

Does all of this make sense together?
Does your first paragraph fit in with your last?
Does what you say follow from the evidence?

Significance

Is this the most important problem to consider?
Is this the central idea to focus on?
Which of these facts are the most important?

Breadth

Do we need to look at this from another perspective?
Do we need to consider another point of view?
Do we need to look at this in other ways?

Table 7.1	Powerful questions are implied by the intellectual standards. Critical thinkers routinely ask them. *(continued)*

Fairness

Is my thinking justifiable in context?
Are my assumptions supported by evidence?
Is my purpose fair given the situation?
Am I using my concepts in keeping with educated usage or am I distorting them to get what I want?

Figure 7.1 Critical thinkers routinely apply the intellectual standards to the elements of reasoning.
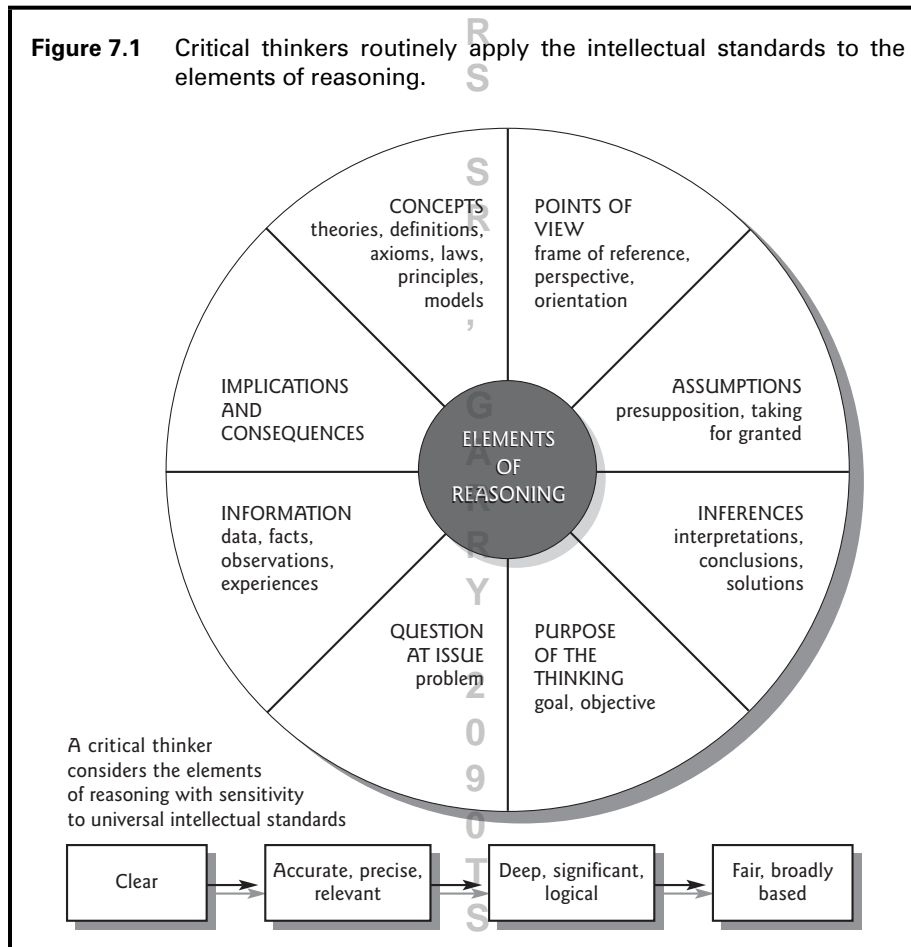
Purpose, Goal, or End in View

Whenever we reason, we do so to some end, to achieve an objective, to satisfy some desire or fulfill a need. One source of problems in human reasoning is traceable to defects at the level of goal, purpose, or end. If the goal is unrealistic, for example, or contradictory to other goals we have, if it is confused or muddled, the reasoning used to achieve it will suffer as a result.

As a developing critical thinker, then, you should get in the habit of explicitly stating the purposes you are trying to accomplish. You should strive to be clear about your purpose in every situation. If you fail to stick to your purpose, you are unlikely to achieve it. Let's say that your purpose in parenting is to help your children develop as life-long learners and contributing members of society. If you keep this purpose clearly in mind and consistently work to achieve it, you are more likely to be successful. But it is easy to lose sight of such an important purpose in the daily life of dealing with children. It is all too easy to get pulled into daily battles over whether a child's room is kept clean, whether they wear clothes considered "appropriate," whether they can get their nose pierced or their stomach tattooed. To achieve your purpose, you must revisit again and again what it is you are trying to accomplish. You must ask yourself on a daily basis questions like, "What have I done today to help my child develop as a rational, caring person?"

As an employee, you can begin to ask questions that improve your ability to focus on purpose in your work. For example: Am I clear as to my purpose—in this meeting, in this project, in dealing with this issue, in this discussion? Can I specify my purpose precisely? Is my purpose a significant one? Realistic? Achievable? Justifiable? Do I have contradictory purposes?

Test the Idea
Bringing Intellectual Standards to Bear Upon Your Purpose

Think of an important problem in your life. This can be a problem in a personal relationship, at your place of work, etc. Now state your purpose in the situation clearly and precisely. What exactly are you trying to accomplish? Is your purpose fair, or justifiable? Is it realistic?

Question at Issue or Problem to Be Solved

Whenever you attempt to reason something through, there is at least one question to answer—one question that emerges from the problem to be solved or issue to resolve. An area of concern in assessing reasoning, therefore, revolves around the very question at issue.

An important part of being able to think well is assessing your ability to formulate a problem in a clear and relevant way. It requires determining whether the question

you are addressing is an important one, whether it is answerable, whether you understand the requirements for settling the question, for solving the problem.

As an employee, you can begin to ask yourself questions that improve your ability to focus on the important questions in your work. You begin to ask: What is the most fundamental question at issue (in this meeting, in this project, in this discussion)? What is the question, precisely? Is the question simple or complex? If it is complex, what makes it complex? Am I sticking to the question (in this discussion, in this project I am working on)? Is there more than one important question to be considered here (in this meeting, etc.)?

Test the Idea
Bringing Intellectual Standards to Bear Upon the Question at Issue

Go back to the important problem in the previous activity. Now state the problem you are trying to address. Then state the question that emerges from that problem. State your question clearly and precisely. What complexities, if any, are inherent in the problem? Is there more than one question that you need to address to effectively reason through the problem?

Point of View, or Frame of Reference

Whenever we reason, we must reason within some point of view or frame of reference. Any "defect" in that point of view or frame of reference is a possible source of problems in the reasoning.

A point of view may be too narrow, may be based on false or misleading information, may contain contradictions, and may be narrow or unfair. Critical thinkers strive to adopt a point of view that is fair to others, even to opposing points of view. They want their point of view to be broad, flexible, and justifiable, to be clearly stated and consistently adhered to. Good thinkers, then, consider alternative points of view as they reason through an issue.

As an employee, you begin to ask yourself questions that improve your ability to focus on point of view in your work. These questions might be: From what point of view am I looking at this issue? Am I so locked into my point of view that I am unable to see the issue from other points of view? Must I consider multiple points of view to reason well through the issue at hand? What is the point of view of my colleague? How is she seeing things differently than I? Which of these perspectives seems more reasonable given the situation?

> **Test the Idea**
> **Bringing Intellectual Standards to Bear Upon Points of View**
>
> Continue with the problem from the last two activities. Now state the point or points of view that are relevant to the issue at hand. State each point of view clearly and precisely. Make sure you are considering all relevant points of view (that you are thinking broadly), and that you are representing each point of view accurately (even if it means sympathetically expressing a view that you do not personally hold).

Information, Data, Experiences

Whenever we reason, there is some "stuff," some phenomena about which we are reasoning. Any "defect," then, in the experiences, data, evidence, or raw material upon which a person's reasoning is based is a possible source of problems.

Those who reason should be assessed on their ability to give evidence that is gathered and reported clearly, fairly, and accurately. Therefore, as a developing thinker, you should assess the information you use to come to conclusions, whether you are reasoning through issues at work or reasoning through a problem in your personal life. You should assess whether the information you are using in reasoning is relevant to the issue at hand and adequate for achieving your purpose. You should assess whether you are taking the information into account consistently or distorting it to fit your own (often self-serving) point of view.

At work, you can begin to ask yourself questions that improve your ability to focus on information in your work. These questions might be: What is the most important information I need to reason well through this issue? Are there alternate information sources I need to consider? How can I check to see if the information I am using is accurate? Am I sure that all of the information I am using is relevant to the issue at hand?

> **Test the Idea**
> **Bringing Intellectual Standards to Bear Upon the Information You are Using in Your Reasoning**
>
> Continue with the problem you have been working on. Now state the information you are using in your thinking. This could be data, facts, or experiences that, in conjunction with your assumptions, lead you to conclusions. It could come from your experience, word of mouth, research, the media, or other sources. State the information clearly. How could you determine whether the information is accurate and relevant to the question at issue?

Concepts, Theories, Ideas

All reasoning uses some ideas or concepts and not others. These concepts include the theories, principles, axioms, and rules implicit in our reasoning. Any defect in the concepts or ideas of the reasoning is a possible source of problems in our reasoning.

As an aspiring critical thinker, you begin to focus more deeply on the concepts you use. You begin to assess the extent to which you are clear about those concepts, whether they are relevant to the issue at hand, and whether your principles are inappropriately slanted by your point of view. You begin to direct your attention to how you use concepts, what concepts are most important, and how concepts are intertwined in networks.

As a person interested in developing your mind, you begin to ask questions that improve your ability to focus on the importance of concepts in your life. These questions may include: What is the most fundamental concept I am focused on in this situation? How does this concept connect with other key concepts I need to consider? What are the most important theories I need to consider? Am I clear about the important concepts in this meeting? What questions do I need to ask to get clear about the concepts we are discussing?

Test the Idea
Bringing Intellectual Standards to Bear upon the Concepts You Use

Continue with the problem you have been working on. Now state the most important concepts you are using to guide your reasoning. For example, if you are concerned with how you can keep in physical shape while also dedicating enough time to family and work, your key concepts might be physical fitness, good family relationships, and productive work life. (You usually can find the key concepts you are using in your reasoning by looking at your question and purpose.) Elaborate on each of these concepts so you understand exactly how you are using them. State your concepts clearly and precisely.

Assumptions

All reasoning must begin somewhere. It must take some things for granted. Any defect in the assumptions or presuppositions with which reasoning begins is a possible source of problems in the reasoning.

Assessing skills of reasoning involves assessing our ability to recognize and articulate assumptions, again according to relevant standards. Our assumptions may be clear or unclear, justifiable or unjustifiable, consistent or contradictory.

As a person interested in developing your mind, you begin to ask questions that improve your ability to analyze the assumptions you and others are using. These questions could include: What am I taking for granted? Am I justified in taking this

for granted? What are others taking for granted? What is being assumed in this meeting? What is being assumed in this relationship? What is being assumed in this discussion? Are these assumptions justifiable, or should I question them?

Test the Idea
Bringing Intellectual Standards to Bear Upon Your Assumptions

Continue with the problem you have been working on. Now state the most important assumptions you are making in your reasoning. What are you taking for granted that might be questioned? Using the previous example of how to keep in physical shape while also dedicating enough time to your family and your work, your main assumptions might be:

1. High-quality family relationships are more important than work productivity.

2. I know enough about physical fitness to do appropriate exercises.

3. I must spend a considerable amount of time at work in order to support my family.

4. I have enough time to do all of the above well.

State your assumptions clearly and precisely. Make sure they are justifiable in the context of the issue.

Implications and Consequences

Whenever we reason, implications follow from our reasoning. When we make decisions, consequences result from those decisions. As critical thinkers, we want to understand implications whenever and wherever they occur. We want to be able to trace logical consequences. We want to see what our actions are leading to. We want to anticipate possible problems before they arise.

No matter where we stop tracing implications, there always will be further implications. No matter what consequences we do see, there always will be other and further consequences. Any defect in our ability to follow the implications or consequences of our reasoning is a potential source of problems in our thinking. Our ability to reason well, then, is measured in part by our ability to understand and enunciate the implications and consequences of reasoning.

In your work and personal life, you begin to ask yourself questions that improve your ability to focus on the important implications in your thinking and the thinking of others. These questions could include, for example: What are the most important implications of this decision? What are the implications of my doing this versus my doing that? Have we thought through the implications decision in this meeting? Have I thought through the implications of my parenting behavior? Have I thought through the implications of the way I treat my spouse?

Test the Idea
Thinking Through the Implications of Your Reasoning

Continue with the problem you have been working on. Now state the most important implication of potential decisions you might make. Fill in these blanks: If I decide to do _____, then _____ is likely to follow. If I decide to act differently by doing _____, then _____ is likely to follow.

In this activity, you are emphasizing the logical implications and potential consequences of each potential decision. Make sure you emphasize important implications of each decision. For further practice, what would be the most likely implications of (1) getting married, (2) staying in your hometown for the whole of your life, (3) staying in the same job for the whole of your life, (4) deciding to get a divorce (if you are married)?

Inferences

All reasoning proceeds by steps in which we reason as follows: "Because this is so, that also is so (or is probably so)" or, "Because this, therefore that." The mind perceives a situation or a set of facts and comes to a conclusion based on those facts. When this step of the mind occurs, an inference is made. Any defect in our ability to make logical inferences is a possible problem in our reasoning. For example, if you see a person sitting on the street corner wearing tattered clothing, a worn bed roll beside him and a bottle wrapped in a brown paper bag in his hand, you might infer that he is a bum. This inference is based on the facts you perceive in the situation and of what you assume about them. The inference, however, may or may not be logical in this situation.

Critical thinkers want to become adept at making sound inferences. First, you want to learn to identify when you or someone else has made an inference. What are the key inferences made in this discussion? Upon what are the inferences based? Are they justified? What is the key inference (or conclusion) I made in this meeting? Was it justified? What is the key inference in this way of proceeding, in solving this problem in this way? Is this inference logical? Is this conclusion significant? Is this interpretation justified? These are the kinds of questions you begin to ask.

As a person interested in developing your mind, you should ask questions that improve your ability to spot important inferences wherever they occur. Given the facts of this case, is there more than one logical inference (conclusion, interpretation) one could come to? What are some other logical conclusions that should be considered? From this point on, develop an inference detector, the skill of recognizing the inferences you are making in order to analyze them.

Test the Idea
Bringing Intellectual Standards to Bear Upon Your Inferences
Continue with the problem you have been working on. Now state the inferences, or conclusions, you might come to (about the information you have) in solving your problem. You may have already stated these in the activities above. Once you have thought through the potential conclusions you might come to in reasoning through the question at issue, state a possible final conclusion. Be clear and precise in stating each potential conclusion. Make sure your inferences make good sense, based on the information and concepts you are using.

Using Intellectual Standards to Assess Your Thinking: Brief Guidelines

As we have emphasized, all reasoning involves eight elements, each of which has a range of possible mistakes. Here we summarize some of the main "checkpoints" you should use in reasoning (See also Tables 7.2–7.9).

1. **All reasoning has a purpose.**
   - Take time to state your purpose clearly.
   - Choose significant and realistic purposes.
   - Distinguish your purpose from related purposes.
   - Make sure your purpose is fair in context (that it doesn't involve violating the rights of others).
   - Check periodically to be sure you are still focused on your purpose and haven't wandered from your target.

2. **All reasoning is an attempt to figure out something, to settle some question, solve some problem.**
   - Take time to clearly and precisely state the question at issue.
   - Express the question in several ways to clarify its meaning and scope.
   - Break the question into sub-questions (when you can).
   - Identify the type of question you are dealing with (historical, economic, biological, etc.) and whether the question has one right answer, is a matter of mere opinion, or requires reasoning from more than one point of view.
   - Think through the complexities of the question (think deeply through the question).

3. **All reasoning is based on assumptions.**
   - Clearly identify your assumptions and determine whether they are justifiable.
   - Consider how your assumptions are shaping your point of view.

4. All reasoning is done from some point of view.

- Clearly identify your point of view.
- Seek other relevant points of view and identify their strengths as well as weaknesses.
- Strive to be fair-minded in evaluating all points of view.

5. All reasoning is based on data, information, and evidence.

- Restrict your claims to those supported by the data you have.
- Search for information that opposes your position as well as information that supports it.
- Make sure that all information used is clear, accurate, and relevant to the question at issue.
- Make sure you have gathered sufficient information.
- Make sure, especially, that you have considered all significant information relevant to the issue.

6. All reasoning is expressed through, and shaped by, concepts and ideas.

- Clearly identify key concepts.
- Consider alternative concepts or alternative definitions for concepts.
- Make sure you are using concepts with care and precision.
- Use concepts justifiably (not distorting their established meanings).

7. All reasoning contains inferences or interpretations by which we draw conclusions and give meaning to data.

- Infer only what the evidence implies.
- Check inferences for their consistency with each other.
- Identify assumptions that lead you to your inferences.
- Make sure your inferences logically follow from the information.

8. All reasoning leads somewhere or has implications and consequences.

- Trace the logical implications and consequences that follow from your reasoning.
- Search for negative as well as positive implications.
- Consider all possible significant consequences.

Test the Idea
Checkpoints in Thinking

For all of the eight categories outlined, transform each checkpoint into a question or a set of questions; figure out one or more questions that the checkpoint implies. When you have completed your list and you are actively using the questions you formulated, you will have powerful tools for thinking.

Under the first category, All reasoning has a purpose, for example, the first checkpoint is, "Take time to state your purpose clearly" Two questions implied by this checkpoint are: "What exactly is my purpose?" and "Am I clear about my purpose?"

Table 7.2	This chart focuses on *purpose in thinking*. It is useful in understanding the intellectual standards to be applied to purpose and in differentiating between the use of purpose in thinking by skilled and unskilled reasoners.

PURPOSE

(All reasoning has a purpose)

Primary standards: (1) clarity, (2) significance, (3) achievability, (4) consistency, (5) justifiability

Common problems: (1) unclear, (2) trivial, (3) unrealistic, (4) contradictory, (5) unfair

Principle: To reason well, you must clearly understand your purpose, and your purpose must be fair-minded.

