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Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life

By [Richard W. Paul](#), [Linda Elder](#)

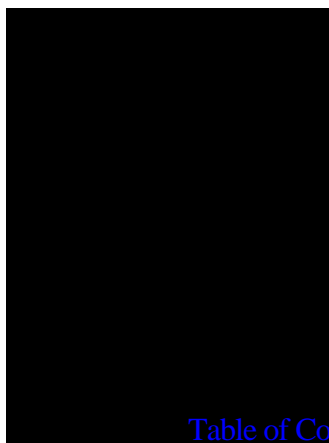
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Critical Thinking is about becoming a better thinker in every aspect of your life: in your career, and as a consumer, citizen, friend, parent, and lover. Discover the core skills of effective thinking; then analyze your own thought processes, identify weaknesses, and overcome them. Learn how to translate more effective thinking into better decisions, less frustration, more wealth, and above all, greater confidence to pursue and achieve your most important goals in life.



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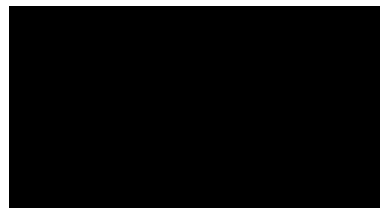
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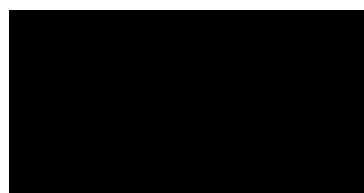


world, it is quality of thinking that gives an edge—an idea that opens new doors, a technique that solves a problem, or an insight that simply helps make sense of it all.

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Preface

"The mind is its own place and in itself can make a hell of heaven or a heaven of hell"

—Milton, Paradise Lost

You are what you think. Whatever you are doing, whatever you feel, whatever you want—all are determined by the quality of your thinking. If your thinking is unrealistic, your thinking will lead to many disappointments. If your thinking is overly pessimistic, it will deny you due recognition of the many things in which you should properly rejoice.

Test this idea for yourself. Identify some examples of your strongest feelings or emotions. Then identify the thinking that is correlated with those examples. For example, if you feel excited about going to work, it is because you [think](#) that positive things will happen to you while you are at work, or that you will be able to accomplish important tasks. If you dread going to work, it is because you think it will be a negative experience.

In a similar way, if the quality of your life is not what you wish it to be, it is probably because it is tied to the way you think about your life. If you think about it positively, you will feel positive about it. If you think about it negatively, you will feel negative about it.

For example, suppose you recently accepted a job in a new city. You accepted said job because you had the view that you were ready for a change, that you wanted to experience living in a different place, that you wanted to find a new set of friends—in short, in many ways you wanted to start a new life. And let's suppose that your expectations of what would happen when you took the new job did not come to fruition. If this were the thrust of your thinking, you would now feel disappointed and maybe even frustrated (depending on how negative your experience has been interpreted by your thinking).

For most people, most of their thinking is subconscious, that is, never explicitly put into words. For example, most people who think negatively would not say of themselves, "I have chosen to think about myself and my experience in largely negative terms. I prefer to be as unhappy as I can be. "

The problem is that when you are not aware of your thinking you have no chance of "correcting" it. When thinking is subconscious, you are in no position to see any problems in it. And, if you don't see any problems in it, you won't be motivated to change it.

The truth is that since few people realize the powerful role that thinking plays in their lives, few gain significant command of their thinking. And therefore, most people are in many ways "victims" of their own thinking, harmed rather than helped by it. Most people are their own worst enemy. Their thinking is a continual source of problems, preventing them from recognizing opportunities, keeping them from exerting energy where it will do the most good, poisoning relationships, and leading them down blind alleys.

This book will—if you let it—improve the quality of your thinking, and therefore, help you achieve your goals and ambitions, make better decisions, and understand where others are trying to influence your thinking. It will help you take charge of what you do in your professional and personal life, how you relate to others, and even what emotions you feel. It's time for you to discover the power and role of thinking in your life. You are capable of achieving more significant professional goals. You can become a better problem solver. You can use power more wisely. You can

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The Nature of the Post-Industrial World Order

The world is swiftly changing. With each passing day, the pace of life and change quickens. The pressure to respond intensifies. New global realities are rapidly working their way into the deepest structures of our lives: economic, social, cultural, political, and environmental realities—realities with profound implications for thinking and learning, business and politics, human rights, and human conflicts. These realities are becoming increasingly complex; many represent significant dangers and threats. And they all turn on the powerful dynamic of accelerating change.

A Complex World of Accelerating Change

Can we deal with incessant and accelerating change and complexity without revolutionizing our thinking? Traditionally, our thinking has been designed for routine, for habit, for automation and fixed procedure. We learned how to do our job, and then we used what we learned over and over. But the problems we now face, and will increasingly face, require a radically different form of thinking, thinking that is more complex, more adaptable, and more sensitive to divergent points of view. The world in which we now live requires that we continually relearn, that we routinely rethink our decisions, and that we regularly reevaluate the way we work and live. In short, there is a new world facing us, one in which the power of the mind to command itself, to regularly engage in self-analysis, will increasingly determine the quality of our work, the quality of our lives, and perhaps even, our very survival.

Consider a simple feature of daily life: drinking water from the tap. With the increase of pollution, the poisoning of ground water, the indirect and long-term negative consequences of even small amounts of any number of undesirable chemicals, how are we to judge whether or not our drinking water is safe? Increasingly, governments are making decisions about how many lives to risk based on the financial consequence of saving them, about whether, for example, to put less money into the improvement of water quality at increased risks to human health. How are we to know whether the risk the government is willing to take with our lives is in line with our willingness to be at risk? This is just one of hundreds of decisions that require that we think critically about the ever-more changing world we face.

Consider the quiet revolution that is taking place in global communications. From fax machines to E-Mail, from complex electronic marketing systems to systems that track us and penetrate our private lives, we are not only providing positive opportunities for people to be more efficient with their time, but also systems that render us vulnerable and wield power over us. On the one hand, we have networks where goods, services, and ideas are freely exchanged with individuals the world over, and on the other hand, we face worldwide surveillance systems that render privacy an illusion. How are we to respond to these revolutionary changes? What is one to resist and what is one to support? When is a new system cost effective? Who should control it? For what ends should it be used? Who is to monitor its impact on human lives and well being? How are we to preserve our traditional freedoms, at home and abroad? How are we to protect our families and ourselves? How are we to preserve our human rights and have lives of autonomy, security, and integrity? What are we willing to give up in the pursuit of greater convenience and ease of communication?

And while we ponder the many issues related to technological advancement, we must also juggle and judge work and child care, efficiency and clogged transportation systems, expensive cars and inconvenient office space, increased specialization and increasing obsolescence, increased state power and decreased civil freedoms.

A Threatening World

We are caught up not only in an increasing swirl of challenges and decisions, but in an increasingly threatening world as well:

- A world in which we can no longer anticipate the knowledge or data we will need on the job, because we can no longer predict the kinds of jobs we will be doing.
- A world in which powerful technologies are interfaced with simplistic thinking about complex issues: "Get tough on crime!" "Three strikes and you're out!" "Zero tolerance!" "Adult crime, adult time!"
- A world in which national mass media gain more and more power over the minds of people.
- A world in which the incarceration of more and more people for longer and longer periods of time is becoming one of the largest industries, employing hundreds of thousands of professionals with vested interests in maintaining a large prison population: builders, architects, lawyers, police, federal investigators, prosecutors, social workers, counselors, psychologists, prison guards, and others.
- A world in which privacy is increasingly penetrated by multiple invasive technologies: face-recognition software, DNA testing, e-mail review systems, credit card tracking, and auto-tracking systems.
- A world in which global forces—subject to virtually no control—make far-reaching decisions that deeply impact our lives.
- A world in which self-serving ideologies are advanced in expensive media campaigns.
- A world in which increasing numbers of people advocate the use of violence as a response to real or perceived injustice.
- A world in which increasing numbers of people willingly accept significant diminution of individual rights and freedoms in exchange for increasing police and governmental powers of surveillance and detention.
- A world in which increasing numbers of civilians find themselves trapped in the crossfire of warring groups and ideologies.

Change, Danger, and Complexity: Interwoven

Accelerating change, danger, and complexity do not function alone. They are deeply intermeshed, interactive, and transforming.

Consider the problem of solid waste management. This problem involves every level of government, every department: from energy to water quality, to planning, to revenues, to public health. Without a cooperative venture, without bridging territorial domains, without overcoming the implicit adversarial process within which we currently operate, the responsible parties at each tier of government cannot even begin to solve these problems. When they do communicate, they often speak from a position of vested interest, less concerned with public good than in furthering a self-serving agenda.

Consider the issues of depletion of the ozone layer, world hunger, over-population, and AIDS. Without the intellectual ability to reason through these complex problems, without being able to analyze the layers within them, without knowing how to identify and pursue the information we need to solve them, we are adrift in a sea of confusion. Without a grasp of the political realities, economic pressures, and scientific data (on the physical environment and its changes)—all of which are simultaneously changing as well—we cannot reverse the trend of deterioration of the quality of life for all who share the earth.

Consider, finally, the problem of terrorism and its link to the problem of ever-diminishing freedom. Predictable and unpredictable "enemies" threaten increasing numbers of innocent people. Though the root causes of terrorism almost always stems from complex issues, terrorism itself is often treated simplistically. People routinely, and uncritically, accept their national media's portrayal of world affairs, though national media in every country typically distort why their nation's "enemies" think and act as they do. Similarly, people readily accept their government's portrayal of world issues. When one's own country, or their allies, attack and kill civilians, such actions are defined by the national governments (and their symbiotic media) as 'defensive' in nature. Unethical practices by one's own government are covered-up, played down, or defended as a last recourse. Similar practices on the part of one's enemy are highlighted and trumpeted, often fomenting national outrage. Mob action, national vendettas, and witch hunts commonly result. The words "good" and "evil" are freely used to justify violence and terror inflicted on enemies—whether "real" or imagined.

But the problem of terrorism is inseparable from the problem of preserving essential human rights and freedoms. In "solving" one problem, we can easily create another. Let us look at a very small part of the evidence. Statewatch (www.statewatch.org/news) a European public interest watchdog group, reports on a letter from President Bush proposing a "lengthy list of more than 40 demands to the European Union for cooperation on anti-terrorism measures," many of which indiscriminately cover "criminal investigations, data surveillance, border controls, and immigration policies." Yet Tony Bunyan, Statewatch editor, comments: "Many of the demands have nothing to do with combating terrorism ." At the same time, the UK parliamentary Joint Committee on Human Rights, comprised of Ministers and Lords, has issued a report that is highly critical of the British government's proposed Anti-Terrorism, Crime and Security Bill. The report claims that the bill violates the European Convention on Human Rights, and questions both the definition of "terrorist activity" and the extension of police powers inherent in the bill.

The fact is that governments world-wide seem prepared to abandon traditional citizen rights and protections to accommodate sweeping extensions of police and government power—in the pursuit of those labeled "terrorists." The New York Times reports (Nov. 22, 2001): "As Americans debate how ruthless a war to wage against terrorism, India's leaders have seized on the Sept. 11 attack to push a draconian new anti-terror law that has stirred furious opposition " The new ordinance allows authorities "to tap telephones, monitor e-mail, detain people without charge for up to six months, conduct secret trials in jails, and keep the identity of witnesses secret." According to the Times, under a similar previous Indian law, " more than 75,000 people were arrested, but only 1% convicted [while] many

The Challenge of Becoming Critical Thinkers

The question of how to survive in the world is a question that continually transforms itself. Accelerating change, increasing complexity, and intensifying danger sound the death knell for traditional methods of learning. How can we adapt to reality when reality won't give us the time to master it before it changes, again and again, in ways we can but partially anticipate? Unfortunately, the crucial need for ever-new modes of thought to adapt to new problems and situations in new and humane ways is ignored by most cultures and most schools. Short-term thinking, which leads to quick-fix solutions, is largely the rule of the day. Great power is wielded around the world by little minds. Critical thinking is not a social value in any society. If we are to take up the challenge of becoming critical thinkers, we face a battery of hitherto unanswered questions that define the detailed agenda of this book. This question-centered agenda provides the impetus for reformulating our worldview. Through it, we can appreciate the intellectual work required to change our thinking in foundational ways. Through it, we can grasp the need to regularly re-examine the extent of our ignorance. Through it, we can grasp the need for regular exercise of disciplined thinking. Through it, we can understand the long-term nature of intellectual development, social change, and personal growth and transformation.

Every chapter of this book highlights crucial questions we need to ask about thinking. All deal with essential dimensions of the problems we face in thinking. All challenge our perseverance and courage. In the end, we must face ourselves honestly and forthrightly.

Recommended Reading

Heilbroner, Robert, *Twenty-First Century Capitalism* (House of Anansi Press, Limited: Concord, Ontario, 1992).

Reich, Robert, *The Work of Nations* (Vintage Books: New York, NY, 1992).

Chapter 2. Becoming a Critic of Your Thinking

The mind is its own place and in itself can make a hell of heaven or a heaven of hell.

—John Milton, *Paradise Lost*

How Skilled is Your Thinking (Right Now)?

There is nothing more practical than sound thinking. No matter what your circumstance or goals, no matter where you are, or what problems you face, you are better off if your thinking is skilled. As a professional—shopper, employee, citizen, lover, friend, parent—in every realm and situation of your life, good thinking pays off. Poor thinking, in turn, inevitably causes problems, wastes time and energy, engenders frustration and pain.

Critical thinking is the disciplined art of ensuring that you use the best thinking you are capable of in any set of circumstances. The general goal of thinking is to "figure out the lay of the land." We all have multiple choices to make. We need the best information to make the best choices.

What is really going on in this or that situation? Are they trying to take advantage of me? Does so-and-so really care about me? Am I deceiving myself when I believe that? What are the likely consequences of failing to? If I want to do, what is the best way to prepare for it? How can I be more successful in doing? Is this my biggest problem, or do I need to focus my attention on something else? Responding to such questions successfully is the daily work of thinking. That's why we are THINKERS.

Nothing you can do, of course, guarantees that you will discover the complete truth about anything, but there is a way to get better at it. Excellence of thought and skill in thinking are real possibilities. However, to maximize the quality of your thinking, you must learn how to become an effective "critic" of your thinking. And to become an effective critic of your thinking, you have to make learning about thinking a priority.

Ask yourself these—rather unusual—questions: What have you learned about how you think? Did you ever study your thinking? What information do you have, for example, about how the intellectual processes that occur as your mind thinks? More to the point, perhaps, what do you really know about how to analyze, evaluate, or reconstruct your thinking? Where does your thinking come from? How much of it is of "good" quality? How much of it is of "poor" quality? How much of your thinking is vague, muddled, inconsistent, inaccurate, illogical, or superficial? Are you, in any real sense, in control of your thinking? Do you know how to test it? Do you have any conscious standards for determining when you are thinking well and when you are thinking poorly? Have you ever discovered a significant problem in your thinking and then changed it by a conscious act of will? If anyone asked you to teach them what you have learned, thus far in your life, about thinking, would you really have any idea what that was or how you learned it?

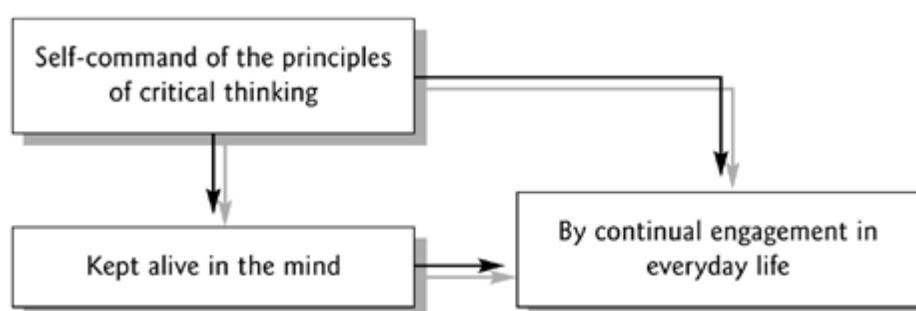
If you are like most, the only honest answers to these questions run along the lines of: "Well, I suppose I really don't know much about my thinking or about thinking in general. I suppose in my life I have more or less taken my thinking for granted. I don't really know how it works. I have never really studied it. I don't know how I test it, or even if I do test it. It just happens in my mind automatically." In other words, serious study of thinking, serious thinking about thinking, is rare. It is not a subject in most schools. It is not a subject taught at home. But if you focus your attention for a moment on the role that thinking is playing in your life, you may come to recognize that, in fact, everything you do, want, or feel is influenced by your thinking. And if you become persuaded of that, you will be surprised that humans show so little interest in thinking. We are like monkeys uninterested in what goes on when we "monkey around." What is more, if you start, then, to pay attention to thinking in a manner analogous to the way a botanist observes plants, you will be on your way to becoming a truly exceptional person. You will begin to notice what few others notice. You will be the rare monkey who knows what monkeying around is all about. You will be the rare monkey who knows how and why he is monkeying around, the rare monkey skilled in assessing and improving his monkeying. Here are some things you will eventually discover: that all of us have, somewhere along the way, picked up bad habits of thinking. All of us, for example, make generalizations when we don't have the evidence to back them up, allow stereotypes to influence our thinking, form some false beliefs, tend to look at the world from one fixed point of view, ignore or attack points of view that conflict with our own, fabricate illusions and myths that we subconsciously confuse with what is true and real, and think deceptively about many aspects of our experience. As

Good Thinking Is as Easy as Bad Thinking (But It Requires Hard Work to Develop It)

It is important to realize that thinking itself is not difficult. Humans naturally think without having to exert much energy or engage in any real intellectual work. We can easily see thinking manifest, for example, in very young children who have few or no skills of mind. It is clear that children are thinking when they are trying to figure out their "world" and how it operates, when they are determining what they can get away with and what they can't, when they are distinguishing between people who like them and people who don't, when they are asserting what they want and what they don't want. In a similar way adults are continually thinking about their world, figuring things out, making decisions, making choices. Thus, thinking per se is natural to humans; it comes easy to us. What does not come easy is consistent high quality thinking across the dimensions of one's life. That is, it is not easy to discover our bad habits and do something about them.