Skilled Reasoners	Unskilled Reasoners	Critical Reflections
take the time to state their purpose clearly.	are often unclear about their central purpose.	Have I made the purpose of my reasoning clear? What exactly am I trying to achieve? Have I stated the purpose in several ways to clarify it?
distinguish it from related purposes.	oscillate between different, sometimes contradictory, purposes.	What different purposes do I have in mind? How do I see them as related? Am I going off in somewhat different directions? How can I reconcile these contradictory purposes?
periodically remind themselves of their purpose to determine whether they are straying from it.	lose track of their fundamental object or goal.	In writing this proposal, do I seem to be wandering from my purpose? How do my third and fourth paragraphs relate to my central goal?
adopt realistic purposes and goals.	adopt unrealistic purposes and set unrealistic goals.	Am I trying to accomplish too much in this project?
choose significant purposes and goals.	adopt trivial purposes and goals as if they were significant.	What is the significance of pursuing this particular purpose? Is there a more significant purpose I should be focused on?
choose goals and purposes that are consistent with other goals and purposes they have chosen	inadvertently negate their own purposes. do not monitor their thinking for inconsistent goals.	Does one part of my proposal seem to undermine what I am trying to accomplish in another part?
adjust their thinking regularly to their purpose.	do not adjust their thinking regularly to their purpose.	Does my argument stick to the issue? Am I acting consistently within my purpose?
choose purposes that are fair-minded, considering the desires and rights of others equally with their own desires and rights.	choose purposes that are self-serving at the expense of others' needs and desires.	Is my purpose self-serving or concerned only with my own desires? Does it take into account the rights and needs of other people?

Table 7.3 This chart focuses on *questions in thinking*. It is useful in understanding the intellectual standards to be applied to questions and in differentiating between the use of questions in thinking by skilled and unskilled reasoners.

QUESTION AT ISSUE OR CENTRAL PROBLEM

(All reasoning is an attempt to figure something out, to settle some question, solve some problem.)

Primary standards: (1) clarity and precision, (2) significance, (3) answerability, (4) relevance

Common problems: (1) unclear and unprecise, (2) insignificant, (3) not answerable, (4) irrelevant

Principle: To settle a question, it must be answerable, and you must be clear about it and understand what is needed to adequately answer it.

Skilled Reasoners	Unskilled Reasoners	Critical Reflections
are clear about the question they are trying to settle.	are often unclear about the question they are asking.	Am I clear about the main question at issue? Am I able to state it precisely?
can re-express a question in a variety of ways.	express questions vaguely and find questions difficult to reformulate for clarity.	Am I able to reformulate my question in several ways to recognize the complexity of it?
can break a question into sub-questions.	are unable to break down the questions they are asking.	Have I broken down the main question into sub-questions? What are the sub-questions embedded in the main question?
routinely distinguish questions of different types.	confuse questions of different types and thus often respond inappropriately to the question they ask.	Am I confused about the type of question I am asking? For example: Am I confusing a legal question with an ethical one? Am I confusing a question of preference with a question requiring judgment?
distinguish significant from trivial questions.	confuse trivial questions with significant ones.	Am I focusing on trivial questions while other significant questions have been addresses?
distinguish relevant questions from irrelevant ones.	confuse irrelevant questions with relevant ones.	Are the questions I'm raising in this discussion relevant to the main question at issue?
are sensitive to the assumptions built into the questions they ask.	often ask loaded questions.	Is the way I'm putting the question loaded? Am I taking for granted from the outset the correctness of my own position?
distinguish questions they can answer from questions they can't.	try to answer questions they are not in a position to answer.	Am I in a position to answer the question? What information would I need to have before I could answer the question?

Table 7.4	This chart focuses on *point of view in thinking*. It is useful in understanding the intellectual standards to be applied to point of view and in differentiating between the use of point of view in thinking by skilled and unskilled reasoners.

POINT OF VIEW
(All reasoning is done from some point of view.)
Primary standards: (1) flexibility, (2) fairness, (3) clarity, (4) breadth, (5) relevance
Common problems: (1) restricted, (2) biased, (3) unclear, (4) narrow, (5) irrelevant
Principle: To reason well, you must identify those points of view relevant to the issue and enter these viewpoints empathetically.

Skilled Reasoners	Unskilled Reasoners	Critical Reflections
keep in mind that people have different points of view, especially on controversial issues.	do not credit alternative reasonable viewpoints.	Have I articulated the point of view from which I am approaching this issue? Have I considered opposing points of view regarding this issue?
consistently articulate other points of view and reason from within those points of view to adequately understand other points of view.	cannot see issues from points of view that are significantly different from their own; cannot reason with empathy from alien points of view.	I may have characterized my own point of view, but have I considered the most significant aspects of the problem from the point of view of others?
seek other viewpoints, especially when the issue is one they believe in passionately.	can sometimes give other points of view when the issue is not emotionally charged but cannot do so for issues they feel strongly about.	Am I presenting X's point of view in an unfair manner? Am I having difficulty appreciating X's viewpoint because I am emotional about this issue?
confine their monological reasoning to problems that are clearly monological.*	confuse multilogical with monological issues; insist that there is only one frame of reference within which a given multilogical question must be decided.	Is the question here monological or multilogical? How can I tell? Am I reasoning as if only one point of view is relevant to this issue when in reality other viewpoints are relevant?
recognize when they are most likely to be prejudiced.	are unaware of their own prejudices.	Is this prejudiced or reasoned judgement? If prejudiced, where does it come from?
approach problems and issues with a richness of vision and an appropriately broad point of view.	reason from within inappropriately narrow or superficial points of view.	Is my approach to this question too narrow? Am I considering other viewpoints so I can adequately address the problem?

* Monological problems are ones for which there are definite correct and incorrect answers and definite procedures for getting those answers. In multilogical problems, there are competing schools of thought to be considered.

Table 7.5	This chart focuses on *information in thinking*. It is useful in understanding the intellectual standards to be applied to information and in differentiating between the use of information in thinking by skilled and unskilled reasoners.

INFORMATION

(All reasoning is based on data, information, evidence, experience, research.)

Primary standards: (1) clear, (2) relevant, (3) fairly gathered and reported, (4) accurate, (5) adequate, (6) consistently applied

Common problems: (1) unclear, (2) irrelevant, (3) biased, (4) inaccurate, (5) insufficient, (6) inconsistently applied

Principle: Reasoning can be only as sound as the information it is based on.

Skilled Reasoners	Unskilled Reasoners	Critical Reflections
assert a claim only when they have sufficient evidence to back it up.	assert claims without considering all relevant information.	Is my assertion supported by evidence?
can articulate and evaluate the information behind their claims.	don't articulate the information they are using in their reasoning and so do not subject it to rational scrutiny.	Do I have evidence to support my claim that I haven't articulated? Have I evaluated for accuracy and relevance the information I am using?
actively search for information *against* (not just *for*) their own position.	gather information only when it supports their own point of view.	Where is a good place to look for evidence on the opposite side? Have I looked there? Have I honestly considered information that doesn't support my position?
focus on relevant information and disregard what is irrelevant to the question at issue.	do not carefully distinguish between relevant information and irrelevant information.	Are my data relevant to the claim I'm making? Have I failed to consider relevant information?
draw conclusions only to the extent that they are supported by the data and sound reasoning.	make inferences that go beyond what the data support.	Does my claim go beyond the evidence I've cited?
state the evidence clearly and fairly.	distort the data or state it inaccurately.	Is my presentation of the pertinent information clear and coherent? Have I distorted information to support my position?

Table 7.6	This chart focuses on *concepts in thinking*. It is useful in understanding the intellectual standards to be applied to concepts and in differentiating between the use of concepts in thinking by skilled and unskilled reasoners.

CONCEPTS AND IDEAS
(All reasoning is expressed through, and shaped by, concepts and ideas.)
Primary standards: (1) clarity, (2) relevance, (3) depth, (4) accuracy
Common problems: (1) unclear, (2) irrelevant, (3) superficial, (4) inaccurate
Principle: Reasoning can only be as clear, relevant, realistic, and deep as the concepts that shape it.

Skilled Reasoners	Unskilled Reasoners	Critical Reflections
are aware of the key concepts and ideas they and others use.	are unaware of the key concepts and ideas they and others use.	What is the main concept I am using in my thinking? What are the main concepts others are using?
are able to explain the basic implications of the key words and phrases they use.	cannot accurately explain basic implications of their key words and phrases.	Am I clear about the implications of key concepts? For example: Does the word *cunning* have negative implications that the word *clever* does not?
are able to distinguish special, nonstandard uses of words from standard uses.	are not able to recognize when their use of a word or phrase departs from educated usage.	Where did I get my definition of this central concept? For example: Where did I get my definition of the concept of… Have I put my unwarranted conclusions into the definition?
are aware of irrelevant concepts and ideas and use concepts and ideas in ways relevant to their functions.	use concepts in ways inappropriate to the subject or issue.	Am I using the concept of "love" appropriately? For example: Do I unknowingly act as if loving a person implies a right to treat them discourteously?
think deeply about the concepts they use.	fail to think deeply about the concepts they use.	Am I thinking deeply enough about this concept? For example: The concept of health care, as I describe it, does not take into account the patient's rights and privileges. Do I need to consider the idea of health care more deeply?

Table 7.7 This chart focuses on *assumptions in thinking*. It is useful in understanding the intellectual standards to be applied to assumptions and in differentiating between the use of assumptions in thinking by skilled and unskilled reasoners.

ASSUMPTIONS

(All reasoning is based on assumptions—beliefs we take for granted.)

Primary standards: (1) clarity, (2) justifiability, (3) consistency
Common problems: (1) unclear, (2) unjustified, (3) contradictory
Principle: Reasoning can be only as sound as the assumptions it is based on.

Skilled Reasoners	Unskilled Reasoners	Critical Reflections
are clear about the assumptions they are making.	are often unclear about the assumptions they make.	Are my assumptions clear to me? Do I clearly understand what my assumptions are based upon?
make assumptions that are reasonable and justifiable given the situation and evidence.	often make unjustified or unreasonable assumptions.	Do I make assumptions about the future based on just one experience from the past? Can I fully justify what I am taking for granted? Are my assumptions justifiable given the evidence I am using to support them?
make assumptions that are consistent with each other.	often make assumptions that are contradictory.	Do the assumptions I made in the first part of my argument contradict the assumptions I am making now?
constantly seek to figure out what their assumptions are.	ignore their assumptions.	What assumptions am I making in this situation? Are they justifiable? Where did I get these assumptions?

Table 7.8   This chart focuses on *implications in thinking*. It is useful in understanding the intellectual standards to be applied to implications and in differentiating between how skilled and unskilled reasoners think about implications.

IMPLICATIONS AND CONSEQUENCES
(All reasoning leads somewhere. It has implications and,
when acted upon, has consequences.)

Primary standards: (1) significance, (2) logicalness, (3) clarity, (4) precision, (5) completeness

Common problems: (1) unimportant, (2) unrealistic, (3) unclear, (4) imprecise, (5) incomplete

Principle: To reason well through an issue, you might think through the implications that follow from your reasoning. You must think through the consequences likely to follow from the decisions you make.

Skilled Reasoners	Unskilled Reasoners	Critical Reflections
trace out a number of significant potential implications and consequences of their reasoning.	trace out few or none of the implications and consequences of holding a position or making a decision.	Did I spell out all the significant consequences of the action I am advocating? If I were to take this course of action, what other consequences might follow that I haven't considered?
clearly and precisely articulate the possible implications and consequences clearly and precisely.	are unclear and imprecise in the possible consequences they articulate.	Have I delineated clearly and precisely the consequences likely to follow from my chosen action?
search for potentially negative as well as potentially positive consequences.	trace out only the consequences they had in mind at the beginning, either positive or negative, but usually not both.	I may have done a good job of spelling out some positive implications of the decision I am about to make, but what are some of the possible negative implications or consequences?
anticipate the likelihood of unexpected negative and positive implications.	are surprised when their decisions have unexpected consequences.	If I make this decision, what are some possible unexpected implications? What are some variables out of my control that might lead to negative consequences?

Table 7.9	This chart focuses on *inferences in thinking*. It is useful in understanding the intellectual standards to be applied to inferences and in differentiating between the use of inferences in thinking by skilled and unskilled reasoners.

INFERENCE AND INTERPRETATION

(All reasoning contains inferences from which we draw conclusions and give meaning to data and situations.)

Primary standards: (1) clarity, (2) logicalness, (3) justifiability, (4) profundity, (5) reasonability, (6) consistency

Common problems: (1) unclear, (2) illogical, (3) unjustified, (4) superficial, (5) unreasonable, (6) contradictory

Principle: Reasoning can be only as sound as the inferences it makes (or the conclusions it comes to).

Skilled Reasoners	Unskilled Reasoners	Critical Reflections
are clear about the inferences they are making clearly articulate their inferences.	are often unclear about the inferences they are making do not clearly articulate their inferences.	Am I clear about the inferences I am making? Have I clearly articulated my conclusions?
usually make inferences that follow from the evidence or reasons presented.	often make inferences that do not follow from the evidence or reasons presented.	Do my conclusions logically follow from the evidence and reasons presented?
often make inferences that are deep rather than superficial.	often make inferences that are superficial.	Are my conclusions superficial, given the problem?
often make inferences or come to conclusions that are reasonable.	often make inferences or come to conclusions that are unreasonable.	Are my conclusions reasonable?
make inferences or come to conclusions that are consistent with each other.	often make inferences or come to conclusions that are contradictory.	Do the conclusions I come to in the first part of my analysis seem to contradict the conclusions that I come to at the end?
understand the assumptions that lead to inferences.	do not seek to figure out the assumptions that lead to inferences.	Is my inference based on a faulty assumption? How would my inference be changed if I were to base it on a different, more justifiable assumption?

Chapter 8

Design Your Life

"The development of general ability for independent thinking and judgment should always be placed foremost, not the acquisition of specialized knowledge."

—Albert Einstein

Fate or Freedom: Which Do You Choose?

Many people talk about their lives as if the events in them were pre-determined, as if some force in the universe had issued a timeless decree by which the order of all things (including their lives) was prescribed and all events controlled by inevitable necessity. If you think about your life as a pre-determined product of forces over which you have no control, then you lose any chance of controlling your life.

The Very Idea of Freedom

The idea of designing one's life is a product of two insights: 1) there is a significant difference between life as it is typically lived and life as it might be lived; and 2) by deliberately changing our thinking, we can live in a manner closer to our ideal than if we uncritically allow our thinking to be shaped by the forces acting on us.

Lifelong learners are skilled thinkers who recognize the different roles that learning can play in life. There is a large difference between being passive as a learner and being active. In a passive learner's life, the only end is that of establishing habits that "work," that enable the individual to "get by." Passive learning tends toward "stagnation," for once I find something that enables me to get by, I then, as a passive learner, lack the motivation to change. What I seek in my learning is confirmation in

129

my present beliefs, in my present judgments, and in my present behavior patterns. I seek a way of defending my status quo.
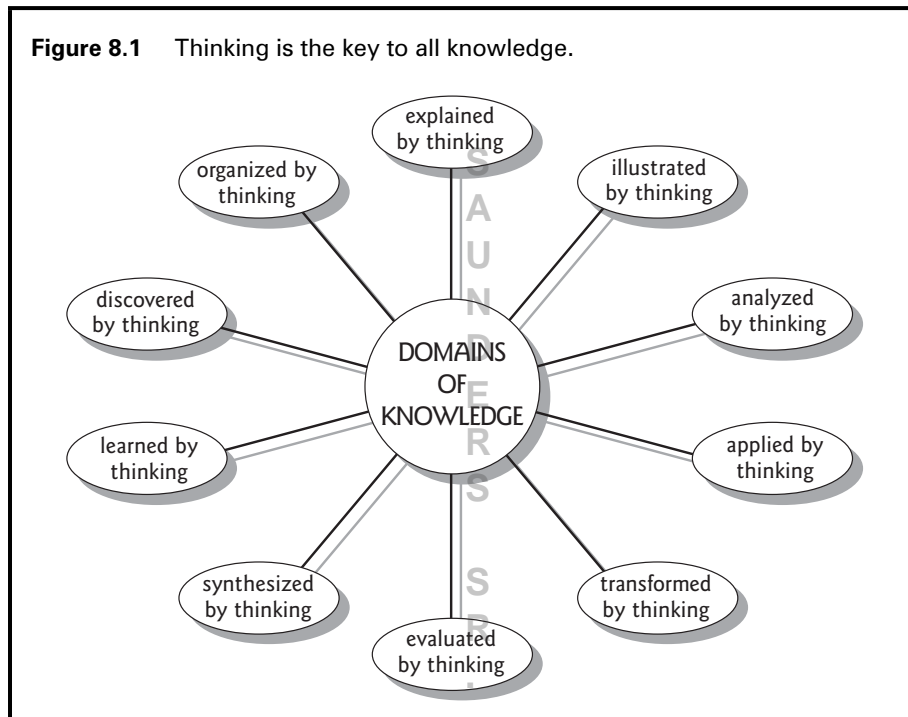

Test the Idea
To What Extent Are You a Passive Learner?

Think back upon the learning experiences you have had in your life, as well as the opportunities for learning you have had. Answer the following questions: To what extent would you say you have been a passive learner? To what extent have you actively sought out opportunities for learning? To what extent have you taken responsibility for your own learning? To what extent do you see learning as something that happens to you rather than something you make happen? To what extent do you see value in learning?

In the life of a critical thinker, active learning is a tool for continually bridging the gap between what is and what could be. We then recognize the role that learning plays in our lives: establishing habits of continual improvement, of always reaching for the next level of skill, ability, and insight. Critical thinkers are lifelong learners and take charge of their experience, their learning, and the patterned behavior that defines their lives. They, in essence, "design" how they think and feel, and hence lay the foundation for how they live. They recognize that their thinking will shape their emotions and that their emotions impact their thinking. They use this recognition as a tool in self-deliberation (Figure 8.1).

Lifelong learners design their lives by becoming clear as to what their goals, problems, and options are. They think through their decisions. They give careful consideration to their options. They give explicit priorities to goals. They do not simply react to immediate imperatives, the predictable and unpredictable distractions that occur in all of our lives. They create their own imperatives by bringing their foremost goals into the center of their thoughts and actions, and create their own calendar of actions.

Though our choices are always limited, we all have a much larger range of choices than we generally recognize to be so.

Figure 8.1 Thinking is the key to all knowledge.

- explained by thinking
- organized by thinking
- illustrated by thinking
- discovered by thinking
- analyzed by thinking
- learned by thinking
- applied by thinking
- synthesized by thinking
- transformed by thinking
- evaluated by thinking

DOMAINS OF KNOWLEDGE

Recognizing the Dual Logic of Experience

For most people, experience is understood as something that "happens to them," not something they create for themselves. But experience is something over which we can all, in principle, exercise significant control. Consider the nature of experience. Experience is a reciprocal relationship between two factors: an objective factor and a subjective one.