To make significant gains in the quality of your thinking, you will have to engage in a kind of work that most humans find unpleasant, if not painful—intellectual work. Yet once this thinking is done and we move our thinking to a higher level of quality, it is not hard to keep our thinking at that level. Still there is a price you have to pay to step up to the next level. One doesn't become a skillful critic of thinking over night, any more than one becomes a skillful basketball player or dancer over night. To become better at thinking, you must be willing to put the work into thinking that skilled improvement always requires. We say "No pain, no gain!" when thinking of what physical conditioning requires. In this case, it would be more precise to say: "No intellectual pain, no intellectual gain!" This means you must be willing to practice special "acts" of thinking that are initially at least uncomfortable, and sometimes challenging and difficult. You have to learn to do with your mind "moves" analogous to what accomplished athletes learn to do (through practice and feedback) with their bodies. Improvement in thinking, in other words, is similar to improvement in other domains of performance, where progress is a product of sound theory, commitment, hard work, and practice. This book will point the way to what you need to practice to become a skilled thinker, yet it cannot, of course, provide you with the internal motivation to do the required work. This must come from you (See [Figure 2.1](#)).

Figure 2.1. Critical thinkers use theories to explain how the mind works. Then they apply those theories to the way they live every day.



Let's now develop the analogy between physical and intellectual development. This analogy, we believe, goes a very long way, and provides us with just the right prototype to keep before our minds. If you play tennis, and you want to play better, there is nothing more advantageous than to look at some films of excellent players in action and then painstakingly compare how they address the ball in comparison to you. You study their performance. You note what you need to do more of, what you need to do less of, and you practice, practice, practice. You go through many cycles of practice/feedback/practice. Your practice heightens your awareness of the IN's and OUT's of the art. You develop a vocabulary for talking about your "performance." Perhaps you get a coach. And slowly, progressively, you improve. Similar points could be made for ballet, distance running, piano playing, chess, reading, writing, shopping, parenting, teaching, performing complex tasks on the job, etc.

One major problem, however, is that all the activities of skill development with which we are typically familiar are visible. We could watch a film of the skill-in-action. But imagine a film of a person sitting in a chair THINKING. It

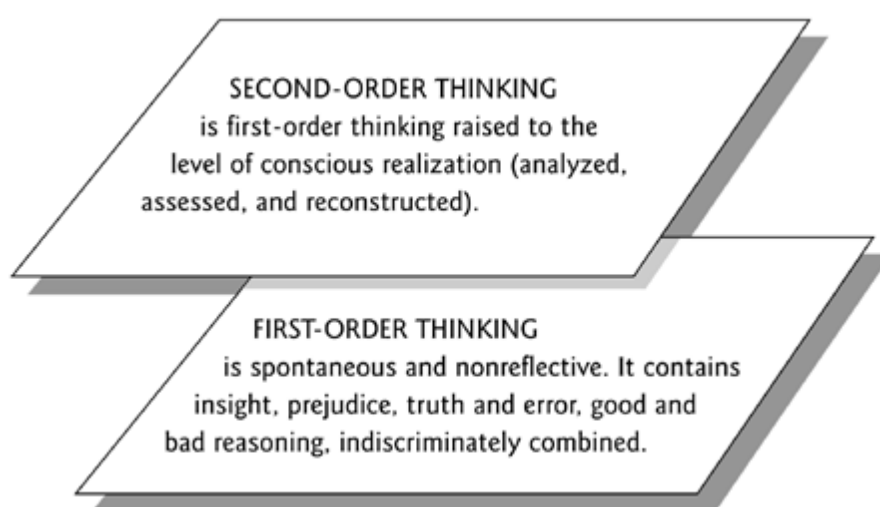
The Hard Cruel World

What help can you expect from the world about you in becoming a critical thinker? In the ordinary case, very little. Family, schools, acquaintances, employers—each have agendas that are not focused on the value of critical thinking in our lives. Most people—family members, teachers, acquaintances, business associates—have multiple problems in their own thinking: prejudices, biases, misconceptions, ideological rigidity. Few can help us directly and effectively to improve ours. Whether in a personal or public world, whether in a private or a business world, action agendas, only partially understood by those maintaining them, are the order of the day. If we are "in the way," if we act out of keeping with what is expected of us, we are likely to be introduced to the "school of hard knocks." Like it or not, we need to learn how to analyze the logic of the circumstances and persons with which we must deal and act realistically. For example, if you find yourself working in an organization, you must be prepared to take into account the actual structure of power within it, along with group definitions of reality, bureaucratic thinking, and other variables that may diminish the quality of day-to-day thinking. Nevertheless, it would be folly to speak candidly without thinking of the likely consequences of that speech. Critical thinking helps us to see with new eyes. It does not require us to endanger ourselves or act against our best interest. We must integrate three dimensions of thought. We must be idealistic (and thus capable of imagining a better world). We must be realistic (and thus see things as they are). And we must be pragmatic (and thus adopt effective measures for moving toward our ideals).

Become a Critic of Your Own Thinking

One of the most important things you can do for yourself is to begin the process of becoming a "critic" of your thinking. You do this not to negate or "dump on" yourself, but to improve yourself, to begin to practice the art of skilled thinking and lifelong learning. To do this you must "discover" your thinking, see its structure, observe its implications, and recognize its basis and vantage point. You must come to recognize that, through commitment and daily practice, you can make foundational changes in You need to learn about your "bad" habits of thought and about what you are striving for (habits of thought that routinely improve your thinking). At whatever level you think, you need to recognize that you can learn to think better ([Figure 2.4](#))

Figure 2.4. Critical thinking adds a second level of thinking to ordinary thinking. The second level analyzes and assesses our ordinary thinking.



Test the Idea Critique Your Thinking

Consider your thinking in these domains of your life: at work, in personal relationships, in sports, in dealing with others of your gender, in dealing with the opposite sex, as a reader, as a writer, in planning your life, in dealing with your emotions, in figuring out complex situations. Complete these statements:

1.

Right now, I believe my thinking across all domains of my life is of _____ quality. I based this judgment on _____.

2.

In the following areas, I think very well:

a)

b)

Conclusion

Critical thinking works ([Table 2.1](#)). It is practical. It enables you to be more successful, to save time and energy, and experience more positive and fulfilling emotions. It is in your interest to become a better critic of your thinking: as an employee, professional, manager, scholar, parent, consumer, citizen, etc. If you are not progressively improving the quality of your life, you have not yet discovered the true power of critical thinking.

Table 2.1 Why critical thinking?

| The Problem | A Definition |
|---|---|
| <p>Everyone thinks. It is our nature to do so. But much of our thinking, left to itself, is biased, distorted, partial, uninformed, or downright prejudiced. Yet the quality of our life and that of what we produce, make, or build depends precisely on the quality of our thought. Shoddy thinking is costly, both in money and in quality of life. Excellence in thought, however, must be systematically cultivated.</p> | <p>Critical thinking is that mode of thinking—about any subject, content, or problem—in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them.</p> |

The Result

A well-cultivated critical thinker:

- raises vital questions and problems, formulating them clearly and precisely;
- gathers and assesses relevant information, and effectively interprets it;
- comes to well-reasoned conclusions and solutions, testing them against relevant criteria and standards;
- thinks openmindedly within alternative systems of thought, recognizing and assessing, as need be, their assumptions, implications, and practical consequences; and

Chapter 3. Becoming a Fair-Minded Thinker

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[What Does Fair-Mindedness Require?](#)

[Intellectual Humility: Having Knowledge of Ignorance](#)

[Intellectual Courage: Being Willing to Challenge Beliefs](#)

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[Intellectual Integrity: Holding Ourselves to the Same Standards to Which We Hold Others](#)

[Intellectual Perseverance: Working Through Complexity and Frustration](#)

[Confidence in Reason: Recognizing that Good Reasoning Has Proven Its Worth](#)

[Intellectual Autonomy: Being an Independent Thinker](#)

[Recognizing the Interdependence of Intellectual Virtues](#)

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Weak versus Strong Critical Thinking

Critical thinking involves basic intellectual skills, but these skills can be used to serve two incompatible ends: self-centeredness or fair-mindedness. As we develop the basic intellectual skills that critical thinking entails, we can begin to use those skills in a selfish or in a fair-minded way. In other words, we can develop in such a way that we learn to see mistakes in our own thinking, as well as the thinking of others. Or we can merely develop some proficiency in making our opponent's thinking look bad.

Typically, people see mistakes in other's thinking without being able to credit the strengths in those opposing views. Liberals see mistakes in the arguments of conservatives; conservatives see mistakes in the arguments of liberals. Believers see mistakes in the thinking of nonbelievers; nonbelievers see mistakes in the thinking of believers. Those who oppose abortion readily see mistakes in the arguments for abortion; those who favor abortion readily see mistakes in the arguments against it.

We call these thinkers weak-sense critical thinkers. We call the thinking "weak" because, though it is working well for the thinker in some respects, it is missing certain important higher-level skills and values of critical thinking. Most significantly, it fails to consider, in good faith, viewpoints that contradict its own viewpoint. It lacks fair-mindedness.

Another traditional name for the weak-sense thinker is found in the word sophist. Sophistry is the art of winning arguments regardless of whether there are obvious problems in the thinking being used. There is a set of lower-level skills of rhetoric, or argumentation, by which one can make bad thinking look good and good thinking look bad. We see this often in unethical lawyers and politicians who are merely concerned with winning. They use emotionalism and trickery in an intellectually skilled way.

Sophistic thinkers succeed only if they do not come up against what we call strong-sense critical thinkers. Strong-sense critical thinkers are not easily tricked by slick argumentation. As William Graham Sumner ([1906](#)) said almost a century ago, they

cannot be stampeded are slow to believe can hold things as possible or probable in all degrees, without certainty and without pain can wait for evidence and weigh evidence can resist appeals to their dearest prejudices .

Perhaps even more important, strong-sense critical thinkers strive to be fair-minded. They use thinking in an ethically responsible manner. They work to understand and appreciate the viewpoints of others. They are willing to listen to arguments they do not necessarily hold. They change their views when faced with better reasoning. Rather than using their thinking to manipulate others and to hide from the truth (in a weak-sense way), they use thinking in an ethical, reasonable manner.

We believe that the world already has too many skilled selfish thinkers, too many sophists and intellectual con artists, too many unscrupulous lawyers and politicians who specialize in twisting information and evidence to support their selfish interests and the vested interests of those who pay them. We hope that you, the reader, will develop as a highly skilled, fair-minded thinker, one capable of exposing those who are masters at playing intellectual games at the expense of the well-being of innocent people. We hope as well that you develop the intellectual courage to argue publicly against what is unethical in human thinking. We write this book with the assumption that you will take seriously the fair-mindedness implied by strong-sense critical thinking.

To think critically in the strong sense requires that we develop fair-mindedness at the same time that we learn basic

What Does Fair-Mindedness Require?

First, the basic concept:

Fair-mindedness entails a consciousness of the need to treat all viewpoints alike, without reference to one's own feelings or selfish interests, or the feelings or selfish interests of one's friends, company, community, or nation. It implies adherence to intellectual standards (such as accuracy and sound logic), uninfluenced by one's own advantage or the advantage of one's group.

To be fair-minded is to strive to treat every viewpoint relevant to a situation in an unbiased, unprejudiced way. It entails a consciousness of the fact that we, by nature, tend to prejudge the views of others, placing them into "favorable" (agrees with us) and "unfavorable" (disagrees with us) categories. We tend to give less weight to contrary views than to our own. This is especially true when we have selfish reasons for opposing views. For example, the manufacturers of asbestos advocated its use in homes and schools, and made large profits on its use, even though they knew for many years that the product was carcinogenic. They ignored the viewpoint and welfare of the innocent users of their product. If we can ignore the potentially harmful effects of a product we manufacture, we can reap the benefits that come with large profits without experiencing pangs of conscience. Thus, fair-mindedness is especially important when the situation calls on us to consider the point of view of those whose welfare is in conflict with our short-term vested interest.

The opposite of fair-mindedness is intellectual self-centeredness. It is demonstrated by the failure of thinkers to treat points of view that differ significantly from their own by the same standards that they treat their own.

Achieving a truly fair-minded state of mind is challenging. It requires us to simultaneously become intellectually humble, intellectually courageous, intellectually empathetic, intellectually honest, intellectually perseverant, confident in reason (as a tool of discovery and learning), and intellectually autonomous.

Without this family of traits in an integrated constellation, there is no true fair-mindedness. But these traits, singly and in combination, are not commonly discussed in everyday life, and are rarely taught. They are not discussed on television. Your friends and colleagues will not ask you questions about them.

In truth, because they are largely unrecognized, these traits are not commonly valued. Yet each of them is essential to fair-mindedness and the development of critical thinking. Let us see how and why this is so.

Intellectual Humility: Having Knowledge of Ignorance

We will begin with the fair-minded trait of intellectual humility:

Intellectual humility may be defined as having a consciousness of the limits of one's knowledge, including a sensitivity to circumstances in which one's native egocentrism is likely to function self-deceptively. This entails being aware of one's biases, one's prejudices, the limitations of one's viewpoint, and the extent of one's ignorance. Intellectual humility depends on recognizing that one should not claim more than one actually knows. It does not imply spinelessness or submissiveness. It implies the lack of intellectual pretentiousness, boastfulness, or conceit, combined with insight into the logical foundations, or lack of such foundations, of one's beliefs.

The opposite of intellectual humility is intellectual arrogance, a lack of consciousness of the limits of one's knowledge, with little or no insight into self-deception or the limitations of one's point of view. Intellectually arrogant people often fall prey to their own bias and prejudice, and frequently claim to know more than they actually know.

When we think of intellectual arrogance, we are not necessarily implying a person who is outwardly smug, haughty, insolent, or pompous. Outwardly, the person may appear humble. For example, a person who uncritically believes in a cult leader may be outwardly self-effacing ("I am nothing. You are everything"), but intellectually he or she is making a sweeping generalization that is not well founded, and has complete faith in that generalization.

Unfortunately, in human life people of the full range of personality types are capable of believing they know what they don't know. Our own false beliefs, misconceptions, prejudices, illusions, myths, propaganda, and ignorance appear to us as the plain, unvarnished truth. What is more, when challenged, we often resist admitting that our thinking is "defective." We then are intellectually arrogant, even though we might feel humble. Rather than recognizing the limits of our knowledge, we ignore and obscure those limits. From such arrogance, much suffering and waste result.

It is not uncommon for the police, for example, to assume a man is guilty of a crime because of his appearance, because he is black for example, or because he wears an earring, or because he has a disheveled and unkempt look about him. Owing to the prejudices driving their thinking, the police are often incapable of intellectual humility. In a similar way, prosecutors have been known to withhold exculpatory evidence against a defendant in order to "prove" their case. Intellectually righteous in their views, they feel confident that the defendant is guilty. Why, therefore, shouldn't they suppress evidence that will help this "guilty" person go free?

Intellectual arrogance is incompatible with fair-mindedness because we cannot judge fairly when we are in a state of ignorance about the object of our judgment. If we are ignorant about a religion (say, Buddhism), we cannot be fair in judging it. And if we have misconceptions, prejudices, or illusions about it, we will distort it (unfairly) in our judgment. We will misrepresent it and make it appear to be other than it is. Our false knowledge, misconceptions, prejudices, and illusions stand in the way of the possibility of our being fair. Or if we are intellectually arrogant, we will be inclined to judge too quickly and be overly confident in our judgment. Clearly, these tendencies are incompatible with being fair (to that which we are judging).

Why is intellectual humility essential to higher-level thinking? In addition to helping us become fair-minded thinkers, knowledge of our ignorance can improve our thinking in a variety of ways. It can enable us to recognize the prejudices, false beliefs, and habits of mind that lead to flawed learning. Consider, for example, our tendency to accept superficial learning. Much human learning is superficial. We learn a little and think we know a lot. We get limited information and generalize hastily from it. We confuse cutesy phrases with deep insights. We uncritically accept much that we hear and read—especially when what we hear or read agrees with our intensely held beliefs or

Intellectual Courage: Being Willing to Challenge Beliefs

Now let's consider intellectual courage:

Intellectual courage may be defined as having a consciousness of the need to face and fairly address ideas, beliefs, or viewpoints toward which one has strong negative emotions and to which one has not given a serious hearing. Intellectual courage is connected to the recognition that ideas that society considers dangerous or absurd are sometimes rationally justified (in whole or in part). Conclusions and beliefs inculcated in people are sometimes false or misleading. To determine for oneself what makes sense, one must not passively and uncritically accept what one has learned. Intellectual courage comes into play here because there is some truth in some ideas considered dangerous and absurd, and distortion or falsity in some ideas strongly held by social groups to which we belong. People need courage to be fair-minded thinkers in these circumstances. The penalties for nonconformity can be severe.

The opposite of intellectual courage, intellectual cowardice, is the fear of ideas that do not conform to one's own. If we lack intellectual courage, we are afraid of giving serious consideration to ideas, beliefs, or viewpoints that we perceive as dangerous. We feel personally threatened by some ideas when they conflict significantly with our personal identity—when we feel that an attack on the ideas is an attack on us as a person.

All of the following ideas are "sacred" in the minds of some people: being a conservative, being a liberal; believing in God, disbelieving in God; believing in capitalism, believing in socialism; believing in abortion, disbelieving in abortion; believing in capital punishment, disbelieving in capital punishment. No matter what side we are on, we often say of ourselves: "I am a (an) [insert sacred belief here; for example, I am a Christian. I am a conservative. I am a socialist. I am an atheist]."

Once we define who we are in relation to an emotional commitment to a belief, we are likely to experience inner fear when that idea or belief is questioned. Questioning the belief seems to be questioning us. The intensely personal fear that we feel operates as a barrier in our minds to being fair (to the opposing belief). When we do seem to consider the opposing idea, we subconsciously undermine it, presenting it in its weakest form, in order to reject it. This is one form of intellectual cowardice. Sometimes, then, we need intellectual courage to overcome our self-created inner fear—the fear we ourselves have created by linking our identity to a specific set of beliefs.