The objective dimension of experience is that part of it that we did not generate. It consists in what happens outside our skin, so to speak, in the world about us. Many things happen in the physical and social world over which we have no control. Some we "experience." We have no direct control over what others think, feel, and do. We cannot enter into the minds of people and change them directly. We cannot directly modify the physical or social environment in which we live and act. There are many factors that limit our choices.

But all of the objective factors in our experience must nevertheless be given a meaning, an interpretation. They must become part of our inner life. It is only through this act on our part that a happening or event becomes an "experience." For example, there is much that happens around us that we do not notice and, hence, never becomes part of our experience. Our mind acts as a screen that records and

gives a meaning to only a part of what happens around us. The mind ignores the rest. Furthermore, part of the meaning we give an experience is determined by what we decide is important and what is not important. These are crucial decisions of the mind. They exercise immense influence upon our well being. For example, it is our minds that decide what is in our interest or against it, what we should rejoice in and what we should fear, what will help and what hurt us. Unfortunately, our minds often fail us in these matters.

Self-Deception, Insight, and Analyzed Experiences

The human mind, whatever its conscious good will, is subject to powerful, self-deceptive, unconscious egocentricity of mind. A major obstacle to developing intel-lectual virtues is the presence in the human egocentric mind of what Freud has called "defense mechanisms." Each represents a way to falsify, distort, misconceive, twist, or deny reality. In the distinction between a critically analyzed experience and an unan-alyzed one, we can see the opposition between *insight* and *self-deception.*

As suggested above, we rarely subject our experience to critical analysis. We seldom take our experiences apart to judge their truth value. We rarely sort the "lived" integrated experience into its component parts, *raw data versus our inner processing of* the data, or ask ourselves how the interests, goals, and desires we brought to those data shaped and structured that interpretation. Similarly, we rarely consider the possibility that our interpretation (and, hence, our experience) might be selective, biased, or misleading.

This is not to say that our unanalyzed experiences lack meaning or significance. Quite the contrary, in some sense we assess *all that we* experience. We routinely catalogue experiences in accord with our egocentric fears, desires, prejudices, stereotypes, caricatures, hopes, dreams, and assorted irrational drives. We shouldn't assume *a priori* that our rational side controls the shaping of our experience. Our unanalyzed experiences are some combination of rational and irrational thoughts and actions. Only through critical analysis can we hope to isolate and reduce the irrational dimensions of our experience. The ability to do so grows as we analyze more and more of our experience.

Facing Contradictions and Inconsistencies

Of course, more important than the sheer *number* of analyzed experiences is their *qual-ity* and *significance*. This quality and significance depends on how much our analyses enable us to face our own inconsistencies and contradictions. What links the experi-ences, as analyzed products of the mind, is *insight.* Every critically analyzed experience to some extent produces some insight into who we are. To become more rational, it is not enough to give meaning to our experience. Many experiences are more or less charged with *irrational* meanings. Stereotypes, prejudices, narrow-mindedness, delu-sions, and illusions of various kinds are sometimes rampant in our thinking.

The process of developing insights is part and parcel of separating experiences into their rational and irrational dimensions, those forming meta-experiences, i.e., higher-order experiences. These meta-experiences become important benchmarks and guides for future thought. They make possible modes of thinking and maneuvers in thinking closed to the irrational mind. Through them we learn to talk insightfully about our experience. Our first-order experiences are no longer sacred. They are materials of the mind that the mind evaluates.

I can reason well in domains in which I am prejudiced—hence, eventually, reason my way out of prejudices—only if I develop benchmarks for such reasoning. Of course, when I am prejudiced it will seem to me that I am not, and similarly, it will seem to me that those who are not prejudiced (as I am) are prejudiced. (To a prejudiced person, an unprejudiced person seems prejudiced.)

I will come to this insight only insofar as I have analyzed experiences in which I was intensely convinced I was correct only to find, after a series of challenges, re-considerations, and new reasoning, that my previous conviction was, in fact, prejudiced. I must take this experience apart in my mind, understand its elements and how they fit together (how I became prejudiced; how I inwardly experienced that prejudice; how intensely that prejudice seemed true and insightful; how I progressively broke that prejudice down through serious consideration of opposing lines of reasoning; how I slowly came to new assumptions, new information, and ultimately new conceptualizations).

Only when one gains analyzed experiences of working and reasoning one's way out of prejudice can one gain the insight essential to self-honesty. Generally, to develop essential insights, we must create a collection of analyzed experiences that represent to us intuitive models, not only of the pitfalls of our own previous thinking and experiencing, but also processes for reasoning our way out of or around them. These model experiences must be charged with meaning for us. We cannot be *indifferent* to them. We must sustain them in our minds by our sense of their importance as they sustain and guide us in our thinking.

In analyzing experiences we should ask at least three questions:

1. What are the raw facts? What is the most neutral description of the situation?

2. What interests, attitudes, desires, or concerns do I bring to the situation?

3. How am I conceptualizing or interpreting the situation in light of my point of view? How else might it be interpreted?

We must also explore the interrelationships of these parts: How did my point of view, values, desires, etc, affect what I noticed about the situation? How did they prevent me from noticing other things? How would I have interpreted the situation had I noticed those other things? How did my point of view, desires, etc, affect my interpretation? How *should* I interpret the situation?

Test the Idea
Asking Important Questions in Context

Think back upon a recent experience you had. This could have been a meeting you attended or headed. It could have been a discussion you had with your spouse, child, or parent. Answer these questions as you revisit that experience in your mind:

1. What were the raw facts in the situation? What is the most neutral description of the situation?

2. What interests, attitudes, desires, or concerns did you bring to the situation?

3. How did you conceptualize or interpret the situation in light of your point of view? How else might it have been interpreted?

Of course, not all experiences are direct and firsthand. Many come to us vicariously, through the mass media. Such experiences, such influences, are crucial to understanding the uncriticalness of much of our thinking.

Social Forces, the Mass Media, and Our Experience

There are powerful social forces that act through the mass media to influence the "meanings" we give to things. The news media, for one, exert significant influence on how we conceptualize the world. They affect the meanings we give to events across the globe—in Europe, Asia, Africa, South America, etc. They affect the meanings we give to events close to us. They shape our world view. They tell us, in effect, who to trust and who to fear, what gives us security and what threatens us, who to admire and who to scorn, what is significant in our lives and what is insignificant. They create friend and enemy, tell us what our problems are and, typically, tell us how to solve our problems. They imply what is criminal behavior and what is not. They influence what we think about capital punishment, the police, prisons, prisoners, punishments, social workers, poverty, welfare, the medical system, schools, etc. They influence what we consider normal and healthy sexuality and what we consider perverted. They imply when violence is necessary and praise-worthy and when it is inappropriate and to be condemned. Much of this mass media influence upon us is one-sided, superficial, and misleading—when not out-and-out false.

Billions are spent to create, shape, and influence this process. The consequences for the well being of people are enormous. We cannot be critical thinkers and accept the influence that the mass media continually fosters. Whether our viewpoint is conservative or liberal; right, middle, or left; Christian, Jewish, Muslim, Hindu, Agnostic, or atheist—we need to resist mass media influence in our lives. We must decide for ourselves what we think, feel, and want. We cannot do this while under

the thrall of the mass media. We must "experience" the world in terms that we ourselves create. We must seek out alternative views. We must find sources that go beyond our national media. We must read widely. We must think broadly.

Of course, it is not enough to know this in the abstract. One must know actively how to correct for it. We must learn how not to be drawn into media-engineered experiences, how to see through them, how to avoid the manner in which they insinuate images into our minds, how they seek to use us where we are most vulnerable, to foster internal confirmation of what is propaganda.

Success in life is best fostered through life-long learning, but an uncritical use of the media in the learning process engenders in us a great deal of activated ignorance, prejudice, misconception, half-truth, and over-simplification. It feeds upon our infantile egocentrism and or uncritical socio-centrism.

To counteract the influence of the mainstream media over our lives, we should seek information from news sources outside of the mainstream, sources such *as The Nation*, and *Counterpoint.*

Test the Idea
Thinking About the Influence of the Media on Our Thinking

Try to locate articles in the newspaper where it appears that the news media is attempting to influence your views as a reader and is using a distorted view to do so. You might do this by looking for an article depicting as ethically wrong a practice that is merely a social convention. Then try to locate articles or books from sources outside of the mainstream that would shed light on how it makes best sense to view the situation.

Reading Backwards

One of the most powerful ways to open our minds to alternative experiences, and thus to counteract the influence of social conditioning and the mass media, is to read "backward." That is, to read books printed in the past: 10 years ago, 20 years ago, 50 years ago, 100 years ago, 200 years ago, 300 years ago, 400 years ago, 500 years ago, 700 years ago, 800 years ago, even 2000 years ago, and more. This provides us with a unique perspective and the ability to step outside of the presuppositions and ideologies of the present day. When we read only in the present, no matter how widely, we are apt to absorb widely shared misconceptions taught and believed today as the truth.

Below is a sampling of the authors of books that we believe enable us to re-think the present. Each has insights that deepen and widen the thinking of the critical reader:

1. **(over 2000 years ago)** The writings of Plato, Aristotle, Aeschylus, and Aristophanes
2. **1200s (over 800 years ago)** The writings of Thomas Aquinas and Dante
3. **1300s (over 700 years ago)** The writings of Boccaccio and Chaucer
4. **1400s (over 500 years ago)** The writings of Eramus and Francis Bacon
5. **1500s (over 400 years ago)** The writings of Machiavelli, Cellini, Cervantes, and Montaigne
6. **1600s (over 300 years ago)** The writings of John Milton, Pascal, John Dryden, John Locke, and Joseph Addison
7. **1700s (over 200 years ago)** The writings of Thomas Paine, Thomas Jefferson, Adam Smith, Benjamin Franklin, Alexander Pope, Edmund Burke, Edward Gibbon, Samuel Johnson, Daniel Defoe, Goethe, Rousseau, and William Blake
8. **1800s (over 100 years ago)** The writings of Jane Austen, Charles Dickens, Emile Zola, Balzac, Dostoevsky, Sigmund Freud, Karl Marx, Charles Darwin, John Henry Newman, Leo Tolstoy, The Brontes, Frank Norris, Thomas Hardy, Emile Durkheim, Edmond Rostand, and Oscar Wilde
9. **1900s (the last 100 years)** The writings of Ambrose Bierce, Gustavus Myers, H.L. Mencken, William Graham Sumner, W.H. Auden, Bertolt Brecht, Joseph Conrad, Max Weber, Aldous Huxley, Franz Kafka, Sinclair Lewis, Henry James, Bernard Shaw, Jean-Paul Sartre, Virginia Woolf, William Appleman Williams, Arnold Toynbee, C. Wright Mills, Albert Camus, Willa Cather, Bertrand Russell, Karl Mannheim, Thomas Mann, Albert Einstein, Simone De Beauvoir, Winston Churchill, William J. Lederer, Vance Packard, Eric Hoffer, Erving Goffman, Philip Agee, John Steinbeck, Ludwig Wittgenstein, William Faulkner, Talcott Parsons, Jean Piaget, Lester Thurow, Robert Reich, Robert Heilbroner, Noam Chomsky, Jacques Barzun, Ralph Nader, Margaret Mead, Bronislaw Malinowski, Karl Popper, Robert Merton, Peter Berger, Milton Friedman, and J. Bronowski

If we learn to read backward, we will begin to recognize some of the stereotypes and misconceptions of the present. We will develop a better sense of what is universal and what is relative; what is essential and what is arbitrary. We will also recognize how arbitrary many of our social values are, as well as how likely we are to have misconceptions that are not apparent to us—just as those in the past had misconceptions that were not apparent to them.

For example, reading widely in the past creates multiple perspectives in the mind that enable one to better understand the complexities of the present. Critical reading creates a lens through which we come to better understand the role in history in our lives, even the role in history of critical thinking itself.

For example, thinking historically we discover that though the idea of critical thinking is old, there has apparently never been a society that taught critical thinking

as a basic social value. To the present, critical thinking is being taught only to a minority of citizens, and even then usually in a one-sided way. Critical thinking tends to be taken no further than the skill of attacking and defending ideas, or more usually, the skill of attacking ideas inconsistent with the status quo and defending it in turn. Very often, critical thinking has been indistinguishable from "sophistry," the ability to manipulate people into thinking that the reigning ideology was always "correct and complete." Typically, only a small minority learns and uses critical thinking to question a ruling ideology. We can see this if we scan the history of critical thought.

One of the first thinkers in the history of critical thought is that of Socrates, a Greek teacher from some 2400 years ago. Socrates discovered a method of questioning that, when applied to the leaders of his day, convinced him that most of them could not rationally justify their claims to knowledge. They arrogantly answered his initial questions, but could not intelligibly justify what they thought they knew. For this public exposure of the superficial thinking of authorities, Socrates was rewarded with execution.

Socrates concluded, like Plato and Aristotle after him, that humans typically have no more than a superficial understanding of themselves and their surroundings. This view was expressed by many thinkers over the next 2400 years—including Francis Bacon, Descartes, Pascal, John Stuart Mill, Sigmund Freud, and William Graham Sumner.

It was not until some 1400 years after Socrates that the notion of questioning beliefs became acceptable—albeit only at the university and only under the direction of authorities therein. Of course, in the Renaissance (15th and 16th Centuries), a number of scholars in Europe began to think critically about religion, art, society, human nature, law, and freedom. They proceeded with the assumption that most of the domains of human life were in need of searching analysis and critique. Among these scholars were Colet, Erasmus, and More in England. They followed up on the insight of the ancient Greek thinkers.

Francis Bacon (England) explicitly analyzed the way the human mind, in its normal state, is entrapped by ignorance, prejudice, self-deception, and vested interest. He recognized explicitly that the mind should not be left to its natural tendencies. In his book *The Advancement of Learning*, he argued for the importance of studying the world empirically. He laid the foundation for modern science with his emphasis on the information-gathering processes. He also called attention to the fact that most people, if left to their own devices, develop bad habits of thought (which he called "idols") that lead them to believe what is unworthy of belief. He called attention to "Idols of the Tribe" (the ways our mind naturally tends to trick itself), "Idols of the Cave" (our tendency to see things from our own individual, and often distorted, perspective), "Idols of the Market-Place" (the ways we misuse concepts in our associations with others), and "Idols of the Theater" (our tendency to become

trapped in conventional and dogmatic systems of thought). His book could be considered one of the earliest texts in critical thinking, for his agenda was very much the traditional agenda of critical thinking.

Some fifty years later in France, Descartes wrote what might be called the second text in critical thinking, *Rules for the Direction of the Mind*. In it, Descartes argued for the need for a special systematic disciplining of the mind to guide it in thinking. He articulated and defended the need in thinking for clarity and precision. He developed a method of critical thought based on the principle of systematic doubt. He emphasized the need to base thinking on well reasoned foundational assumptions. Every part of thinking, he argued, should be questioned, doubted, and tested.

In the same time period, Sir Thomas More developed a model of a new social order, *Utopia*, in which every domain of the present world was subject to critique. His implicit thesis was that established social systems are in need of radical analysis and critique. The critical thinking of these Renaissance and post-Renaissance scholars opened the way for the emergence of science and for the development of democracy, human rights, and freedom for thought.

In the Italian Renaissance, Hobbes and Locke displayed the same confidence in the critical mind of the thinker that we find in Machiavelli. Neither accepted the traditional picture of things dominant in the thinking of their day. Neither accepted as necessarily rational that which was considered "normal" in their culture. Both looked to the critical mind to open up new vistas of learning. Hobbes adopted a naturalistic view of the world in which everything was to be explained by evidence and reasoning. Locke defended a common sense analysis of everyday life and thought. He laid the theoretical foundation for critical thinking about basic human rights and the responsibilities of all governments to submit to the reasoned criticism of thoughtful citizens.

It was in this spirit of intellectual freedom and critical thought that people such as Robert Boyle (in the 17th Century) and Sir Isaac Newton (in the 17th and 18th Century) did their work. In his *Sceptical Chymist*, Boyle severely criticized the chemical theory that had preceded him. Newton, in turn, developed a far-reaching framework of thought that roundly criticized the traditionally accepted view of the world. He extended the critical thought of such minds as Copernicus, Galileo, and Kepler. After Boyle and Newton, it was recognized by those who reflected seriously on the natural world that egocentric views must be abandoned in favor of views based entirely on carefully gathered evidence and sound reasoning.

Another significant contribution to critical thinking was made by the thinkers of the French Enlightenment: Bayle, Montesquieu, Voltaire, and Diderot. They all began with the premise that the human mind, when disciplined by reason, is better able to figure out the nature of the social and political world. What is more, for these thinkers, reason must turn inward upon itself, in order to determine weaknesses and strengths of thought. They valued disciplined intellectual exchange, in which all

views had to be submitted to serious analysis and critique. They believed that all authority must submit in one way or another to the scrutiny of reasonable critical questioning.

Eighteenth Century thinkers extended our conception of critical thought even further, developing our sense of the power of critical thought and of its tools. Applied to the problem of economics, it produced Adam Smith's *Wealth of Nations*. In the same year, applied to the traditional concept of loyalty to the king, it produced the *Declaration of Independence*. Applied to reason itself, it produced Kant's *Critique of Pure Reason*.

In the 19th Century, critical thought was extended even further into the domain of human social life by Comte, Spencer, and Max Weber. Applied to the problems of capitalism, it produced the searching social and economic critique of Karl Marx. Applied to social decision-making and power, it produced a deep analysis of bureaucratic thinking and its tendency to dominate large organizations in such a way as to undermine their original purposes (Max Weber). Applied to the history of human culture and the basis of biological life, it led to Darwin's *Descent of Man*. Applied to the unconscious mind, it is reflected in the works of Sigmund Freud. Applied to cultures, it led to the establishment of the field of Anthropological studies. Applied to language, it led to the field of Linguistics and to many profound analyses of the functions of symbols and language in human life.

In the 20th Century, our understanding of the power and nature of critical thinking has emerged in increasingly more explicit formulations. In 1906, William Graham Sumner published a ground-breaking study of the foundations of sociology and anthropology, *Folkways* (Sumner, reprint, 1940), in which he documented the tendency of the human mind to think sociocentrically and the parallel tendency for schools to serve the (uncritical) function of social indoctrination:

> *"Schools make persons all on one pattern, orthodoxy. School education, unless it is regulated by the best knowledge and good sense, will produce men and women who are all of one pattern, as if turned in a lathe... An orthodoxy is produced in regard to all the great doctrines of life. It consists of the most worn and common-place opinions which are common in the masses. The popular opinions always contain broad fallacies, half-truths, and glib generalizations (p. 630)."*

At the same time, Sumner recognized the deep need for critical thinking in life and in education:

> *"Criticism is the examination and test of propositions of any kind which are offered for acceptance, in order to find out whether they correspond to reality or not. The critical faculty is a product of education and training. It is a mental habit and power. It is a prime condition of human welfare that men and women should be trained in it. It is our only guarantee against delusion, deception,*

superstition, and misapprehension of ourselves and our earthly circumstances. Education is good just so far as it produces well-developed critical faculty.…A teacher of any subject who insists on accuracy and a rational control of all processes and methods, and who holds everything open to unlimited verification and revision is cultivating that method as a habit in the pupils. Men educated in it cannot be stampeded…They are slow to believe. They can hold things as possible or probable in all degrees, without certainty and without pain. They can wait for evidence and weigh evidence…They can resist appeals to their dearest prejudices…Education in the critical faculty is the only education of which it can be truly said that it makes good citizens (pp. 632, 633)."

John Dewey agreed. From his work, we have increased our sense of the pragmatic basis of human thought (its instrumental nature), and especially *its grounding in actual human purposes, goals, and objectives.* From the work of Ludwig Wittgenstein, we have increased our awareness not only of the importance of *concepts* in human thought, but also of the need to analyze concepts and assess their power and limitations within particular contexts and expressed first in "natural" (rather than "technical") languages. From the work of Piaget, we have increased our awareness of the *egocentric and sociocentric tendencies of human thought* and of the special need to develop critical thought that is able to *reason within multiple standpoints*, and to be raised to the level of "conscious realization."

From the work of such scholars as C. Wright Mills, we have increased awareness of the manner in which democratic institutions are undermined and social exploitation takes place in mass societies. From the contribution of depth-psychology and other researchers, we have learned how easily the human mind is self-deceived, how easily it unconsciously constructs illusions and delusions, how easily it rationalizes and stereotypes, projects, and scapegoats. From the work of Irving Goffman and others, we have an increased awareness of how "social definitions" can dominate the mental life of individuals in a society. From the work of many sociologists, we have increased awareness of how the "normal" socialization process serves to perpetuate the existing society—its ideology, roles, norms, and values—however inconsistent these might be with a society's announced picture of itself. From the work of economists like Robert Heilbronner, we have increased awareness of how unbridled economic forces influenced by vested interest groups may act so as to undermine or negate economic, political, and ethical values as well as human rights.

From the massive contribution of all the physical and natural sciences, we have learned *the power of information* and the *importance of gathering information with great care and precision,* and with sensitivity to its potential inaccuracy, distortion, or misuse.

To conclude, a scanning of the history of critical thought heightens our awareness of the power and necessity of critical thinking as well as of its rarity in human

experience. Nowhere is there, as far as we can see, a developed community of critical thinkers. No society systematically teaches it to its young. Every society teaches its view of the world as the TRUTH, and invests a good deal of effort into justifying itself to itself. The only community of critical thinkers, to date, exists across cultures and disciplines, across ethnic groups and orientations, across belief systems and life-style agendas.

Test the Idea
Committing Yourself to Reading Backward

Try to commit yourself to reading one book per month that is on our "reading backward" author list, or books by other highly reputable authors from different periods in history. Choose books that represent differing perspectives, differing ways of looking at the world. Should you make such a commitment, as time passes you will experience considerable development in your ability to see things from multiple perspectives and your worldview will significantly broaden.

Implications for the Design of Your Life

If we become committed to designing our own lives, and recognize that, in doing so, we are resisting social forces, and, to greater or lessor extent, acting outside of the expected behavior patterns of the social groups of which we are a member, we also learn to keep some of our thinking private. We learn that others must undergo their own evolution, their own development as critical thinkers and that we cannot give to others the products of our thinking, when it is unorthodox, without their going through a process similar to the one we experienced.

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Chapter 9

The Art of Making
Intelligent Decisions

To live is to act. To act is to decide. Everyday life is an endless sequence of decisions. Some of the decisions are small and inconsequential, and some are large and life determining. When the pattern of decision-making is rational, we live a rational life. When the pattern is irrational, we live an irrational life. Rational decisions maximize the quality of one's life without violating the rights, or harming the well being, of others. Rational decisions maximize our chances of happiness, successful living, and fulfillment. Critical thinking, when applied to decision-making, enhances the rationality of decisions made by raising the pattern of decision-making to the level of conscious and deliberate choice. No one deliberately chooses to live an irrational life. Many, however, subconsciously choose to live an irrational or unethical life. In doing so, they maximize their chances of unhappiness and frustration, or do harm to others in seeking their own advantage.

There are as many domains of decision-making as there are of thinking. Indeed, the most important decision we can make is how and what to think about things, for how and what we think determines how we feel and how we act. We decide what to think, feel, and do when we act as a parent. We decide what to think, feel, and do when we make decisions about our professional lives. We decide what to think, feel, and do when we make decisions about the social world in which we have been raised and the groups of which we are a member (family, professional, personal associations, nation, etc.). We decide what to think, feel, and do when we make political decisions about the policies, parties, and candidates that we choose to support. We decide what to think, feel, and do when we make decisions about what we are morally obliged to do (and what we are not so obliged to do). We decide what to think, feel, and do

143

when we make decisions about our life-style, about the nature and value of friendship, about the nature of what is most important in our lives. We decide what to think, feel, and do when we think historically, sociologically, professionally, environmentally, and philosophically. What is more, the thinking we do in one domain of our lives often is influenced by the thinking we do in other domains of our lives. Often the domains are overlapping. As a result, the decisions we make in one domain of our lives often are influenced by the decisions we make in other domains of our lives.

To become a skilled decision-maker, one must become a skilled thinker, and to become either is to learn to think about our lives both as a whole and as a complex of parts. The most intimate part of the world in which we live originates in our thoughts and actions and is maintained by these. To become a critical thinker, we must become an intimate observer of the manner in which we construct our own intimate world. We must understand how we have been socialized and the implications of that process. We must understand how our socialization is reinforced and reflected in the social institutions that continue to exert direct and indirect influence on us. We must know when we are acting out social routines and rituals that we were conditioned to accept. We must be able to think inside and outside our world, using the latter to critique the former.

Thinking Globally About Your Life

Every point we make in this chapter should be interpreted and qualified by every point we have made in the chapters that preceded it, especially the chapter on the design of your life. To become an effective decision-maker requires that you gain insight into your life as a whole, for the most basic patterns of thought and behavior in your life represent the most basic decisions you have made. They have continual implications for the quality of your life. You need to reflect on those patterns, analyze and assess them, if you are to make the most important decisions in your life. For example, if you assume that the most basic patterns of your life are not in need of assessment, then any mistakes implicit in those lived patterns continue to generate negative implications and consequences.

Here is a key global question. "To what extent have I questioned, or failed to question, my social conditioning?"

This question includes the sub-questions, "To what extent have I simply accepted the religion I was raised to believe, the politics I was raised to believe, the philosophy I was raised to believe, the values I was raised to believe, and the lifestyle I was raised to believe?" Of course, it is important to recognize that questioning how we have been influenced does not entail that we uncritically reject those influences. It simply means that we cease to assume that they are universally positive or necessarily represent the best choices we could make.

Evaluating Patterns in Decision-Making

How can we determine the extent to which our decision-making is irrational? In the first place, our irrational decisions often will be those we make without realizing we are making them. So let us begin with an analysis of our subconscious decisions.

If you ask yourself how many decisions you made yesterday, you probably will be puzzled as to how to determine the number. In a sense, the absolute number is unimportant. What is important is to recognize the categories of decisions you made and find a way to begin to identify and evaluate patterns within those categories.

We all have basic human needs. Consequently, we all make choices as to how to satisfy those needs. In addition, we all have chosen values and made choices in relation to those values. We all assume that our basic values support our welfare and contribute to our general well being. No one says, to himself or herself, "I choose to live in accordance with values that undermine my welfare and harm me."

And we all make choices that have implications for the well being of others. When we make decisions that undermine or harm others' well being, we make unethical decisions. When we make decisions or choose values that undermine or harm our well being, we make irrational decisions.

Some common patterns of irrational or unethical decision-making are:

- Deciding to behave in ways that undermine our welfare;

- Deciding not to engage in activities that contribute to our long-term welfare;

- Deciding to behave in ways that undermine another's welfare;

- Deciding to associate with people who encourage us to act against our own welfare or the welfare of others.

These categories sound odd, for why would anyone make self-defeating or self-harming decisions? But there is a general answer to this query: immediate gratification and short-term gain. This becomes more apparent when we look at more specific categories within these categories. For example, under "Deciding to behave in ways that undermine one's welfare" are:

- Deciding to eat foods that are unhealthy (foods that shorten our lives or lead to disease or negative qualities of life);

- Deciding to smoke, drink to excess, or use drugs that are harmful;

- Deciding not to exercise or engage in adequate aerobic activities.

Clearly, we make these decisions with immediate pleasure and our short-term satisfaction uppermost in our minds. Indeed, our mind is "wired" for immediate and short-term gratification. Taking into account the long-term requires reflection. We must raise our behavior to the level, as Piaget put it, of conscious realization. Of

course, we can be conscious of a problem without taking the steps to correct it. Putting our long-term insights into action requires self-discipline and will power.

When we identify a pattern of irrational decision-making in our life, we have discovered what sometimes is called a bad habit. When we replace a pattern of irrational decision-making with a rational pattern, we replace a bad habit with a good one. The replacement is at the level of action.

Because habits account for hundreds or thousands of decisions over an extended time, we can improve our decision-making significantly by identifying our bad habits and replacing them with good ones. For example, we can make hundreds of rational decisions over time by making the decision to eat healthy foods and not eat unhealthy foods. Once that decision is manifested in behavior over an extended time, it results in a productive habit.

"Big" Decisions

There are two kinds of big decisions to learn to watch for in one's life:

- Those that have more or less obvious long-term consequences (basic career choices, choice of mate, choice of values, choice of philosophy, basic parental decisions);

- Those whose long-term consequences must be "discovered" (such as the implications of our daily habits, including those implicit in our eating and exercise habits).

What is most dangerous in general are "un-thought" decisions, the decisions that creep into our lives unnoticed and unevaluated. Clearly, it is not possible to raise all decisions to the level of conscious realization, for then we would have no habits whatsoever. Rather, we aim to evaluate categories or clusters of decisions, on the one hand (big in their collectivity), and the individual big ones.

The Logic of Decision-Making

It is useful to consider the logic of decision-making. That logic is determined by the goal of decision-making and of the question that follows from that goal:

- The goal: to decide between some set of alternatives, the one most in keeping with our welfare and the welfare of others;

- The question: put in terms of completing the following sentence: "At this point in my life, faced with the alternatives (A or B or C or D), which is the one most likely to enhance my welfare and the welfare of others?"

The four keys to sound decision-making are:

1. To recognize that you face an important decision,

2. To accurately identify the alternatives,

3. To logically evaluate the alternatives,

4. To have the self-discipline to act on the best alternative.

Each of these factors presents potential problems to the thinker.

Test the Idea
Thinking Seriously About Your Career

Many of us have not seriously thought through the extent to which we are satisfied in our careers. Yet clearly the decision to pursue a certain career is one of the most significant decisions we will make in our lives. Consider the following question: Should I seek a career change or continue to focus my professional energies on opportunities implicit in my present situation? Once you think through this decision, evaluate your thinking by considering the dimensions of decision-making discussed later in this chapter.

Recognizing the Need for an Important Decision

Much of the worst decision-making is the result of the failure to recognize that a decision is at hand. The result, then, is that many decisions are made subconsciously—and therefore, often, egocentrically or sociocentrically. Many decisions that people make about friends, associates, schoolwork, family, choice of amusement (including alcohol and drug use), and personal satisfaction are a result of "mindless" decisions ("It never occurred to me!" "I just didn't realize!"). These are often the "after-the-fact" explanations when the negative implications of the decisions are realized.

Accurately Recognizing the Alternatives

Recognizing that a decision is at hand is not all there is to it. We also must recognize what our alternatives are. Here, many decisions go awry because of failure to accurately identify the alternatives. This failure comes in two forms: 1) thinking that something is an alternative when it is not (thinking unrealistically), and 2) failing to recognize an alternative (thinking too narrowly).

Among the common decisions in the first category of failure are decisions that follow from the following types of thinking:

• "I know he's got major faults, but he loves me and I can help him change!"

• "I know there are lots of problems in our relationship, but we love each other and that is all that matters!"

• "I know I'm not doing well at my job, but I will eventually be recognized!"

- "I know I need to learn this, but I can learn it by cramming the night before the exam!"

The second category of failure (thinking too narrowly) is difficult to correct, as no one believes he is thinking too narrowly (when he is). Actually, the more narrow the thinker, the more confident the thinker that he is broad-minded. A good rule of thumb is that if you can think of only one or two options when making a decision, you probably are thinking too narrowly.

We have found the following twofold rule to be useful:

RULE ONE: THERE'S ALWAYS A WAY.

RULE TWO: THERE'S ALWAYS ANOTHER WAY.

Let's now look at the process of becoming a more skilled decision-maker, in the light of what we have considered thus far.

Putting More Time into Your Decision-Making

If we don't make time for reflective thought about our decisions, we cannot improve them. A real change of behavior requires some thought about our present behavior. The key here is to recognize that we lose a tremendous amount of time through bad decision-making. It is not unusual, for example, for a couple to spend 5 or 10 years in a bad marriage before recognizing it, leaving it, and seeking a more productive relationship. People often lose years through a poor career choice. Students often lose a great deal of time by their chosen—and inefficient—mode of studying. Putting more time into our decisions, and making better decisions as a result, is going to save us a tremendous amount of time that otherwise would result from the need to correct bad decisions.

Being Systematic

People need to think through their major habits. They need to give time to the decisions they make around major needs and blocks of time: eating habits, exercise habits, free time activities, social interactions, and so forth. People have to think critically about how the habits they develop in every part of life affect the overall quality of life. For example, if you spend many hours a day playing computer games, what are some implications of the decision to do so? What important things do you not have time to do?

Dealing with One Major Decision at a Time

Speed thinking usually does not help us think well through our decisions. The more things we try to do simultaneously, and the faster we try to do them, the more likely we will be to do each of the things poorly. Because we live in a fast-paced world, it is

difficult to appreciate the importance of taking our time in reasoning through the decisions we face. After making a bad decision, we sometimes say we didn't have enough time to think through the problem. But the problem usually is that we had the time but didn't *take* the time. In general, the more deliberate our approach to decision-making is—the more time we spend thinking through all the aspects of the problem—the better will be our decisions.

Developing Knowledge of Your Ignorance

We are ignorant about most of our decision-making. The more knowledge we gain of our ignorance (of decisions), the more thoughtful our decisions will become. Being able to recognize and face the things we don't know is instrumental in determining what we will have to figure out. We tend not to know what we need to know to make effective decisions, but the primary problem most of us face is that we think we already know everything relevant to making those decisions. We are intellectually arrogant.

Dimensions of Decision-Making

By using the elements of thought as our guide, we can identify at least nine dimensions of decision-making that represent potential problems for thought. These dimensions do not define a procedure that can be followed mindlessly or mechanically. They presuppose good judgment and sound thinking in every dimension.

To be an effective and rational decision-maker:

1. Figure out, and regularly re-articulate, your most fundamental goals, purposes, and needs. Your decisions should help you to remove obstacles and create opportunities to reach your goals, achieve your purposes, and satisfy your needs.

2. Whenever possible, take problems and decisions one by one. State the situation and formulate the alternatives as clearly and precisely as you can.

3. Study the circumstances surrounding the alternative possible decisions to make clear the kind of decision you are dealing with. Figure out what implications follow from the various possible alternatives before you. Differentiate decisions over which you have some control and decisions that seem forced on you. Concentrate your efforts on the most important decisions and those on which you can have the most impact.

4. Figure out the information you need, and actively seek that information.

5. Carefully analyze and interpret the information you collect, drawing what reasonable inferences you can.

6. Figure out your options for action. What can you do in the short term? In the long term? Recognize explicitly your limitations in money, time, and power.

7. Evaluate your options in the situation, taking into account their advantages and disadvantages.

8. Adopt a strategic approach to the decision, and follow through on that strategy. This may involve direct action or a carefully thought-through wait-and-see strategy.

9. When you act, monitor the implications of your action as they begin to emerge. Be ready to revise your strategy at a moment's notice if the situation requires. Be prepared to shift your strategy or your analysis or statement of the kind of decision, or all three, as more information about the decision becomes available to you.

Here we will elaborate on only the first of these dimensions, to illustrate how they might be thought-through.

Regularly Re-Articulate and Reevaluate Your Goals, Purposes, and Needs

All of us live goal-directed lives. We form goals and purposes, and we seek to satisfy them. We form values and seek to acquire what they imply. We have needs and seek to fulfill them. If we were to automatically achieve our goals and purposes and fulfill our needs, we would have no problems or challenging decisions to make. A keen awareness of our goals, purposes, and needs is what often makes us aware of the importance of making a decision. Uncritical thinkers often "walk right by" an opportunity for a decision, not even recognizing that opportunity. For example, if you are in a poor relationship with a person and do not make the decision either to leave the relationship or to take active steps to improve it, the problem it represents is "undealt-with." Your implicit decision is to maintain things as they are.

Skilled critical thinkers regularly revisit their conceptions of what is worth pursuing. Very often, we make poor decisions simply because we are pursuing what we ought not to pursue. For example, if you define your happiness in terms of controlling the lives and decisions of the key persons in your life, you are bound to make poor decisions both for yourself and for those whom you seek to control.

Humans often seek excess—excess of wealth (greed), excess of power (domination), excess of food (an unhealthy body). And humans often make unreasonable demands on others—assuming that everyone believes what they believe, values what they value, and should act as they act. Humans often set up inconsistent standards—expecting others to be satisfied with what they themselves would not be satisfied with, or to be judged by criteria that they would resent were that same criteria applied to themselves.

Test the Idea
Creating Problems through Poor Decision-Making

Consider the following strategies for dealing with, or making, decisions. Each represents poor decision-making. Can you see why? Do you see one or more of these examples as a good way to deal with decisions?

1. Staying in an abusive relationship for the sake of the children.

2. Taking drugs to gain an immediate escape from the pain of facing unpleasant realities in your life.

3. Overeating to deal with depression.

4. Establishing an escalating "get tough" policy on crime, leading to larger and larger prison cultures that create more and more hardened criminals.

5. Smoking to win approval in a group.

6. Establishing an escalating "get tough" policy on terrorists, leading to more and more resentment and hatred in the groups resorting to "terrorism," leading to more violent responses.