Intellectual courage is just as important in our professional as in our personal lives. If, for example, we are unable to analyze the work-related beliefs we hold, then we are essentially trapped by those beliefs. We do not have the courage to question what we have always taken for granted. We are unable to question the beliefs collectively held by our co-workers. We are unable to question, for example, the ethics of our decisions and our behavior at work. But fair-minded managers, employers, and employees do not hesitate to question what has always been considered "sacred" or what is taken for granted by others in their group. It is not uncommon, for example, for employees to think within a sort of "mob mentality" against management, which often includes routinely gossiping to one another about management practices, especially those practices that impact them. Those with intellectual courage, rather than participating in such gossip in a mindless way, will begin to question the source of the gossip. They will question whether there is good reason for the group to be disgruntled, or whether the group is irrational in its expectations of management.

Another important reason to acquire intellectual courage is to overcome the fear of rejection by others because they hold certain beliefs and are likely to reject us if we challenge those beliefs. This is where we invest the group with the power to intimidate us, and such power is destructive. Many people live their lives in the eyes of others and cannot approve of themselves unless others approve of them. Fear of rejection is often lurking in the back of their minds.

Intellectual Empathy: Entertaining Opposing Views

Next let's consider intellectual empathy, another trait of mind necessary to fair-mindedness:

Intellectual empathy is an awareness of the need to imaginatively put oneself in the place of others so as to genuinely understand them. To have intellectual empathy is to be able to accurately reconstruct the viewpoints and reasoning of others and to reason from premises, assumptions, and ideas other than one's own. This trait also correlates with the willingness to remember occasions when one was wrong in the past despite an intense conviction of being right, and with the ability to imagine being similarly deceived in a case at hand.

The opposite of intellectual empathy is intellectual self-centeredness. It is thinking centered on self. When we think from a self-centered perspective, we are unable to understand others' thoughts, feelings, and emotions. From this natural perspective, we are the recipients of most of our attention. Our pain, our desires, and our hopes are most pressing. The needs of others pale into insignificance before the domination of our own needs and desires. We are unable to consider issues, problems, and questions from a viewpoint that differs from our own and that, when considered, would force us to change our perspective.

How can we be fair to the thinking of others if we have not learned to put ourselves in their intellectual shoes? Fair-minded judgment requires a good-faith effort to acquire accurate knowledge. Human thinking emerges from the conditions of human life, from very different contexts and situations. If we do not learn how to take on the perspectives of others and to accurately think as they think, we will not be able to fairly judge their ideas and beliefs. Actually trying to think within the viewpoint of others is not easy, though. It is one of the most difficult skills to acquire. The extent to which you have intellectual empathy has direct implications for the quality of your life. If you cannot think within the viewpoint of your supervisor, for example, you will have difficulty functioning successfully in your job and you may often feel frustrated. If you cannot think within the viewpoints of your subordinates, you will have difficulty understanding why they behave as they do. If you cannot think within the viewpoint of your spouse, the quality of your marriage will be adversely affected. If you cannot think within the viewpoints of your children, they will feel misunderstood and alienated from you.

Test the Idea

Intellectual Empathy I

Try to reconstruct the last argument you had with someone (a supervisor, colleague, friend, or intimate other). Reconstruct the argument from your perspective and that of the other person. Complete the statements below. As you do, watch that you do not distort the other's viewpoint. Try to enter it in good faith, even if it means you have to admit you were wrong. (Remember that critical thinkers want to see the truth in the situation.) After you have completed this activity, show it to the person you argued with to see if you have accurately represented that person's view.

1.

My perspective was as follows (state and elaborate your view):

2.

The other person's view was as follows (state and elaborate the other person's view):

Intellectual Integrity: Holding Ourselves to the Same Standards to Which We Hold Others

Let us now consider intellectual integrity:

Intellectual integrity is defined as recognition of the need to be true to one's own thinking and to hold oneself to the same standards one expects others to meet. It means to hold oneself to the same rigorous standards of evidence and proof to which one holds one's antagonists—to practice what one advocates for others. It also means to honestly admit discrepancies and inconsistencies in one's own thought and action, and to be able to identify inconsistencies in one's own thinking.

The opposite of intellectual integrity is intellectual hypocrisy, a state of mind unconcerned with genuine integrity. It is often marked by deep-seated contradictions and inconsistencies. The appearance of integrity means a lot because it affects our image with others. Therefore, hypocrisy is often implicit in the thinking and action behind human behavior as a function of natural egocentric thinking. Our hypocrisy is hidden from us. Though we expect others to adhere to standards to which we refuse to adhere, we see ourselves as fair. Though we profess certain beliefs, we often fail to behave in accordance with those beliefs.

To the extent that we have intellectual integrity, our beliefs and actions are consistent. We practice what we preach, so to speak. We don't say one thing and do another.

Suppose I were to say to you that our relationship is really important to me, but you find out that I have lied to you about something important to you. My behavior lacks integrity. I have acted hypocritically.

Clearly, we cannot be fair to others if we are justified in thinking and acting in contradictory ways. Hypocrisy by its very nature is a form of injustice. In addition, if we are not sensitive to contradictions and inconsistencies in our own thinking and behavior, we cannot think well about ethical questions involving ourselves.

Consider this political example. From time to time the U.S. media discloses highly questionable practices by the CIA. These practices run anywhere from documentation of attempted assassinations of foreign political leaders (say, attempts to assassinate President Castro of Cuba) to the practice of teaching police or military representatives in other countries (say, Central America or South America) how to torture prisoners to get them to disclose information about their associates. To appreciate how such disclosures reveal a lack of intellectual integrity, we only have to imagine how the U.S. government and citizenry would respond if another nation were to attempt to assassinate the president of the U.S or trained U.S. police or military in methods of torture. Once we imagine this, we recognize a basic inconsistency common in human behavior and a lack of intellectual integrity on the part of those who plan, engage in, or approve of, such activities.

All humans sometimes fail to act with intellectual integrity. When we do, we reveal a lack of fair-mindedness on our part, and a failure to think well enough as to grasp the internal contradictions in our thought or life.

Test the Idea
Intellectual Integrity

Intellectual Perseverance: Working Through Complexity and Frustration

Let us now consider intellectual perseverance:

Intellectual perseverance can be defined as the disposition to work one's way through intellectual complexities despite the frustration inherent in the task. Some intellectual problems are complex and cannot be easily solved. One has intellectual perseverance when one does not give up in the face of intellectual complexity or frustration. The intellectually perseverant person displays firm adherence to rational principles despite the irrational opposition of others, and has a realistic sense of the need to struggle with confusion and unsettled questions over an extended time to achieve understanding or insight.

The opposite of intellectual perseverance is intellectual laziness, demonstrated in the tendency to give up quickly when faced with an intellectually challenging task. The intellectually indolent, or lazy, person has a low tolerance for intellectual pain or frustration.

How does a lack of intellectual perseverance impede fair-mindedness? Understanding the views of others requires that we do the intellectual work to achieve that understanding. That takes intellectual perseverance-insofar as those views are very different from ours or are complex in nature. For example, suppose you are a Christian wanting to be fair to the views of an atheist. Unless you read and understand the reasoning of intelligent and insightful atheists, you are not being fair to those views. Some intelligent and insightful atheists have written books to explain how and why they think as they do. Some of their reasoning is complicated or deals with issues of some complexity. It follows that only those Christians who have the intellectual perseverance to read and/or understand atheists can be fair to atheist views. Of course, a parallel case could be developed with respect to atheists' understanding the views of intelligent and insightful Christians.

Finally, it should be clear how intellectual perseverance is essential to all areas of higher-level thinking. Virtually all higher-level thinking requires some intellectual perseverance to overcome. It takes intellectual perseverance to reason well through complex questions on the job, to work through complex problems in intimate relationships, to solve problems in parenting. Many give up during early stages of working through a problem. Lacking intellectual perseverance, they cut themselves off from all the insights that thinking through an issue at a deep level provides. They avoid intellectual frustration, no doubt, but they end up with the everyday frustrations of not being able to solve complex problems.

Test the Idea Intellectual Perseverance

Most people have more physical perseverance than intellectual perseverance. Most are ready to admit, "No pain, no gain!" when talking about the body. Most give up quickly, on the other hand, when faced with a frustrating intellectual problem. Thinking of your own responses, in your work or your personal life, how would you evaluate your own intellectual perseverance (on a scale of 0–10)? Write out what you are basing your score on.

Confidence in Reason: Recognizing that Good Reasoning Has Proven Its Worth

Let us now consider the trait of confidence in reason:

Confidence in reason is based on the belief that one's own higher interests and those of humankind will be best served by giving the freest play to reason. Reason encourages people to come to their own conclusions by developing their own rational faculties. It is the faith that, with proper encouragement and cultivation, people can learn to think for themselves. As such, they can form insightful viewpoints, draw reasonable conclusions, and develop clear, accurate, relevant, and logical thought processes. In turn, they can persuade each other by appealing to good reason and sound evidence, and become reasonable persons, despite the deep-seated obstacles in human nature and social life. When one has confidence in reason, one is "moved" by reason in appropriate ways. The very idea of reasonability becomes one of the most important values and a focal point in one's life. In short, to have confidence in reason is to use good reasoning as the fundamental criterion by which to judge whether to accept or reject any belief or position.