7. Getting angry and acting out by hitting things or people, throwing things, and shouting.

8. Feeling self-pity when frustrated.

The Early Decisions

(2–11 Years of Age)

By reviewing some of the major decision-making that has shaped our lives, we can gain insight into the problems inherent in the process. For example, in our early life we are not in a position to exercise significant control over our decision-making. Our parents usually give us some opportunity to make decisions, however, when we are very young, we have limited capacity to take the long view. We are naturally dominated by the immediate, and our view of the world is highly egocentric. What is more, many parents exercise excessive control over their children's decision-making, on the one hand, or insufficient control, on the other.

When humans are very young, they need to be restrained from acting egocentrically and sociocentrically so these negative patterns can be modified as soon as possible and with as little damage to themselves and others in the meantime. Even young children, however, need to exercise power in their lives and begin to learn to accept the consequences of their own decisions. Children cannot learn to be responsible for their behavior if they are given no opportunities to make their own decisions.

One of the problems with the decisions of children is that they are often the result of the "party-line" of the peer groups to which they belong. Youth culture—with its

media, movies, music, and heroes—plays a large role in the decision-making of most children. Human insecurity drives children to seek recognition and acceptance from other children. Many of their decisions and their behavior reflect an attempt to be liked by and included in their peer group. The behavior patterns that result from these decisions often become the basis of short- and long-term problems.

One way or another, the decisions made by or for us have an impact on our personality and character. Decisions influence our beliefs and attitudes, our sense of ourselves, and our sense of the world in which we live.

Test the Idea
Evaluating Childhood Decisions

Review in your mind your earliest recollections about your life as a child. See if you can remember or reconstruct some of what proved to be significant decisions either made by you or for you. Ask yourself the following questions. If you cannot answer a question, simply move on to the next:

- To what extent did your parents give you opportunities to make decisions?
- When did you begin, or have you not begun, to take the long view in your decisions?
- To what extent were your early decisions highly egocentric?
- To what extent did your parents exercise excessive control over your decision-making?
- To what extent did they exercise insufficient control?
- To what extent did your parents restrain you from acting egocentrically and sociocentrically?
- To what extent would you say that you still are an egocentric or sociocentric decision-maker?
- To what extent did you exercise power in your life as a child and begin to learn to accept the consequences of your own decisions?
- To what extent do you think you have learned, by having to bear the consequences of your own decisions, to become responsible for your own behavior?

Adolescent Decisions

(12-17 Years of Age)

The adolescent years are important in decision-making in our lives. As adolescents, we tend to seek more independence in decision-making, though sometimes without being willing to take more responsibility for those decisions. Indeed, some adolescents seem to take the view: "I have a right to make my own decisions, but you have the responsibility to help me escape the consequences of those decisions whenever those consequences are negative."

Like the very young, adolescents seem to have limited capacity to take the long view. Their immediate view of what is happening to them is often generalized as if it were a lifelong condition (egocentric immediacy). In their desire to achieve independence, adolescents often engage in power struggles with their parents and other authority figures.

Like young children, the decisions of adolescents are often the result of the "party-line" of the peer groups to which they belong. Adolescent youth culture—again, with its media, movies, music, and heroes—plays a key role in the decision-making of most adolescents. Human insecurity drives adolescents to seek recognition and acceptance from other adolescents. Like young children, many of their decisions and behaviors reflect an attempt to achieve this end. The behavior patterns that result from these decisions often become the basis of short- and long-term problems.

Love, sexuality, and a comprehensive view of the world become important to adolescents, though each of these is often understood superficially. The basis for adolescents' conceptions of these is often drawn from movies, music, and television programs that target the adolescent population. This is a formula tailor-made for poor decision-making and bad habits.

For example, media-created heroes often are presented as successful when they use violence to defeat those who are presented as evil. In this good guys/bad guys world, everything is black or white. The evil doers use bullying and power to hurt and intimidate the weak and the good. The weak and the good are rescued only when someone who is good develops the courage to use violence against the evil doers.

In media-created romantic relationships, love is typically automatic, irrational, and at first sight, and has no real relationship to the character of the person. Adolescent media have virtually no heroes who achieve their heroic status because of rational use of their mind or knowledge.

If the decisions, behavior patterns, and habits developed in adolescence were to simply come and go with the early and adolescent years, one could simply wait them out. But this is not the case. All of us are shaped, often for a lifetime, by decisions and habits formed during these important years. As soon as possible, conscious intervention is needed.

Test the Idea
Evaluating Adolescent Decisions

Review in your mind your recollections about your life as an adolescent. Which of your decisions proved to be most significant? Ask yourself the following questions. If you cannot answer a question, simply move on to the next:

- Can you identify some ways in which you were influenced by the media as an adolescent?
- To what extent did your decisions during adolescence reflect an attempt on your part to gain recognition and acceptance from other adolescents? What decisions can you specify?
- To what extent did any of these decisions become the basis for short- or long-term problems?
- To what extent were your decisions regarding romantic relationships based on influences from youth culture?
- Can you identify one bad habit you formed as a result of poor adolescent decision-making?
- To what extent is your conception of love or friendship a reflection of the manner in which love or friendship is treated in movies or music lyrics?

If you have difficulty answering any of the above questions (for example, because it seems to you that you were independent in your decision-making), does it seem plausible to you that someone lives in a culture and yet is not significantly influenced by it?

Early Adult Decisions

(18-35 Years of Age)

The early adult years are important in decision-making in our lives. As young adults, we exercise more independence in decision-making, though sometimes without being willing to take responsibility for those decisions.

Like adolescents, young adults seem to have limited capacity to take the long view. Their immediate view of what is happening to them is often generalized as if it were a lifelong condition (egocentric immediacy). In their desire to achieve independence, young adults often make hasty decisions about marriage, career, and their future.

Like adolescents, young adults often make decisions that are the result of the "party-line" of the peer groups to which they belong. Young adults tend to look to other young adults for their lead. They are also strongly influenced by the mass media.

Human insecurity drives young adults to seek recognition and acceptance from other young adults. Like adolescents, many of their decisions and behaviors reflect an attempt to achieve this end. The behavior patterns that result from these decisions often become the basis of short- and long-term problems.

Love, sexuality, and a pragmatic view of the world become important to young adults, though each of these is often understood superficially. The basis for young adult conceptions of these is often drawn from movies, music, and television programs that target the young adult. This is a formula tailor-made for poor decision-making and bad habits.

If the decisions, behavior patterns, and habits developed in young adulthood were to simply come and go with the early years, one could simply wait them out. But this is not the case. All of us are shaped, often for a lifetime, by decisions and habits formed during these important years. As soon as possible, conscious intervention is needed.

Conclusion

We all live a life driven by our decisions. What is clear from this chapter is that, though no one fully masters the decisions determining the quality of life, all of us can improve our decision-making by the following two measures:

1. Reflecting critically on the nature and role of decisions in our lives;
2. Systematically adopting strategies that enhance the reasonability of our decision-making, in the light of that nature and role;
3. Frequently comparing our global philosophy (or world view) with the actual facts of our lives, seeking to find our contradictions and inconsistencies and gaining a more comprehensive view of the direction and quality of our lives.

In constructing these strategies, what is in our interest is to think and act so as to maximize our awareness of:

- The patterns that underlie our decision-making;
- The extent to which our decisions presently are based on immediate gratification and short-term goals;
- The "big decisions" we face;
- Our ultimate and most primary goals;
- The alternatives available to us;
- The self-discipline necessary to act on the "best" alternative;
- The need for adequate time for self-reflection in our decision-making;
- The need to be systematic;
- The nine dimensions of decision-making;

- Knowledge of the major decisions of our childhood;
- Knowledge of the major decisions of our adolescence.

Becoming an excellent decision-maker is not separable from becoming a good thinker. Decisions are too deeply embedded into the fabric of our lives to be treated as isolated events that we could "automatically" master. An excellent decision-maker has self-understanding, understands how to use the fundamentals of critical thinking, is well aware of the problem of egocentrism and socio-centrism in thought, and is intellectually humble, perseverant, and fair-minded.

Chapter 10

Taking Charge of Your Irrational Tendencies

Humans often engage in irrational behavior. We fight. We start wars. We kill. We are self-destructive. We are petty and vindictive. We "act out" when we don't get our way. We abuse our spouses. We neglect our children. We rationalize, project, and stereotype. We contradict and deceive ourselves in countless ways. We act inconsistently, ignore relevant evidence, jump to conclusions, and say and believe things that don't make good sense. We are our own worst enemy.

The ultimate motivating force behind human irrationality is best understood, we believe, as human egocentrism, the natural human tendency "to view everything within the world in relationship to oneself, to be self-centered" (*Webster's New World Dictionary*, 1986).

Egocentric Thinking

Egocentric thinking, then, results from the fact that humans do not naturally consider the rights and needs of others, nor do we naturally appreciate the point of view of others or the limitations in our own point of view. Humans become explicitly aware of our egocentric thinking only if specially trained to do so. We do not naturally recognize our egocentric assumptions, the egocentric way we use information, the egocentric way we interpret data, the source of our egocentric concepts and ideas, and the implications of our egocentric thought. We do not naturally recognize our self-serving perspective.

Humans live with the unrealistic but confident sense that we have fundamentally figured out *the way things actually are*, and that we have done this objectively. We naturally

157

believe in our intuitive perceptions—however inaccurate they may be. Instead of using intellectual standards in thinking, humans often use self-centered psychological standards to determine what to believe and what to reject. Here are the most commonly used psychological standards in human thinking:

- "It's true because I believe it." *Innate egocentrism*: I assume that what I believe is true even though I have never questioned the basis for many of my beliefs.

- "It's true because we believe it." *Innate socio-centrism*: I assume that the dominant beliefs within the groups to which I belong are true even though I have never questioned the basis for many of these beliefs.

- "It's true because I want to believe it." *Innate wish fulfillment*: I believe in, for example, accounts of behavior that put me (or the groups to which I belong) in a positive rather than a negative light even though I have not seriously considered the evidence for the more negative account. I believe what "feels good," what supports my other beliefs, what does not require me to change my thinking is any significant way, what does not require me to admit I have been wrong.

- "It's true because I have always believed it." *Innate self-validation*: I have a strong desire to maintain beliefs that I have long held, even though I have not seriously considered the extent to which those beliefs are justified, given the evidence.

- "It's true because it is in my selfish interest to believe it." *Innate selfishness*: I hold fast to beliefs that justify my getting more power, money, or personal advantage even though these beliefs are not grounded in sound reasoning or evidence.

Test the Idea
Identifying Some of Your Irrational Tendencies

Using the above categories of irrational beliefs as a guide, identify at least one belief you hold in each of the categories:

1. It's true because I believe it.

2. It's true because my group believes it.

3. It's true because I want to believe it.

4. It's true because I have always believed it.

5. It's true because it is in my selfish interest to believe it.

On a scale of 1–10 (10 equating with "highly irrational" and 1 with "highly rational"), where would you place yourself? Why?
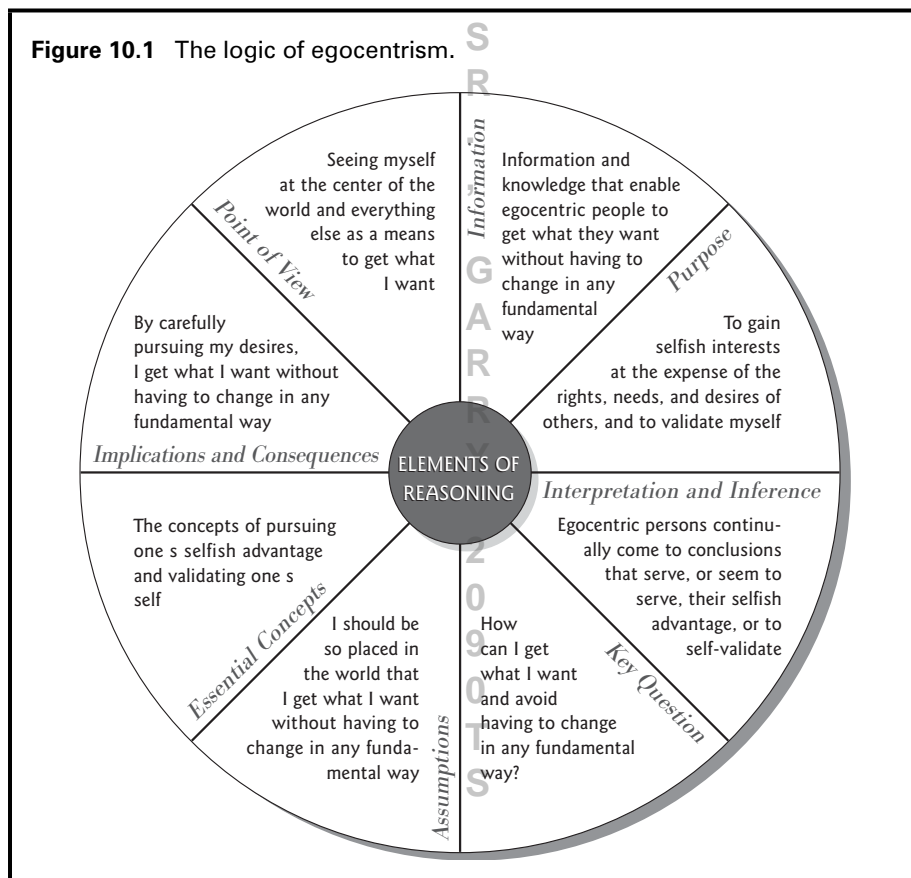

If humans are naturally prone to assess thinking in keeping with the above criteria, it is not surprising that we, as a species, have not developed a significant interest in establishing and fostering legitimate intellectual standards. There are too many domains of our thinking that we, collectively, do not want to have questioned. We have

too many prejudices that we do not want to be challenged. We are committed to having our selfish interests served. We are not typically concerned with protecting the rights of others. We are not typically willing to sacrifice our desires to meet someone else's basic needs. We do not want to discover that beliefs we have taken to be obvious and sacred might not be either. We will ignore any number of basic principles if doing so enables us to maintain our power or to gain more power and advantage.

Fortunately, humans are not always guided by egocentric thinking. Within each person are, metaphorically speaking, two potential minds: One emerges from innate egocentric, self-serving tendencies, and the other emerges from cultivated rational, higher-order capacities (if cultivated).

We begin this chapter by focusing on the problem of egocentric tendencies in human life (Figure 10.1). We then contrast this defective mode of thinking with its opposite: rational or reasonable thinking. We explore what it means to use our minds to create rational beliefs, emotions, and values—in contrast to egocentric ones. We then focus on two distinct manifestations of egocentric thinking: dominating and submissive behavior.

Figure 10.1 The logic of egocentrism.

Point of View: Seeing myself at the center of the world and everything else as a means to get what I want

Information: Information and knowledge that enable egocentric people to get what they want without having to change in any fundamental way

Purpose: To gain selfish interests at the expense of the rights, needs, and desires of others, and to validate myself

Interpretation and Inference: Egocentric persons continually come to conclusions that serve, or seem to serve, their selfish advantage, or to self-validate

Key Question: How can I get what I want and avoid having to change in any fundamental way?

Assumptions: I should be so placed in the world that I get what I want without having to change in any fundamental way

Essential Concepts: The concepts of pursuing one's selfish advantage and validating one's self

Implications and Consequences: By carefully pursuing my desires, I get what I want without having to change in any fundamental way

ELEMENTS OF REASONING

Understanding Egocentric Thinking

Egocentric thinking emerges from our innate human tendency to see the world from a narrow self-serving perspective. We naturally think of the world in terms of how it can serve us. Our instinct is to continually operate within the world, to manipulate situations and people, in accordance with our selfish interests.

At the same time, we naturally assume that our thinking is rational. No matter how irrational or destructive our thinking is, when we are operating from an egocentric perspective, we see our thinking as reasonable. Our thinking seems to us to be right, true, good, and justifiable. Our egocentric nature, therefore, creates perhaps the most formidable barrier to critical thinking.

We inherit from our childhood the sense that we have basically figured out the truth about the world. We naturally believe in our sense of who and what we are. Therefore, if we behave or think irrationally, we are, in a sense, victims of the beliefs and thought processes we have developed through life (because egocentric thinking is commanding us).

As we age, our rational capacities develop to some extent. We come to think more reasonably in some areas of our lives. This can come from explicit instruction or experience. If we are in an environment that models reasonable behavior, we become more reasonable. Yet it is hard to imagine making significant inroads into egocentric thinking unless we become explicitly aware of it and learn how to undermine or

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Test the Idea
Beginning to Understand Egocentric Thinking

Try to think of a disagreement you were in recently in which you now realize that you were not fair-mindedly listening to the views of someone else. Perhaps you were defensive during the conversation, or were trying to dominate the other person. You were not trying to see the situation from the perspective of the person with whom you were interacting. At the time, however, you believed that you were being reasonable. Now you realize that you were being close-minded. Complete these statements:

1. The situation was as follows…

2. My behavior/thinking in the situation was as follows…

3. I now realize that I was close-minded because…

If you cannot think of an example, think of a situation that you were in recently in which someone else was being close-minded. Also, ask yourself why you cannot think of any examples of close-mindedness on your part.

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short-circuit it in some way. The human mind can think irrationally in too many ways while masking itself within a facade of reasonability.
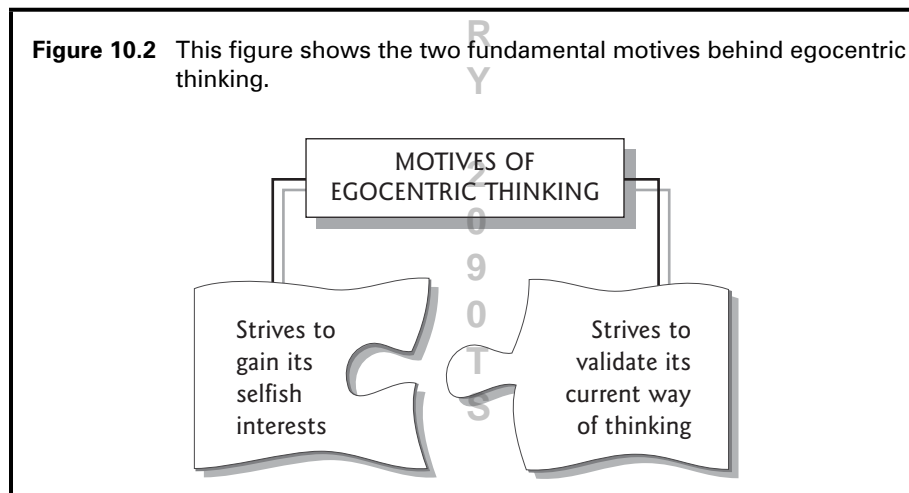
The mere appearance of rationality, of course, is not equivalent to its genuine presence. And, unfortunately, much rational adult behavior is at root, egocentric or sociocentric. This stems, in part, from the fact that people generally do not have a clear understanding of how the human mind functions. Most important, they fail to realize that thinking, if left to itself, is inherently flawed with prejudices, half-truths, biases, vagueness, arrogance, and the like

Understanding Egocentrism as a Mind Within the Mind

Egocentric thinking functions subconsciously, like a mind within us that we deny we have. No one says, "I think I will think egocentrically for a while." Its ultimate goals are gratification and self-validation (Figure 10.2). It does not respect the rights and needs of others—though it may be protective of those with whom it ego-identifies. When we are thinking egocentrically, we see ourselves as right and just. We see those who disagree with us as wrong and unjustified.