The opposite of confidence in reason is intellectual distrust of reason, given by the threat that reasoning and rational analysis pose to the undisciplined thinker. Being prone toward emotional reactions that validate present thinking, egocentric thinkers often express little confidence in reason. They do not understand what it means to have faith in reason. Instead, they have confidence in the truth of their own belief systems, however flawed their beliefs might be.

In many ways we live in an irrational world surrounded by many forms of irrational beliefs and behaviors. For example, despite the success of science in providing plausible explanations based on careful study of evidence gathered through disciplined observations, many people still believe in unsubstantiated systems such as astrology. Many people, when faced with a problem, follow their "gut" impulses. Many follow leaders whose only claim to credibility is that they are skilled in manipulating a crowd and whipping up enthusiasm. Few people seem to recognize the power of sound thinking in helping us to solve our problems and live a fulfilling life. Few people, in short, have genuine confidence in reason. In the place of faith in reason, people tend to have uncritical or "blind" faith in one or more of the following (often as a result of irrational drives and emotions):

1.

Faith in charismatic national leaders (think of leaders such as Hitler, able to excite millions of people and manipulate them into supporting genocide of an entire religious group).

2.

Faith in charismatic cult leaders.

3.

Faith in the father as the traditional head of the family (as defined by religious or social tradition).

4.

Faith in institutional authorities (employers, "the company," police, social workers, judges, priests, evangelical preachers, and so forth).

5.

Faith in spiritual powers (such as a "holy spirit," as defined by various religious belief systems).

Intellectual Autonomy: Being an Independent Thinker

The final intellectual trait we will consider here is intellectual autonomy:

Intellectual autonomy may be defined as internal motivation based on the ideal of thinking for oneself; having rational self-authorship of one's beliefs, values, and way of thinking; not being dependent on others for the direction and control of one's thinking.

Autonomous persons are persons in charge of their lives. They are not irrationally dependent on others and not controlled by infantile emotions. They have self-control. They are competent. They complete what they begin. In forming beliefs, critical thinkers do not passively accept the beliefs of others. Rather, they think through situations and issues for themselves and reject unjustified authorities while recognizing the contributions of reasonable authority. They mindfully form principles of thought and action and do not mindlessly accept those presented to them. They are not limited by the accepted way of doing things. They evaluate the traditions and practices that others often accept unquestioningly. Independent thinkers strive to incorporate knowledge and insight into their thinking, independent of the social status of the source. They are not willful, stubborn, or unresponsive to the reasonable suggestions of others. They are self-monitoring thinkers who strive to amend their own mistakes. They function from values they themselves have freely chosen.

Of course, intellectual autonomy must be understood not as a thing-in-itself. Instead, we must recognize it as a dimension of our minds working in conjunction with, and tempered by, the other intellectual virtues.

The opposite of intellectual autonomy is intellectual conformity, or intellectual or emotional dependence. Intellectual autonomy is difficult to develop because social institutions, as they now stand, depend heavily on passive acceptance of the status quo, whether intellectual, political, or economic. Thinking for oneself almost certainly leads to unpopular conclusions not sanctioned by dominant groups. There are always many rewards for those who simply conform in thought and action to social pressure.

Consequently, the large masses of people are unknowing conformists in thought and deed. They are like mirrors reflecting the belief systems and values of those who surround them. They lack the intellectual skills and the incentive to think for themselves. They are intellectually conforming thinkers (Figure 3.3).

Even those who spend years getting a Ph.D. may be intellectually dependent, both academically and personally. They may uncritically accept faulty practices in the discipline as it stands, uncritically defending the discipline against legitimate critics. The result often is unwarranted human harm and suffering.

One cannot be fair-minded and lack intellectual autonomy, for independent thinking is a prerequisite to thinking within multiple perspectives. When we intellectually conform, we are only able to think within "accepted" viewpoints. But to be fair-minded is to refuse to uncritically accept beliefs without thinking through the merits (and demerits) of those beliefs for oneself.

Test the Idea
Intellectual Autonomy

Recognizing the Interdependence of Intellectual Virtues

The traits of mind essential for critical thinking are interdependent. Consider intellectual humility. To become aware of the limits of our knowledge, we need the intellectual courage to face our own prejudices and ignorance. To discover our own prejudices, in turn, we often must intellectually empathize with and reason within points of view with which we fundamentally disagree. To achieve this end, we typically must engage in intellectual perseverance, as learning to empathically enter a point of view against which we are biased takes time and significant effort. That effort will not seem justified unless we have the necessary confidence in reason to believe we will not be tainted or "taken in" by whatever is false or misleading in the opposing viewpoint.

Furthermore, merely believing we won't be harmed considering "alien" viewpoints is not enough to motivate most of us to consider them seriously. We also must be motivated by an intellectual sense of justice. We must recognize an intellectual responsibility to be fair to views we oppose. We must feel obliged to hear them in their strongest form to ensure that we are not condemning them out of ignorance or bias on our part. At this point, we come full circle to where we began: the need for intellectual humility.

To begin at another point, consider intellectual integrity or good faith. Intellectual integrity is clearly a difficult trait to develop. We are often motivated—generally without admitting to or being aware of this motivation—to set up inconsistent standards in thinking. Our egocentric or sociocentric tendencies, for example, make us ready to believe positive information about those that we like and negative information about those that we dislike. We likewise are strongly inclined to believe what serves to justify our selfish interests or validate our strongest desires. Hence, all humans have some innate mental tendencies to operate with double standards, which is typical of intellectual bad faith. These modes of thinking sometimes correlate well with getting ahead in the world, maximizing our power or advantage, and getting more of what we selfishly want.

Nevertheless, it is difficult to operate explicitly or overtly with a double standard. We therefore need to avoid looking at the evidence too closely. We need to avoid scrutinizing our own inferences and interpretations too carefully. At this point, a certain amount of intellectual arrogance is quite useful. I may assume, for example, that I know just what you're going to say (before you say it), precisely what you are really after (before the evidence demonstrates it), and what actually is going on (before I have studied the situation carefully). My intellectual arrogance makes it easier for me to avoid noticing the unjustifiable discrepancy between the standards I apply to you and the standards I apply to myself. Not having to empathize with you makes it easier to avoid seeing my self-deception. I also am better positioned if I lack a need to be fair to your point of view. A little background fear of what I might discover if I seriously consider the inconsistency of my own judgments can be quite useful as well. In this case, my lack of intellectual integrity is supported by my lack of intellectual humility, empathy, and fair-mindedness.

Going in the other direction, it will be difficult to use a double standard if I feel a responsibility to be fair to your point of view. This responsibility requires me to empathetically view things from your perspective, and to do so with some humility, recognizing that I could be wrong, and that you could be right. The more I dislike you personally, or feel wronged in the past by you or by others who share your way of thinking, the more pronounced in my character the trait of intellectual integrity and good faith must be to compel me to be fair.

We can begin to analyze the extent to which we have developed these interdependent traits of mind by focusing on our reactions to situations in the workplace. Imagine, for example, that your company decides to reorganize your division and some people lose their jobs. To what extent are you able to intellectually empathize, not only with your colleagues who lost their jobs, but also with the managers who made the decision? To what extent do you see [intellectual humility](#) operating in your thinking, so that you recognize what you do know and what you do not know about the situation? To what extent are you able to think autonomously so that you are not trapped in the group's reaction to the situation? To what extent is your thinking driven by an [intellectual sense of justice](#) to all parties

Conclusion

True excellence in thinking is not simply the result of isolated intellectual skills. There are inevitable problems in the thinking of persons who, without knowing it, lack intellectual virtues. Instead, they frequently display the traits of the undisciplined mind. To the extent one is unconsciously motivated to believe what one wants to believe, what is most comfortable to believe, what puts one in a good light, what serves one's selfish interest, one is unable to function as a rational person. As you work through this book, we hope you find yourself internalizing the essential traits. We hope you will resist the influence of both the conformist thinkers around you and the egocentric thinker within you. We hope you will recognize that skilled thinking can be used for good or for ill. We hope you will see that it is the intellectual virtues that guide thinking toward fair-mindedness. Such virtues enable us to enter, in good faith, all viewpoints relevant to a complex issue before coming to final conclusions, to seek out weaknesses in our thinking, to be moved by reasoning that is superior to our own. When possible we have the advantage in seeing all sides and are able to work with them, supporting in each what we see as sound and respectfully disagreeing with that which we see as flawed.

Natural versus Critical Thinking

- As humans we think; as critical thinkers we analyze our thinking.
- As humans we think egocentrically; as critical thinkers we expose the egocentric roots of our thinking to close scrutiny.
- As humans we are drawn to standards of thinking unworthy of belief; as critical thinkers we expose inappropriate standards and replace them with sound ones.
- As humans we live in systems of meanings that typically entrap us; as critical thinkers we learn how to raise our thinking to conscious examination, enabling us to free ourselves from many of the traps of undisciplined, instinctive thought.
- As humans we use logical systems whose root structures are not apparent to us; as critical thinkers we develop tools for explicating and assessing our participation in the logical systems in which we live.
- As humans we live with the illusion of intellectual and emotion freedom; as critical thinkers we take explicit intellectual and emotional command of who we are, what we are, and the ends to which our lives are tending.
- As human thinkers we are governed by our thoughts; as critical thinkers we learn how to govern the thoughts that govern us.

Chapter 4. Self-Understanding

The preceding chapters emphasized that:

- Critical thinking requires the development of basic intellectual skills, abilities, and insights;
- Becoming a skilled thinker is like becoming skilled in basketball, ballet, or saxophone playing;
- These skills can be used to serve two incompatible ends: self-centeredness or fair-mindedness;
- The skills of critical thinking can be learned in a "weak" sense (selfish thinking);
- We are focused on the development of critical thinking in a "strong" sense (i.e., serving fair-minded thinking);
- Fair-mindedness requires that we develop a network of interrelated traits of mind;
- Developing as a thinker is challenging, requiring internal motivation.

Our goal in this chapter is to lay a foundation for understanding better how the human mind works. We will begin by taking a further look at human egocentrism and the obstacle it represents. We then will take a look at some of the most basic distinctions we can use to achieve greater self-command.

Our latent egocentrism asserts itself through each of the basic functions of the mind. We must understand those functions, as they work in relationship to each other.

Only through our practical insight into how our mind operates can we hope to understand, and transform, ourselves.

Monitoring the Egocentrism in Your Thought and Life

One of the fundamental challenges most humans face in developing is that our life is dominated by a tendency to think and feel egocentrically. Our life is deeply situated in our own immediate desires, pains, thoughts, and feelings. We seek immediate gratification or long-term gratification based on an essentially selfish perspective. We are not typically or fundamentally concerned with whether our perceptions or meanings are accurate, though we may think we are. We are not significantly concerned with personal growth, self-insight, or ultimate integrity, though we think we are. We are not deeply motivated to discover our own weaknesses, prejudices, or self-deception. Rather, we seek to get what we want, avoid the disapproval of others, and justify ourselves in our own mind.

The tendency for humans to think in an egocentric fashion means that, typically, we have little or no real insight into the nature of our own thinking and emotions. For example, many of us unconsciously believe that it is possible to acquire knowledge without much thought, that it is possible to read without exerting intellectual energy, and that good writing is a talent one is born with—not a product of practice and hard work. As a result, we tend to evade responsibility for our own development. We do not seek to learn new ways of looking at things. Much of our thinking is stereotypical and simplistic, yet our egocentrism prevents us from recognizing this. We create the inner chains that enslave us.

These inner chains can have a negative effect on our relationships, success, growth, and happiness. It is not possible to get beyond the egocentrism that you and I inherit as human beings by ignoring our ego or pretending that we are decent people. We can restrain our egocentrism only by developing explicit habits that enable us to do so. We get beyond egocentric emotional responses not by denying that we ever respond in such a way but, rather, by owning these responses when they occur and restructuring the thinking that is feeding those emotions.

For example, each of us wants to see ourselves as an ethical person. Yet, through our egocentrism we often behave in ways that are blatantly unethical. Industries, for example, often engage in systematic practices that result in large amounts of pollutants in the environment. Yet if asked to explain their behavior, they will instead justify it through rationalization. They will make comments such as "We meet and exceed all of the federal regulations for pollution control, and in fact we do more than most companies to ensure that we don't pollute." Yet these companies are often hiding behind the concept of "federal regulations." They are not essentially concerned with the ethical or unethical nature of their behavior. Rather they are concerned simply with following the regulations. In cases such as these, industry leaders are unconcerned with whether they are actually polluting. They may not even know whether they are causing damage to the environment. And very often they do not want to know. Through their egocentrism they are able to avoid self-scrutiny. They are able to go on engaging in practices that will yield the highest monetary gain, without reference to the impact of the behavior on the environment.

We will return to the problem of dealing with egocentrism later. But you should begin to think about what egocentrism is and to monitor your thinking for evidence of it.

Test the Idea Beginning to Understand Egocentrism

Think of the most self-centered person you know. This may be someone who is fundamentally selfish or arrogant. Describe the person's behavior in detail. Based on the person's behavior, how would you describe his/her thinking? What types of feelings does he/she seem to display? What is the person's

Making a Commitment to Fair-Mindedness

Though no one defines himself or herself as an egocentric person, each of us should recognize that being egocentric is an important part of what we have to understand in dealing with the structure of our mind. One of the ways to begin to confront our own egocentrism is by exploring the extent to which we have allowed our identity to be egocentrically shaped. For example, as we previously emphasized, we are all born into a culture, a nation, and a family. Our parents inculcate into us particular beliefs (about the family, personal relationships, marriage, childhood, obedience, religion, politics, schooling, and so on). We form associations with people who have certain beliefs (which they have encouraged, or expected, us to accept). We are, in the first instance, a product of these influences. Only through self-understanding can we begin to be more than a product of influences.

If we uncritically believe what we were taught to believe, these beliefs are likely to become part of our egocentric identity. When they do, it affects the manner in which we believe. For example, we are all egocentric to the extent that an examination of our attitudes reveals that we unconsciously use egocentric standards to justify our beliefs:

1.
"It's true because I believe it." People don't say this aloud, but we often find ourselves assuming that others are correct when they agree with us and incorrect when they do not. The way we respond to people indicates that we egocentrically assume we have a unique insight into the truth.
2.
"It's true because we believe it." Our behavior indicates that we egocentrically assume that the groups to which we belong have a unique insight into the truth. Our religion, our company, our country, our friends are special—and better.
3.
"It's true because I want to believe it." Our behavior indicates that we more readily believe what coincides with what we egocentrically want to believe, even to the point of absurdity.
4.
"It's true because I have always believed it." Our behavior indicates that we more readily believe what coincides with beliefs we have long held. We egocentrically assume the rightness of our early beliefs.
5.
"It's true because it is in my selfish interest to believe it." Our behavior indicates that we more readily believe what coincides with beliefs that, when held, serve to advance our wealth, power, or position, even if they conflict with the ethical principles that we insist we hold.

If we consciously recognize these tendencies in ourselves and deliberately and systematically seek to overcome them by thinking fair-mindedly, our definition of ourselves can aid our development as thinkers. We then begin to divide our thoughts into two categories: 1) thoughts that serve to advance the agenda of our egocentric nature, and 2) thoughts that serve to develop our rational fair-mindedness. To effectively do this, we need to develop a special relationship to our mind; we must become a student of our mind's operations, especially of its pathology.

Recognizing the Mind's Three Distinctive Functions

The mind has three basic functions—thinking, feeling, and wanting ([Figures 4.1 & 4.2](#)).

1.

The function of thinking is to create meaning. Thinking makes sense of the events of our lives; it sorts events into named categories and finds patterns for us. It continually tells us: This is what is going on. This is what is happening. Notice this and that. This is how it makes sense to understand the situation. It is the part of the mind that figures things out.

2.

The function of feeling is to monitor or evaluate the meanings created by the thinking function—evaluating how positive and negative the events of our life are, given the meaning we are ascribing to them. It continually tells us: This is how you should feel about what is happening in your life. You're doing really well. Or, alternatively, watch out—you are getting into trouble!

3.

The function of wanting allocates energy to action, in keeping with our definitions of what is desirable and possible. It continually tells us: This is what is worth getting. Go for it! Or, conversely, it tells: This is not worth getting. Don't bother.

Figure 4.1. The three basic functions of the mind are intricately interrelated.

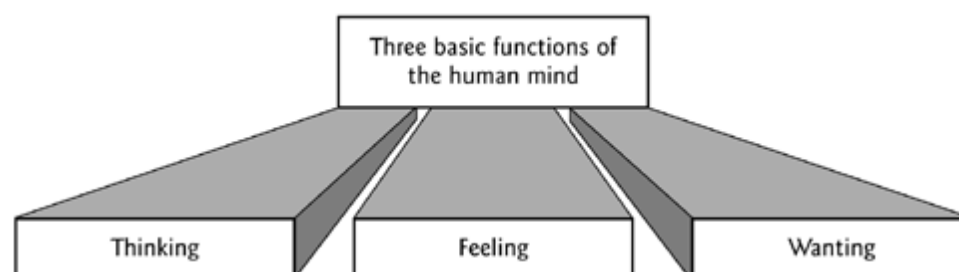
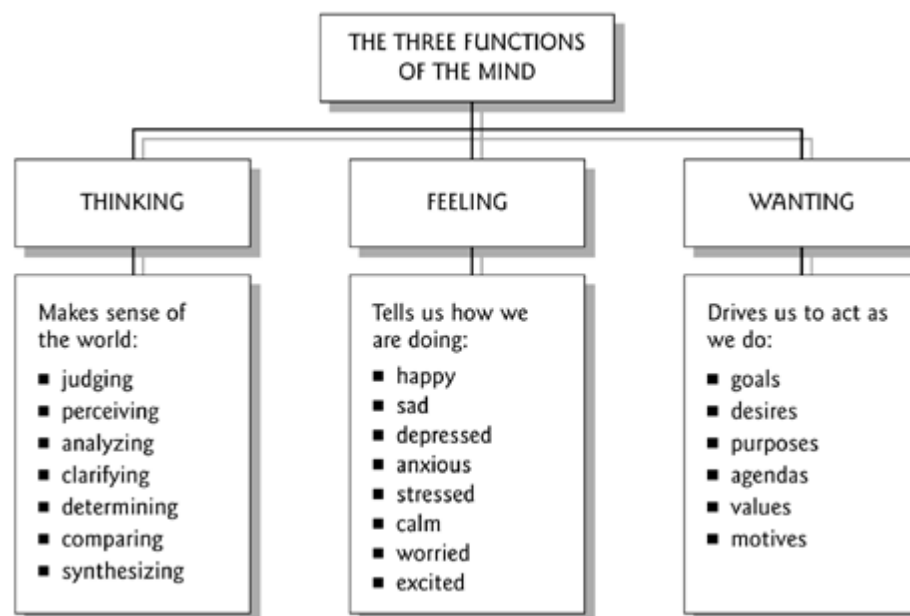


Figure 4.2. Thinking is the part of the mind that figures out what is going on. Feelings tell us whether things are going well or poorly for us. The wanting part of the mind propels us forward or away from action.