Our family, our children, our country, our religion, our beliefs, our feelings, our values are all specially privileged in our egocentric mind. Our validation is crucial to us, and we seek it even if we have been unfair to others or irresponsibly harmed them in a flagrant way. We are interested only in facts we can twist to support us. We dislike or fear people who point out our inconsistencies. If we criticize ourselves, it is not the occasion for significantly changing our behavior but, rather, the means of avoiding such change. For example, if I say, "I know I have a short fuse, but I can't help it. I lose my temper just like my father did!" My criticism justifies my continuing to lose my temper.

Figure 10.2 This figure shows the two fundamental motives behind egocentric thinking.

MOTIVES OF EGOCENTRIC THINKING

Strives to gain its selfish interests

Strives to validate its current way of thinking

One of the ways we use egocentric thinking, then, is to validate our current belief system. When we feel internally validated, we live comfortably with ourselves even if what we are doing is actually unethical. For example, if I am brought up to believe that people of a certain race are inferior, my egocentric thinking enables me to maintain all of the following beliefs: 1) I am not prejudiced (they simply are inferior); 2) I judge each person I meet on his or her own merits; 3) I am an open-minded person.

With these beliefs operating in my thinking, I do not see myself as jumping to conclusions about members of this race. I do not think of myself as wronging them in any way. I see myself as simply recognizing them for what they are. Though I ignore the evidence that demonstrates the falsity of what I believe, I do not see myself ignoring the evidence. I do not think of myself as a racist, for being a racist is bad, and I am not bad.

Only when we explicitly develop our ability to rationally analyze ourselves can we begin to see these tendencies in ourselves. When we do, it is almost never at the precise moments when our egocentric mind is in control. Once egocentric thinking begins to take control, it spontaneously rationalizes and deceives itself into believing that its position is the only justifiable position. It sees itself as experiencing the truth, no matter how inaccurate a picture of things it is painting. This skilled deceiving of self effectively blocks reasonable thoughts from correcting distorted ones. And the more highly self-deceived we are, the less likely we are to recognize our irrationality, the less likely we are to consider relevant information that our egocentricity is blocking from our view, and the less motivated we are to develop truly rational beliefs and views.

Test the Idea
Discovering Prejudices in Your Beliefs

As egocentric thinkers, we see ourselves as possessing the truth. At the same time, we form many beliefs without the evidence to justify them. We form many prejudices (judgments before the evidence). If this is true, we should be able to begin to unearth some of our prejudices, using our rational capacity. In an attempt to begin this process, complete the following statements:

1. One of the prejudices I have is… (Think of generalizations you tend to make even though you don't have the evidence to justify them. They can be about anything you please: a religion, atheists, men, women, homosexuals, heterosexuals, and so on. Put your prejudice in this form: All x are y, as in all women are ??, or all men are ??.)

2. A more rational belief with which I should replace this faulty belief is…

3. If I use this new belief in my thinking, my behavior would change in the following ways…

"Successful" Egocentrism

Though egocentric thinking is irrational by nature, it can be functional within a dysfunctional logic. For example, it often enables us to selfishly get what we want without having to worry about the rights of the people we deny in getting what we want. This type of thinking—though defective from the points of evidence, sound reasoning, objectivity, and fair play—is often "successful" from the point of view of self-gratification. Hence, though egocentric thinking is inherently flawed, it can be successful in achieving what it is motivated to achieve.

We see this in many persons of power and status in the world—successful politicians, lawyers, businesspeople, and others. They are often skilled in getting what they want and are able to rationalize unethical behavior with great sophistication. The rationalization can be as simple as "This is a hard, cruel world. One has to be realistic. We have to realize we don't live in a perfect world. I wish we did. And, after all, we are doing things the way things have always been done." Conversely, rationalization can be as complex as that masked in a highly developed philosophy, ideology, or party platform.

Hence, though egocentric thinkers may use ethical terms in their rationalizations, they are not responsive to ethical considerations. They do not, in fact, respect ethical principles. They think of ethical principles only when those ethical principles seem to justify their getting what they want for other reasons.

Egocentric thinking, then, is inherently indifferent to ethical principles or genuine conscience. We cannot be exclusively focused at one, and the same time, on getting what we selfishly want and genuinely taking into account the rights and needs of others. The only time egocentric thinking takes others into account is when it is forced to take others into account to get what it wants. Hence, an egocentric politician may take into account the views of a public-interest group only when her re-election depends on their support. She is not focused on the justice of their cause but, rather, on the realization that if she fails to publicly validate those views, that group will refuse to support her re-election. She cares only about what is in her selfish interest. As long as the concern is selfish, by definition, the rights and needs of others are not perceived as relevant.

Corporate executives who ensure that the expected earnings of the company are significantly overstated (to enable them to sell out their stock at a high price) cause innocent people to lose money investing in a company that appears to be (but is not) on the upswing. Most CEOs who manipulate data in this way do not worry about the well being of potential investors. Their justification must be, "Let the buyer beware!" By using this type of justification, they don't have to face the unethical nature of their behavior.

Highly skilled egocentric thought can be generated in every type of human situation, from situations involving the rights and needs of thousands of people to simple,

everyday interactions between two people. Imagine that a couple, Max and Maxine, routinely go to the video store to rent movies. Inevitably Max wants to rent an action-packed movie while Maxine wants to rent a love story. Though Maxine is often willing to set aside her choices to go along with Max's desires, Max is never willing to go along with Maxine's choices. Max rationalizes his position to Maxine, telling her that his movie choices are better because they are filled with thrilling action, because love stories are always slow-moving and boring, because his movies are always award-winners, because "no one likes to watch movies that make you cry," because, because, because.... Many reasons are generated. Yet all of them camouflage the real reasons: that Max simply wants to get the types of movies he likes, that he shouldn't have to watch movies that he does not want to watch. In his mind, he should get to do it because he wants to. Period.

Max's egocentrism hides the truth even from himself. He is unable to grasp Maxine's viewpoint. He cannot see how his self-centered thinking adversely affects Maxine. Insofar as his thinking works to achieve his desires, and he is therefore unable to detect any flaws in his reasoning, he is egocentrically successful.

Test the Idea
Recognizing Egocentric Thinking in Action

Think of a situation in which someone you know was trying to selfishly manipulate you into doing something incompatible with your interest. Complete the following statements:

1. The situation was as follows…
2. This person, x, was trying to manipulate me in the following way (by giving me these reasons for going along with him/her)…
3. At the time, these reasons (did/did not) seem rational because…
4. I now believe this person was trying to manipulate me because…
5. I think the real (irrational) reason why he/she wanted me to go along with his/her reasoning is because…

"Unsuccessful" Egocentrism

When egocentric thought is unsuccessful, it creates problems not only for those influenced by the thinker but also for the thinker (Figure 10.3). Let's return to Max and Maxine and the movies for a moment. Imagine that for many months Max and Maxine go through this video-store routine in which, through self-serving argumentation, Max is able to manipulate Maxine into going along with his video choices. But one day Maxine decides that she simply isn't going along with Max's selfish behavior in choosing which movie to rent. She begins to feel resentment toward Max. She begins to think that perhaps Max isn't truly concerned about her. The more

she thinks about it, the more she begins to see that Max is selfish in the relationship in a number of ways. Not only is he unwilling to go along with her movie choices, but he also tries to control where they go to lunch every day, when they eat lunch, when they visit with friends, and so on.

Maxine begins to feel manipulated and used by Max, and out of her resentment emerges a defensive attitude toward Max. She rebels. She no longer simply goes along with Max's unilateral decisions. She begins to tell him when she doesn't agree with his choices.

At this point, the table is turned for Max. His egocentric thinking is no longer working for him. He feels anger when he doesn't get his way. Because he lacks insight into his dysfunctional thinking, though, he doesn't realize that he is actually treating Maxine unfairly.

Because Maxine's resentment is now leading to acts of retaliation on her part, Max's life is less successful than it was. Maxine may end up deciding that she is not going to happily agree to Max's movie choices in the future. Her resentment may lead her to seek subtle ways to punish Max for his unfair treatment of her. If she does go along with his movie choices, she might sulk the entire time they are watching the movie. They may both become unhappy as a result of Maxine's rebellion and interrelate in a perpetual state of war, as it were.

Figure 10.3 These are some of the many feelings that might accompany egocentric thinking. They often occur when egocentric thinking is "unsuccessful."
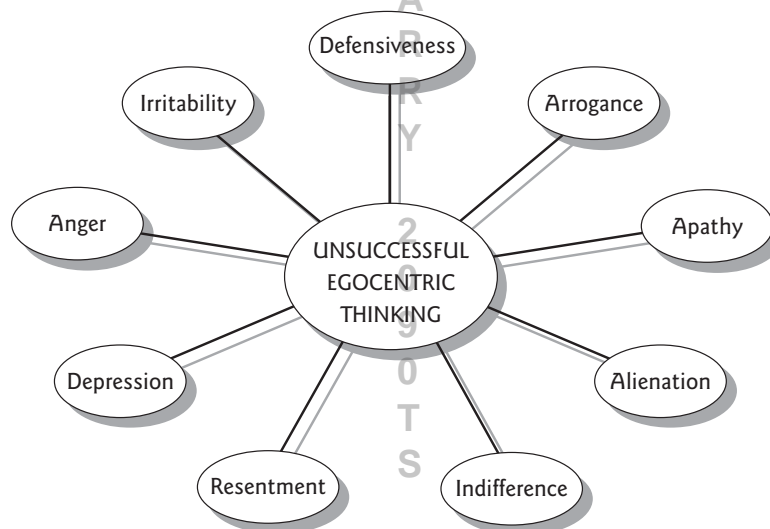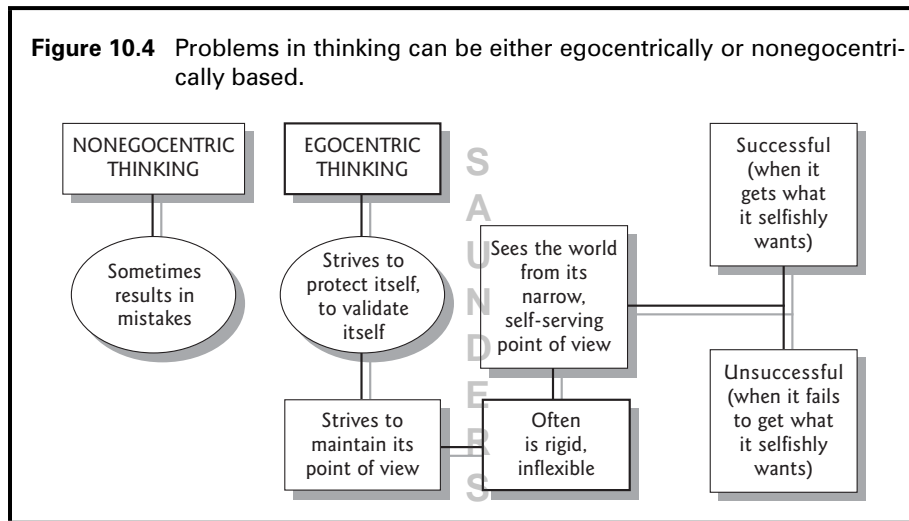
This is merely one pattern in a myriad of possible patterns of egocentric thinking leading to personal or social failure. Egocentric thinking and its social equivalent, sociocentric thinking, can lead to social prejudice, social conflict, warfare, genocide, and a variety of forms of dehumanization. Though on occasion some person or group might be "successful" as a result of the ability to wield superior power, quite often the consequences will be highly negative for themselves, as well as their victims. Consider a gang that randomly chooses a person to harass who is wearing the same color sweatshirt that is its group "color." The members begin with verbal assaults, which quickly lead to physical attacks, which in turn result in serious injury to the victim. Consequently, the gang members responsible for the attack are arrested on suspicion, then found guilty of a serious crime, which leads to their imprisonment.

Even if it does not cause direct harm to others, egocentric thinking may lead to chronic self-pity or depression. When problems emerge, it is easy to revert to this type of thinking:

> I don't know why I should always get the short end of the stick. Just when I think things are going well for me, I have to face another problem. Is there no end? Life seems to be nothing but one problem after another. My boss doesn't think I'm doing a good enough job. My wife is always complaining about something I do. My kids are always getting into trouble at school. And now I've got to figure out how to deal with this car. Life is just a pain in the neck. I don't know why things don't ever go my way.

Egocentric, self-pitying persons fail to recognize the positives in life. They screen these out in favor of self-pity. They inflict unnecessary suffering on themselves. They say to themselves, "I have a right to feel all the self-pity I want, given the conditions of my life." In situations such as this, because the mind is unable to correct itself, it is its own victim. It chooses to focus on the negative and engage in self-punitive behavior (Figure 10.4).

That is not all. Important moral implications follow from adult egocentrism and socio-centrism. Thinking that ignores the rights and needs of others will necessarily violate those rights and needs. Hence, for example, when humans are under the sway of highly sociocentric thinking, that thinking places the desires and aspirations of the group in a privileged position over other groups. One consequence resulting from such thinking is that the needs and desires of other groups are systematically ignored for the "in group" to justify getting its way. The double standards of the "in group" are camouflaged. To be sure, history is replete with examples of social groups imposing on other groups pain, suffering, and deprivation that they would object to if it were inflicted on them. The inconsistencies characteristic of hypocrisy easily avoid our notice when we are under the sway of socio-centrism.

Figure 10.4 Problems in thinking can be either egocentrically or nonegocentrically based.

NONEGOCENTRIC THINKING	EGOCENTRIC THINKING
Sometimes results in mistakes	Strives to protect itself, to validate itself

Sees the world from its narrow, self-serving point of view

Successful (when it gets what it selfishly wants)

Unsuccessful (when it fails to get what it selfishly wants)

Strives to maintain its point of view

Often is rigid, inflexible

Test the Idea
Unearthing Dysfunctional Egocentric Thinking

Try to think of a time when your desire to selfishly get what you wanted failed because of your egocentric behavior. Complete these statements:
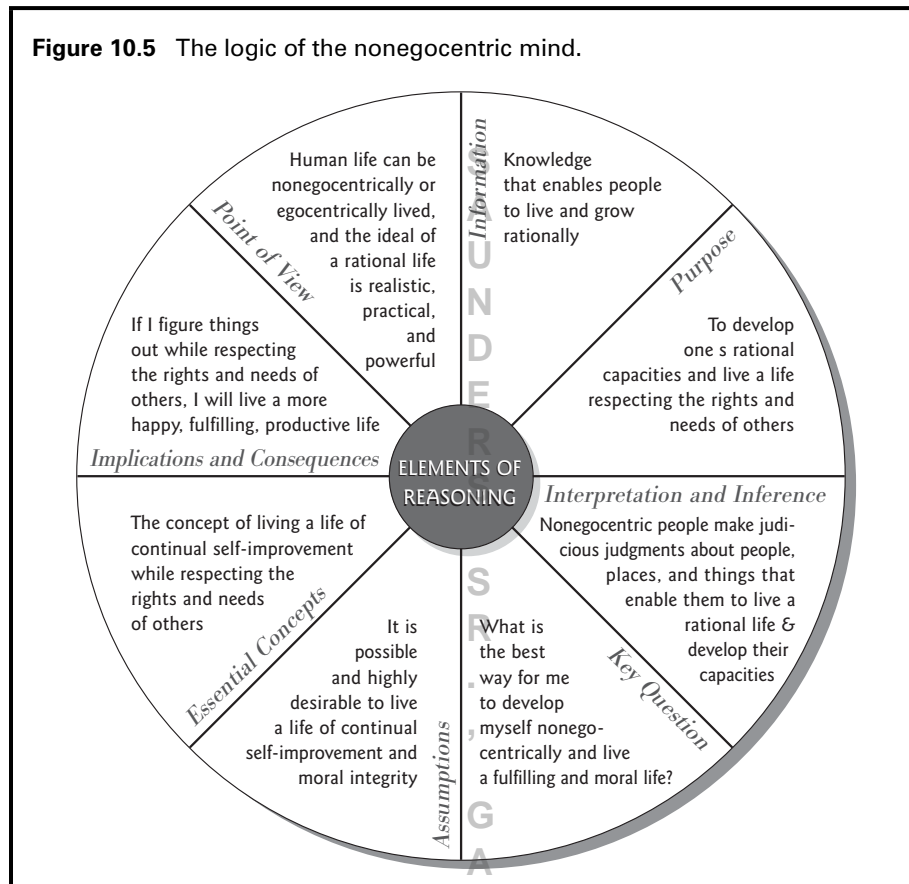
1. The situation was as follows…
2. When I didn't get what I wanted, I thought … and behaved…
3. A more rational way to think would have been…
4. A more rational way to act would have been…

Rational Thinking

Although irrationality plays a significant role in human life, human beings are in principle capable of thinking and behaving rationally. Humans can learn to respect evidence even though it does not support their views. We can learn to enter empathically into the viewpoint of others. We can learn to attend to the implications of our own reasoning and behavior. We can become compassionate. We can make sacrifices for others. We can work with others to solve important problems. We can discover our tendency to think egocentrically and begin to correct for that tendency.

Hence, though egocentrism causes us to suffer from illusions of perspective, we can transcend these illusions by practicing the thinking that takes us into the perspective of others. Just as we can assimilate what we hear into our own perspective, so can we learn to role-play the perspectives of others. Just as egocentrism can keep us unaware of the thinking process that guides our behavior, critical thinking can help us learn to

Figure 10.5 The logic of the nonegocentric mind.

Point of View
Human life can be nonegocentrically or egocentrically lived, and the ideal of a rational life is realistic, practical, and powerful

Information
Knowledge that enables people to live and grow rationally

Purpose
To develop one s rational capacities and live a life respecting the rights and needs of others

Implications and Consequences
If I figure things out while respecting the rights and needs of others, I will live a more happy, fulfilling, productive life

ELEMENTS OF REASONING

Interpretation and Inference
Nonegocentric people make judicious judgments about people, places, and things that enable them to live a rational life & develop their capacities

Essential Concepts
The concept of living a life of continual self-improvement while respecting the rights and needs of others

Assumptions
It is possible and highly desirable to live a life of continual self-improvement and moral integrity

Key Question
What is the best way for me to develop myself nonegocentrically and live a fulfilling and moral life?

explicitly recognize that thinking process. Just as we can take our own point of view to be absolute, we also can learn to recognize that our point of view is always incomplete and sometimes blatantly self-serving. Just as we can remain completely confident in our ideas even when they are illogical, we can learn to look for lapses of logic in our thinking and recognize those lapses as problematic (Figure 10.5).

We need not continually confuse the world with our own perspective of the world. We can learn to consider and understand others' points of view, to see situations from more than one point of view. We can learn to assess our thinking for soundness. We can strive to become conscious of it as we develop our "second nature."

Each of us has at least the potential for developing a rational mind and using that development to resist or correct for egocentric thought patterns (Table 10.1). This requires a certain level of command over the mind that few people have. It involves disciplined thinking. It means holding oneself accountable. It means developing an inner voice that guides thinking so as to improve it. It means thinking through the

implications of thinking before acting. It involves identifying and scrutinizing our purposes and agendas, explicitly checking for egocentric tendencies. It involves identifying irrational thinking and transforming it into reasonable thinking.

Let us imagine the case of Todd and Teresa, who are dating. Todd finds himself feeling jealous when Teresa talks with another man. Then Todd recognizes the feeling of jealousy as irrational. Now he can intervene to prevent his egocentric nature from asserting itself. He can ask himself questions that enable him to begin to distance himself from his "ego." "Why shouldn't she talk to other men? Do I really have any good reason for distrusting her? If not, why is her behavior bothering me?"

Table 10.1 This table compares the tendencies of inherent egocentric thinking with those of cultivated nonegocentric thinking.	
The Egocentric Mind	**The Nonegocentric Mind**
Pursues selfish interests at the expense of the rights, needs, and desires of others while stunting development of the rational mind	Respects the needs and desires of others while pursuing its own needs and desires and is motivated to develop itself, to learn, to grow intellectually
Seeks self-validation	
Can be inflexible (unless it can achieve its selfish interests through flexibility	Is flexible, adaptable
	Strives to be fair-minded
Is selfish	Strives to accurately interpret information
Makes global, sweeping positive or negative generalizations	Strives to gather and consider all relevant information
Distorts information and ignores significant information	Reacts rationally to situations by taking charge of emotions and using emotional energy productively
Reacts with negative, counterproductive emotions when it fails to have desires met	

Through this sort of self-scrutinizing, reasonable persons seek to understand what lies behind their motivation. They come to terms with their own egocentrism. They establish relationships characterized by reasonability and mutual respect. Rational thinking, then, is flexible, disciplined, and fair-minded in its approach. It is able to chart its own course while adhering to ethical demands. It guides itself deliberately away from irrational tendencies in itself.

Thus, just as unconscious, self-deceptive thinking is the vehicle for accomplishing irrational ends, conscious self-perceptive thinking is the vehicle for achieving rational ends (Figure 10.6). An intrinsic dimension of rational thinking, therefore, is raising

Figure 10.6 At any given moment, depending on the situation, the three functions of the mind are controlled by either egocentric or nonegocentric thinking.
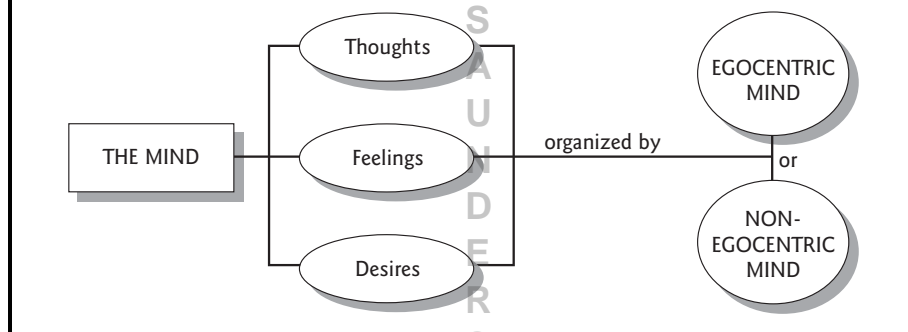
to the conscious level all instinctive irrational thought. We cannot improve by ignoring our bad habits, only by breaking them down. This requires admitting we have bad habits. And it requires an active self-analytic stance.

Following this line of reasoning, a rational act is one that is able to withstand reasonable criticism when brought entirely into the open. All thought that we cannot entirely own up to should be suspect to us. Like a contract with many pages of fine print that the contract writer hopes the reader will not explicitly understand, the egocentric mind operates to hide the truth about what it is actually doing. It hides the truth both from itself and from others, all the while representing itself as reasonable and fair.

Rational thinking, in contrast, is justified by the giving of good reasons. It is not self-deceptive. It is not a cover for a hidden agenda. It is not trapped within one point of view when other points of view are relevant. It strives to gather all relevant information and is committed to self-consistency and integrity. Reasonable people seek to see things as they are, to understand and experience the world richly and fully. Reasonable people are actively engaged in life, willing to admit when they are wrong, and to learn from their mistakes. Indeed, they want to see themselves as wrong when they are wrong.

To develop your rational capacities, then, you have to understand that at any given moment, your thoughts, feelings, and desires can be controlled either by egocentric or by rational thinking. For your rational mind to prevail over your egocentric tendencies, you will function in a way analogous to that of the orchestra leader. The leader controls the process of musical production, maintains discipline within the orchestra, assesses the quality of the sounds, listens for flaws in delivery and points out those flaws for correction, and, through routine scrutiny and continual practice, is finally able to elicit music of high quality.

For you to reach more of your rational potential, you must become a student of the interplay between rational and irrational thought and motivation in your life. You must come to see that, ultimately, your thinking is what is controlling who and what you are, determining the essential quality of your life.

Test the Idea
To What Extent Are You Rational?

Now that you have read an introduction to rationality and irrationality (egocentrism), think about the extent to which you think you are either rational or irrational. Answer these questions:

1. If you were to divide yourself into two parts, one being egocentric and the other rational, to what extent would you say you are either? Would you say you are 100% rational, 50% rational and 50% egocentric, or how would you divide yourself?

2. What reasoning would you give to support your answer to number 1 above? Give examples from your life.

3. To the extent that you are egocentric, what problems does your egocentrism cause?

4. Does your egocentric thinking tend to cause more problems for yourself or for others? Explain.

Two Egocentric Functions

We have introduced you to the distinction between rationality and irrationality. Now we will discuss two distinctively different patterns of egocentric thinking. Both represent general strategies the egocentric mind uses to get what it wants and ways of irrationally acquiring power.

First let's focus on the role that power plays in everyday life. All of us need to feel that we have some power. If we are powerless, we are unable to satisfy our needs. Without power, we are at the mercy of others. Virtually all that we do requires the exercise of some kind of power, whether small or large. Hence, the acquisition of power is essential for human life. But we can pursue power through either rational or irrational means, and we can use the power we get to serve rational or irrational ends.

Two irrational ways to gain and use power are given in two distinct forms of egocentric strategy:

1. The art of dominating others (a direct means to getting what one wants);
2. The art of submitting to others (as an indirect means to getting what one wants).

Insofar as we are thinking egocentrically, we seek to satisfy our egocentric desires either directly, by exercising overt power and control over others, or indirectly, by

submitting to those who can act to serve our interest. To put it crudely, the ego either bullies or grovels. It either threatens those weaker or subordinates itself to those more powerful, or both.
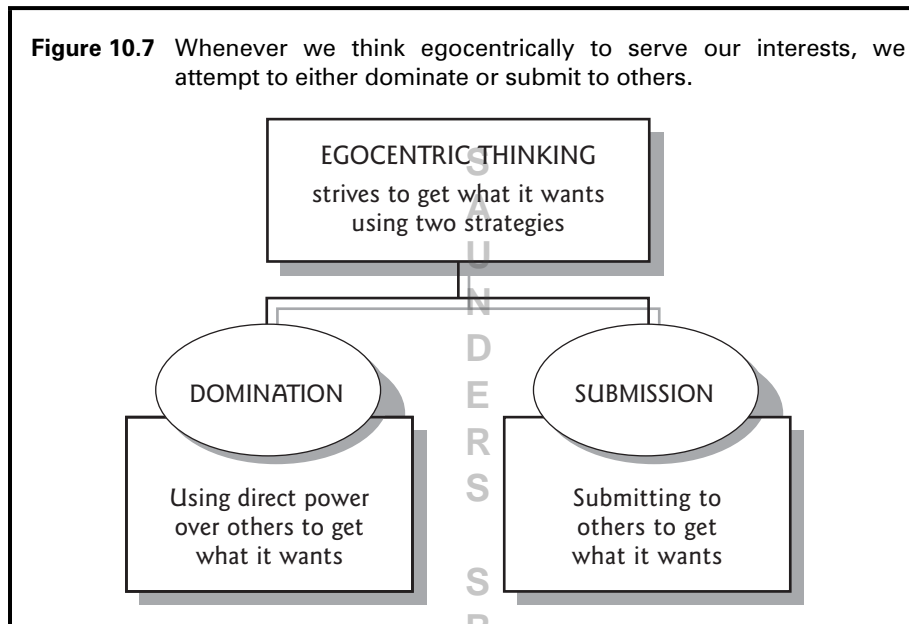
Both of these methods for pursuing our interests are irrational, both fundamentally flawed, because both are grounded in unjustified thinking. Both result from the assumption that an egocentric persons' needs and rights are more important than those they exploit for their advantage. We will briefly explore these two patterns of irrational thinking, laying out the basic logic of each.

Before we discuss these patterns, one caveat is in order. As we have mentioned, many situations in life involve using power. However, using power need not imply an inappropriate use. For example, in a business setting, hierarchical protocol requires managers to make decisions with which their employees may not agree. The responsibility inherent in the manager's position calls for that manager to use his or her power to make decisions. Indeed, managers who are unable to use the authority vested in their positions are usually ineffective. They are responsible for ensuring that certain tasks are completed. Therefore, they must use their power to see those tasks to completion. Of course that does not justify their using power unjustifiably to serve selfish ends.

The use of power, then, is and must be part of human life. The fundamental point is that power can be used either rationally or irrationally, depending on the motivation and manner of the person wielding it. Thus, if power is used to serve rational ends, and pursues those ends in a reasonable manner, it is justified. In contrast, if power is used to control and manipulate others for irrational, self-serving ends, that is another matter entirely.

Let us now turn to the two predominant patterns of irrational thinking that all of us use to the extent that we are egocentric. The first we refer to as the dominating ego function: "I can get what I want by fighting my way to the top." The second we term the submissive ego function: "I can get what I want by pleasing others." The egocentric mind chooses one over the other either through habit or through an assessment of the situation (Figure 10.7). For example, it can either forcefully displace those at the top or please those on top and gain its desires thereby. Of course, we must remember that these choices and the thinking that accompanies them function subconsciously.

Figure 10.7 Whenever we think egocentrically to serve our interests, we attempt to either dominate or submit to others.
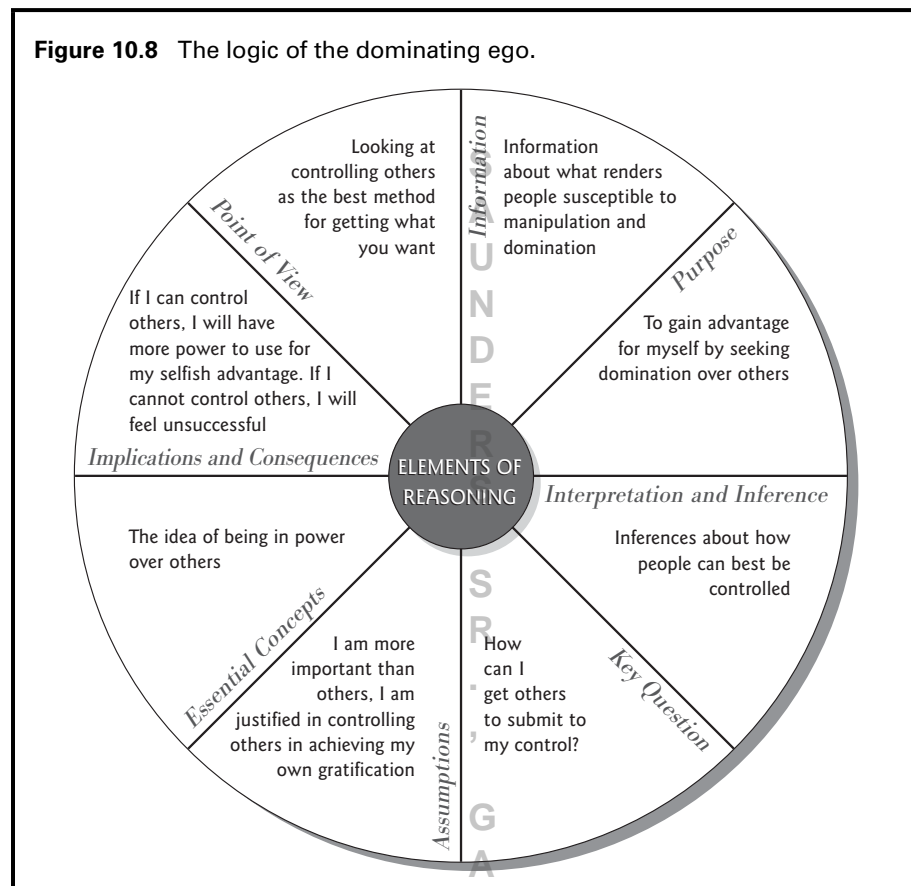
EGOCENTRIC THINKING
strives to get what it wants
using two strategies

DOMINATION

Using direct power over others to get what it wants

SUBMISSION

Submitting to others to get what it wants

Dominating Egocentrism

Between the two functions of egocentric thinking, perhaps the one more easily understood is the dominating function—or the dominating ego, as we usually will refer to it for the purposes of this chapter. When we are operating within this mode of thinking, we are concerned, first and foremost, to get others to do precisely what we want by means of power over them. Thus, the dominating ego uses physical force, verbal intimidation, coercion, violence, aggression, "authority," and any other form of overt power to achieve its agenda. It is driven by the fundamental belief that to get what we want, we must control others in such a way that were they to resist us, we could force them to do what we want. At times, of course, domination may be quite subtle and indirect, with a quiet voice and what appears to be a mild manner.

For examples of the dominating ego at work, we need only to look to the many people who are verbally or physically abused by their spouses, or the many children similarly abused by their parents. The basic unspoken pattern is, "If others don't do what I want, I force them to do it." Or consider the man in a bar who gets into a fight to force another man away from his girlfriend. His purpose, on the surface, is to protect her. In reality, his purpose may be to ensure that she won't be tempted into a romantic relationship with someone else, or embarrass him in front of his peers.

Domination over others typically generates feelings of power and self-importance (Figure 10.8). Through self-deception, it also commonly entails a high sense of self-righteousness. The dominator is typically arrogant. To the dominator, control over

Figure 10.8 The logic of the dominating ego.

Looking at controlling others as the best method for getting what you want

Point of View

Information

Information about what renders people susceptible to manipulation and domination

Purpose

If I can control others, I will have more power to use for my selfish advantage. If I cannot control others, I will feel unsuccessful

Implications and Consequences

To gain advantage for myself by seeking domination over others

ELEMENTS OF REASONING

Interpretation and Inference

The idea of being in power over others

Inferences about how people can best be controlled

Essential Concepts

I am more important than others, I am justified in controlling others in achieving my own gratification

How can I get others to submit to my control?

Key Question

Assumptions

I UNDERSTAND, GARRY 2009 OUTS

others seems to be right and proper. The dominator uses force and control "for the good" of the person being dominated. The key is that there is self-confirmation and self-gain in using power and forcing others to submit. One key is that others must undergo undeserved inconvenience, pain, suffering, or deprivation as a result.

Given these mutually supporting mental structures, it is difficult for those who successfully dominate others to recognize any problems in their own behavior or reasoning. Why change when, in your mind, you are doing what ought to be done? Hence, as long as the dominating ego is "successful," it experiences positive emotions. To the extent that it is "unsuccessful"—unable to control, dominate, or manipulate others—it experiences negative emotions.

When control is the goal, negative emotions frequently generated from the frustrated failure to control include anger, rage, wrath, rancor, hostility, antagonism, depression, and sadness. Consider the abusive husband who, for many years, is successfully able to control his wife. When she decides to leave him, he may go into a

fit of rage and kill her, and perhaps even himself. As long as he thinks he is in control of her, he feels satisfied. But when he no longer can dominate her, his irrational anger may well lead him to the extreme of physical violence.

Examples of the kinds of thinking that dominating persons use in justifying their irrational controlling behavior are:

- "I know more than you do."
- "Since I know more than you, I have an obligation to take charge."
- "If I have to use force to make things right, I should do so because I understand better what needs to be done."
- "If I have more power than you do, it is because I am superior to you in skill and understanding."
- "I have a right to take the lead. I understand the situation best."
- "You are behaving stupidly. I cannot let you hurt yourself."
- "I am an expert. Therefore, there is nothing you can teach me that I don't already know or need to know."

Given these subconscious beliefs and thoughts, it follows that people who operate primarily from the dominating ego would be likely to have difficulties in interpersonal relationships, especially when they come up against another dominating ego or against a strong rational person.

Another benchmark of the dominating ego is its propensity to impose higher standards on others than it imposes on itself. For example, it may require something near perfection in others while ignoring blatant flaws in itself. For a simple, everyday example, we can turn to what often happens in traffic jams. People frequently drive as if their "rights" were sacred ("No one should ever cut me off.") while they frequently cut off others ("I have to get into this lane—too bad if others have to wait."). In short, the dominating ego expects others to adhere to rules and regulations it has the "right" to thrust aside at will.

From an ethical point of view, those who seek control over others frequently violate the rights, and ignore the needs, of others. Selfishness and cruelty are common in these people. It is, of course, difficult to gain any ground by reasoning with people who are under the sway of their dominating ego, for they will use any number of intellectual dodges to avoid taking moral responsibility for their behavior.

> **Test the Idea**
> **To What Extent are You Egocentrically Dominating?**
>
> Think about your typical patterns of interaction with friends, family members, fellow workers, and others. Complete the following statements:
>
> 1. I tend to be the most (egocentrically) dominating in the following types of situations…
> 2. Some examples of my dominating behavior are…
> 3. I usually am successful/unsuccessful in dominating others. My strategy is…
> 4. My controlling behavior creates problems because…

In the next section, we lay out the logic of egocentric submissive thinking, thinking that seeks power and security through attachment to those who dominate and wield power. Again we are not assuming that everyone who has power has achieved it by dominating others. They may well have achieved it through rational means. With this caveat in mind, let us begin with a basic outline of the submissive ego.

Submissive Egocentrism

If the hallmark of the dominating ego is control over others, the hallmark of the submissive ego is strategic subservience (Figure 10.9). When in this mode of thinking, people gain power not through the direct struggle for power but, instead, through subservience to those who have power. They submit to the will of others to get those (powerful) others to act in their selfish interest. In this way, people with submissive egos gain indirect power. To be successful, they learn the arts of flattery and personal manipulation. They must become skilled actors and actresses, appearing to be genuinely interested in the well being and interests of the other while in reality pursuing their own interest through the other. At the same time, they must hide this mode of functioning from themselves, as they have to maintain some level of self-respect. If they had to consciously admit to themselves that they were submitting to others to have their own way, they would have trouble feeling justified.

There are countless examples of this mode of functioning in everyday life. The teenage female, for example, who pretends to enjoy fishing (while being inwardly bored by it) so her boyfriend will like her better is engaging in this type of thinking. She submits to his desires and his will only because she wants to gain specific ends (of having a prestigious boyfriend, gaining attention from him, feeling secure in the relationship, and so on). Though she readily agrees to go fishing with him, she probably will end up resenting having done so in the long run—especially once she secures his commitment to her. By virtue of the bad faith implicit in the strategies of

Figure 10.9 The logic of the submissive ego.
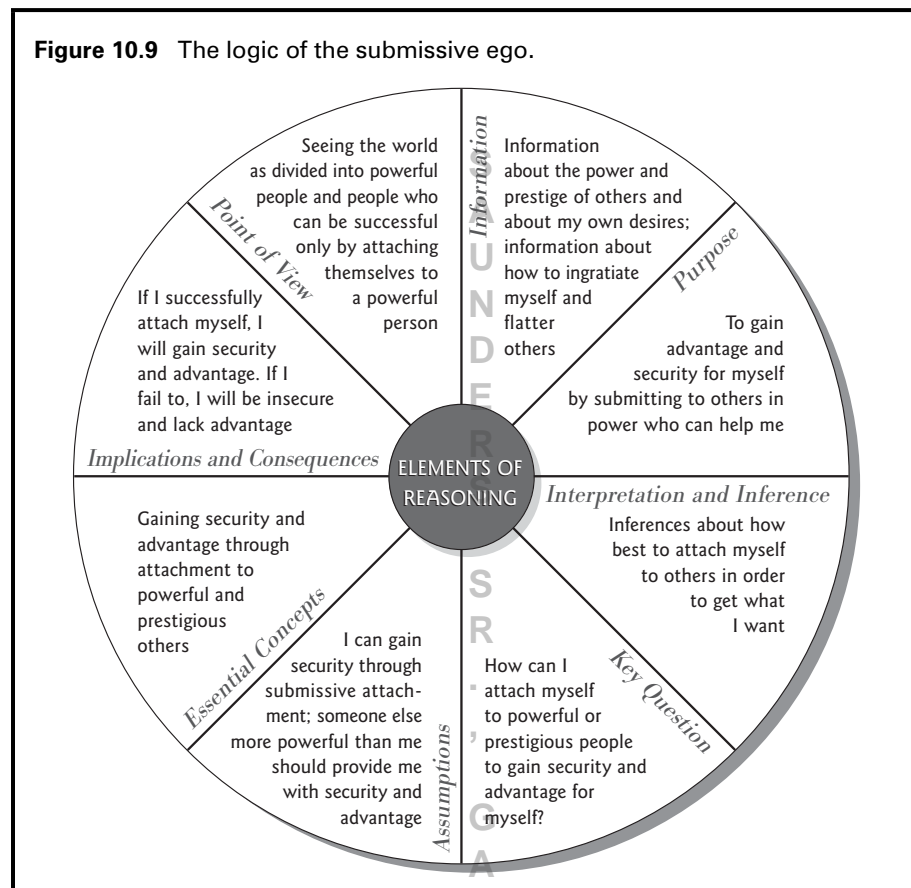
the submissive ego, it is common for resentment eventually to develop in the person who functions consistently in this mindset.

If the pattern of thinking of the submissive ego takes root in the young woman we just imagined, she eventually might marry a financially secure man so she can be taken care of, will not have to work, and can enjoy the luxuries of a life without personal sacrifice. Consciously she may deceive herself into believing she loves the man. Yet, because she does not relate to him rationally, the relationship is likely to be dysfunctional.

A similar pattern often occurs in social groups. Within most groups there will be a structure of power, with some playing a dominant and others a submissive role.

Most people will play both roles, depending on the situation. Nazi Germany and the ideology of Fascism provide an excellent example of a system that simultaneously cultivated both dominating and submissive behavior. In this system, nearly everyone had to learn to function within both egocentric types, depending on the context. A

hierarchy was established in which everyone was required to give absolute obedience to those above them and to have absolute authority over everyone below them. Only Hitler did not have to use the strategy of submission, as there was no one for him to submit to. Theoretically, no one in such a system has to rationally persuade anyone below him or her in the system. The expectation is clear: Anyone below submits; anyone above dominates.

In the ideology of most human cultures, a greater place is officially given to the use of reason in human life than it was in Fascist society. Much of the official ideology of any society, however, is more window dressing than reality. Suffice it to say that because all societies are stratified and all stratified societies have a hierarchical structure of power, all societies, to date, encourage the thinking of the dominating and submissive ego.

Part of that stratification is found in work-related contexts. In many work situations, men and women alike feel forced to operate in a submissive manner toward their supervisors, allowing themselves to be dominated and manipulated by their superiors so they can stay in favor, keep their jobs, or get promotions.

Thus, the submissive ego operates through artifice and skillful self-delusion to ensure its security, advantage, and gratification. It engages in behavior that is compliant, servile, cowering, acquiescent, to achieve its objectives—though all of these characteristics may be highly disguised. It continually capitulates, defers, caves in, succumbs, and yields to the will of others to gain advantage and maintain its artificial self-esteem.

To avoid the feeling of caving in to superiors, one of the most effective image-saving devices is to adopt the point of view of the superior. In this case, the submission appears as simple agreement: "He didn't pressure me; I agree with him."

As long as the submissive ego achieves "success," it experiences positive emotions—satisfaction, happiness, fulfillment, pleasure, and the like. To the extent that it is not achieving its goals and fails to gain its ends through submission, however, it feels any of a number of negative emotions including bitterness, resentment, animosity, ill will, spitefulness, vindictiveness, enmity, antipathy, and loathing. What is more, depending on the situation, a sense of having failed may lead to insecurity, fear, helplessness, depression, and anxiety.

When unsuccessful, the submissive ego tends to punish itself inwardly, much more than the dominating ego, which, when experiencing pain, tends to respond by inflicting pain on others. Egocentric feelings mirror egocentric thought. Hence, when inflicting pain on itself, the submissive ego sees itself as justified in feeling bad. It experiences a form of sick pleasure in reminding itself that it has every reason to feel negative emotions.

Consider, for example, the woman who believes that her husband should deal with all the unpleasant decisions that have to be made. If he asks her to handle some of

those decisions, she goes along with him but is resentful as a result. She may think thoughts such as:

> *Why should I have to deal with these unpleasant decisions? They are his respon-*
> *sibility. I always have to do the things he doesn't want to do. He doesn't really*
> *care about me because if he did, he wouldn't ask me to do this.*

She feels justified in thinking these negative thoughts, and in a way she enjoys the feelings of resentment that accompany such thoughts.

The submissive ego often has a "successful" relationship with a person who functions within the dominating-ego mindset. The paradigm case of this phenomenon can be found in marriages in which the male dominates and the female submits. She submits to his will. He may require that she do all the household chores. In return, either implicitly or explicitly, he agrees to take care of her (serve as the primary bread-winner). Although she may at times resent his domination, she understands and, at some level, accepts the bargain. Through rationalization she convinces herself that she probably couldn't do better with any other man, that this one provides the comforts she requires, that in essence she can put up with his domineering behavior because the pay-offs are worth it.

Thus, the submissive ego can experience a form of dysfunctional "success" as long as it feels that it is having its desires met. Take the employee who behaves in a subservient manner to a verbally abusive manager in order to get promotions. As long as the manager takes care of the employee—by looking after his interests, by giving him the promotions he is striving toward—the employee has more positive feelings. When the manager ceases doing this, however, and therefore no longer seems to be concerned with the employee's needs and desires, the employee may feel degraded and resentful of the manager and the subservient role he is forced to play. If given an opportunity, he may turn on his supervisor.

As the submissive ego relates to others, its feelings, behaviors, and thoughts are controlled by beliefs deriving from its own subconscious sense of inferiority. To justify its need to submit to the desires and will of another person, it must perceive itself as inferior to that person. Otherwise it would be unable to rationalize its subservience. It would be forced to recognize its dysfunctional thinking and behavior. Consider the following unconscious beliefs that drive the thinking of the submissive ego:

- "I must go along with this (decision, situation) even though I don't agree with it. Otherwise I won't be accepted."
- "For me to get what I want, I must submit to those who are more powerful than I am."
- "Since I'm not very smart, I must rely on others to think for me."
- "Since I'm not a powerful person, I must use manipulative strategies to get others to get what I want."

As is true for all manifestations of egocentric thinking, none of these beliefs exists in a fully conscious form. They require self-deception. Otherwise the mind would immediately recognize them as irrational, dysfunctional, and absurd. Consequently, what the mind consciously tells itself is very different from the beliefs operating in egocentric functioning. Consider the first belief, "I must go along with this decision even though I don't agree with it. Otherwise I won't be accepted." The conscious thought parallel to this unconscious one is something like: "I don't know enough about the situation to decide for myself. Even though I'm not sure this is the right decision, I'm sure the others are in a better position than I to decide." This is the thought the mind believes it is acting upon, when in reality it is basing its reasoning on the other, unconscious belief. Thinking within this logic, the person is "dishonestly" going along with the decision, in a sense pretending to agree, but all the while doing so only to forward an agenda of acceptance.

In addition to serving as a major barrier to the pursuit of rational relationships, the submissive ego stunts the development of the rational mind, limiting its capacity for insight into self. The submissive ego is enabled to do this through any number of self-protecting beliefs:

- "I'm too stupid to learn this."

- "If I have a question, others might think I'm ignorant."

- "I'm not as smart as others."

- "No matter how hard I try, I can't do any better than I'm already doing."

- "I'll never be able to figure this out."

- "Since I know I'm too dumb to learn this, there's no point in really trying."

Thus, the submissive ego, like the dominating ego, creates significant barriers to development. It routinely turns to others for help when it is capable of performing without that help. The submissive ego experiences frustration, anxiety, and even depression when it fails, or when it anticipates failure, in learning situations. Whereas the dominating ego believes it already knows what it needs to know, the submissive ego often believes it is incapable of learning.

Test the Idea
To What Extent are You Egocentrically Submissive?

Think about your typical patterns of interaction with friends, family members, fellow workers, and others. Complete the following statements:

1. I tend to be the most (egocentrically) submissive in the following types of situations…

2. Some examples of my submissive egocentric behavior are…

3. I am usually successful/unsuccessful when I try to manipulate others through submissiveness. My strategy is…

4. My submissive behavior creates problems because…

To What Extent are You Egocentrically Dominating Versus Submissive?

Think about your typical patterns of interaction with friends, family members, fellow workers, and others. Do you tend to be more dominating or submissive in most situations in which you are egocentric? What about your friends, family members, co-workers? Do they tend to be more dominating or submissive? Given your experience, what problems emerge from people behaving in dominating or submissive ways?

Pathological Tendencies of the Human Mind

We now can put explicitly into words an array of interrelated natural dispositions of the human mind that follow as consequences of the pathology of the natural mind. To significantly develop our thinking, we must overtly identify these tendencies as they operate in our lives, and we must correct them through critical-thinking processes. As you read them, ask yourself whether you recognize these as processes that take place regularly in your own mind (if you conclude, "not me!" think again):

- **Egocentric memory**: the natural tendency to "forget" evidence and information that do not support our thinking and to "remember" evidence and information that do.

- **Egocentric myopia**: the natural tendency to think in an absolutist way within an overly narrow point of view.

- **Egocentric righteousness**: the natural tendency to feel superior in the light of our confidence that we possess the truth when we do not.

- **Egocentric hypocrisy**: the natural tendency to ignore flagrant inconsistencies— for example, between what we profess to believe and the actual beliefs our behavior implies, or between the standards to which we hold ourselves and those to which we expect others to adhere.

- **Egocentric oversimplification**: the natural tendency to ignore real and important complexities in the world in favor of simplistic notions when consideration of those complexities would require us to modify our beliefs or values.

- **Egocentric blindness**: the natural tendency not to notice facts and evidence that contradict our favored beliefs or values.

- **Egocentric immediacy**: the natural tendency to overgeneralize immediate feelings and experiences, so that when one event in our life is highly favorable or unfavorable, all of life seems favorable or unfavorable to us.

- **Egocentric absurdity**: the natural tendency to fail to notice thinking that has "absurd" consequences.

Challenging the Pathological Tendencies of the Mind

It is not enough to recognize abstractly that the human mind has a predictable pathology. As aspiring critical thinkers, we must take concrete steps to correct it. This requires us to create the habit of identifying these tendencies in action. This is a long-term project that is never complete. To some extent, it is analogous to stripping off onion skins. After we remove one, we find another beneath it. To some extent, we have to strip off the outer layer to be able to recognize the one underneath. Each of the following admonitions, therefore, should not be taken as simple suggestions that any person could immediately, and effectively, put into action, but rather as strategic formulations of long-range goals. We all can perform these corrections, but only over time and only with considerable practice:

Correcting Egocentric Memory. We can correct our natural tendency to "forget" evidence and information that do not support our thinking and to "remember" evidence and information that do, by overtly seeking evidence and information that do not support our thinking and directing explicit attention to them. If you try and cannot find such evidence, you should probably assume you have not conducted your search properly.

Correcting Egocentric Myopia. We can correct our natural tendency to think in an absolutistic way within an overly narrow point of view by routinely thinking within points of view that conflict with our own. For example, if we are liberal, we can take the time to read books by insightful conservatives. If we are conservative, we can take the time to read books by insightful liberals. If we are North Americans, we can study a contrasting South American point of view or a European or Far-Eastern or Middle-Eastern or African point of view. If you don't discover significant personal prejudices through this process, you should question whether you are acting in good faith in trying to identify your prejudices.

Correcting Egocentric Righteousness. We can correct our natural tendency to feel superior in light of our confidence that we possess the truth by regularly reminding ourselves how little we actually know. In this case, we can explicitly state the unanswered questions that surround whatever knowledge we may have. If you don't discover that there is much more that you do not know than you do know, you should question the manner in which you pursued the questions to which you do not have answers.

Correcting Egocentric Hypocrisy. We can correct our natural tendency to ignore flagrant inconsistencies between what we profess to believe and the actual beliefs our behavior implies, and inconsistencies between the standards to which we hold ourselves and those to which we expect others to adhere. We can do this by regularly comparing the criteria and standards by which we are judging others with those by which we are judging ourselves. If you don't find many flagrant inconsistencies in

your own thinking and behavior, you should doubt whether you have dug deeply enough.

Correcting Egocentric Oversimplification. We can correct our natural tendency to ignore real and important complexities in the world by regularly focusing on those complexities, formulating them explicitly in words, and targeting them. If you don't discover over time that you have oversimplified many important issues, you should question whether you have really confronted the complexities inherent in the issues.

Correcting Egocentric Blindness. We can correct our natural tendency to ignore facts or evidence that contradicts our favored beliefs or values by explicitly seeking out those facts and evidence. If you don't find yourself experiencing significant discomfort as you pursue these facts, you should question whether you are taking them seriously. If you discover that your traditional beliefs were all correct from the beginning, you probably moved to a new and more sophisticated level of self-deception.

Correcting Egocentric Immediacy. We can correct our natural tendency to overgeneralize immediate feelings and experiences by getting into the habit of putting positive and negative events into a much larger perspective. You can temper the negative events by reminding yourself of how much you have that many others lack. You can temper the positive events by reminding yourself of how much is yet to be done, of how many problems remain. You know you are keeping an even keel if you find that you have the energy to act effectively in either negative or positive circumstances. You know that you are falling victim to your emotions if and when you are immobilized by them.

Correcting Egocentric Absurdity. We can correct our natural tendency to ignore thinking that has absurd consequences by making the consequences of our thinking explicit and assessing them for their realism. This requires that we frequently trace the implications of our beliefs and their consequences in our behavior. For example, we should frequently ask ourselves: "If I really believed this, how would I act? Do I really act that way?"

By the way, personal ethics is a fruitful area for disclosing egocentric absurdity. We frequently act in ways that are "absurd"—given what we insist we believe in. If, after what you consider to be a serious search, you find no egocentric absurdity in your life, think again. You are probably just developing your ability to deceive yourself.

The Challenge of Rationality

If the human mind has a natural tendency toward irrationality, in the form of dominating and submissive ego functions, it also has a capacity for rationality, in the form of capacity for self-knowledge. We all have a tendency toward hypocrisy and inconsistency, but we nevertheless can move toward greater and greater integrity and con-

sistency. We can counteract our natural tendency toward intellectual arrogance by developing our capacity for intellectual humility. Put another way, we can learn to continually question what we "know" to ensure that we are not uncritically accepting beliefs that have no foundation in fact.

Moreover, we can counteract our tendency to be trapped in our own point of view by learning how to enter sympathetically into the points of view of others. We can counteract our tendency to jump to conclusions by learning how to test our conclusions for their validity and soundness. We can counteract our tendency to play roles of domination or submission by learning how to recognize when we are doing so. We can begin to see clearly why submission and domination are inherently problematic. We can learn to search out options for avoiding either of these modes of functioning. And we can practice the modes of self-analysis and critique that enable us to learn and grow in directions that render us less and less egocentric. We will focus more extensively on learning to control our egocentrism in Chapter 16, on strategic thinking.