Understanding That You Have a Special Relationship to Your Mind

It should now be clear that everyone lives in a special and intimate relationship to his or her mind—at least unconsciously. The trick is to make that unconscious relationship conscious and deliberate. All of our activity is a product of inward ideas of who and what we are, ideas of what we are experiencing (from moment to moment), of where we are going (our future), of where we have come from (our past). And, in addition, all of these ideas are in a state of continual interplay with our emotions and feelings about them. Emotions and feelings function as ongoing evaluators of the quality of our lives and circumstances.

For every positive thought the mind "believes," the mind naturally tends to generate a positive emotion to fit it. Conversely, for every negative thought, the mind tends to generate a negative emotion. If we explicitly recognize the continual interrelationships among these three functions of our mind, we will gain a central insight that we can begin to use to our advantage. Then we can begin to exercise command over our own mind's functions. Let's look into this idea more closely.

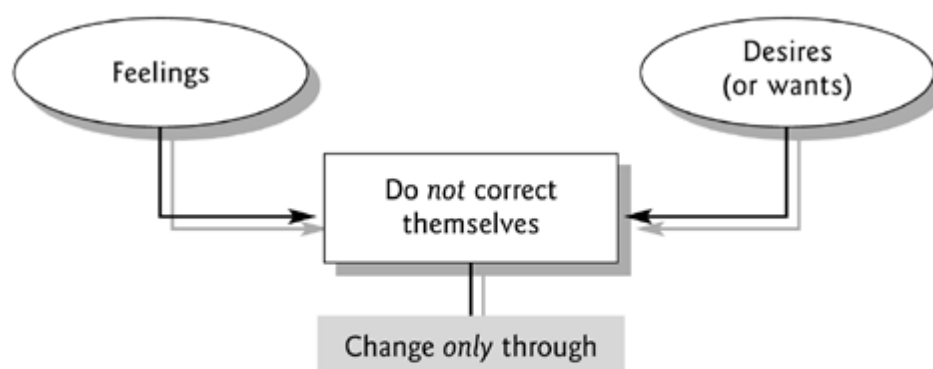
We experience joy, happiness, frustration, pain, confusion, desire, passion, and indifference because we give a meaning to every situation we experience, because we think about it in a particular fashion, and because we connect it to feelings we experienced in what we perceived as similar or related circumstances. The meaning we create can be grounded in insight, objective reality, a fantasy, or even a dysfunctional interpretation of reality. For example, two people in the same situation may react completely differently, with one person experiencing pain and frustration while the other experiences curiosity and excitement.

Consider two employees faced with the task of improving office procedures in order to improve productivity. The first experiences resentment at being required to change what appears to be "working just fine." This person gives a negative meaning to the task of improvement, considering it unnecessary and time consuming (when so many other things are more important). Given the negative thinking this person is engaging in, s/he will feel negative emotions about the task.

In the same situation, another person might welcome the opportunity for improvement. Defining the situation as a chance to be creative and to think independently about ways to improve procedures, she/he looks forward to the task. Positive, rather than negative, emotions result from such a definition.

The actual task at hand is precisely the same. Nevertheless, the difficulty or ease with which a person handles the challenge, the decision to take up the challenge or avoid it altogether, ultimate success or failure, is determined fundamentally by the manner in which the situation is interpreted through one's thinking ([Figure 4.4](#)). Different emotions follow from these differences in thought and action.

Figure 4.4. We change undesirable feelings and desires by changing the thinking that is leading to them.



Chapter 5. The First Four Stages of Development: What Level Thinker Are You?

Most of us are not what we could be. We are less. We have great capacity, but most of it is dormant and undeveloped. Improvement in thinking is like improvement in basketball, ballet, or playing the saxophone. It is unlikely to take place in the absence of a conscious commitment to learn. As long as we take our thinking for granted, we don't do the work required for improvement.

Development in thinking is a gradual process requiring plateaus of learning and just plain hard work. It is not possible to become an excellent thinker by simply taking a beginning course. Changing one's habits of thought is a long-range project, happening over years, not weeks or months. The essential traits of a critical thinker, which we examined briefly in [Chapter 3](#), require an extended period of development.

Here are the stages we go through if we aspire to develop as thinkers ([Figure 5.1](#)):

Stage 1 The Unreflective Thinker (we are unaware of significant problems in our thinking)

Stage 2 The Challenged Thinker (we become aware of problems in our thinking)

Stage 3 The Beginning Thinker (we try to improve, but without regular practice)

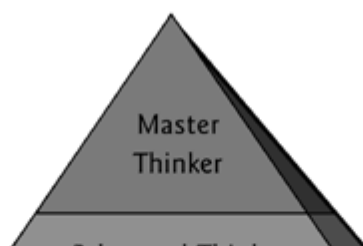
Stage 4 The Practicing Thinker (we recognize the necessity of regular practice)

Stage 5 The Advanced Thinker (we advance in accordance with our practice)

Stage 6 The Master Thinker (skilled and insightful thinking becomes second nature)

Figure 5.1. Most people have lived their entire lives as unreflective thinkers. To develop as thinkers requires commitment to daily practice.

STAGES OF DEVELOPMENT OF CRITICAL THINKING



Stage One: The Unreflective Thinker—Are You an Unreflective Thinker?

We all are born as unreflective thinkers, fundamentally unaware of the role that thinking is playing in our lives. Most of us also die this way. At this unreflective stage, we have no useful conception of what thinking entails. For example, as unreflective thinkers we don't notice that we are continually making assumptions, forming concepts, drawing inferences, and thinking within points of view. At this stage, we don't know how to analyze and assess our thinking. We don't know how to determine whether our purposes are clearly formulated, our assumptions justified, or our conclusions logically drawn. We are unaware of intellectual traits and so are not striving to embody them.

At this stage poor thinking causes many problems in our lives, but we are unaware of this. We think of our beliefs as truth. We think of our decisions as sound. We lack intellectual standards and have no idea what such standards might be. We lack intellectual traits, but are not aware that we lack them. We unconsciously deceive ourselves in many ways. We create and maintain pleasant illusions. Our beliefs feel reasonable to us, and so we believe them with confidence. We walk about the world with confidence that things really are the way they appear to us. We judge some people to be "good" and some to be "bad." We approve of some actions. We disapprove of others. We make decisions, react to people, go our way in life, and do not seriously question the thinking we do or its implications.

At this stage, our egocentric tendencies play a dominant role in our thinking, yet we do not recognize this. We lack the skills and the motivation to notice how self-centered and prejudiced we are, how often we stereotype others, how frequently we irrationally dismiss ideas because we don't want to change our behavior or our comfortable way of looking at things.

Test the Idea Reflecting on Your Knowledge of Thinking

Are you at the unreflective stage of development? Test yourself by writing your answers to the following:

1.

Can you describe the role that thinking is playing in your life? (Be as clear and as detailed as you can.)

2.

What was a recent assumption you made (that you should not have made)?

3.

What is a recent concept you formed (that you previously lacked)?

4.

List five inferences you made in the last hour.

5.

Stage Two: The Challenged Thinker—Are You Ready to Accept the Challenge?

We cannot solve a problem we do not own. We cannot deal with a condition we deny. Without knowledge of our ignorance, we cannot seek the knowledge we lack. Without knowledge of the skills we need to develop, we will not develop those skills.

As we begin to become aware that "normal" thinkers often think poorly, we move into the second stage of critical thinking development. We begin to notice that we often:

- Make questionable assumptions;
- Use false, incomplete, or misleading information;
- Make inferences that do not follow from the evidence we have;
- Fail to recognize important implications in our thought;
- Fail to recognize problems we have;
- Form faulty concepts;
- Reason within prejudiced points of view; and
- Think egocentrically and irrationally.

We move to the "challenged" stage when we become aware of the way our thinking is shaping our lives, including the recognition that problems in our thinking are causing problems in our lives. We are beginning to recognize that poor thinking can be life-threatening, that it can lead literally to death or permanent injury, that it can hurt others as well as ourselves. For example, we might reflect upon the thinking of:

- The person who is a perpetual procrastinator;
-

Stage Three: The Beginning Thinker—Are You Willing to Begin?

When a person actively decides to take up the challenge to grow and develop as a thinker, that person enters the stage we call "beginning thinker." This is the stage of thinking in which one begins to take thinking seriously. This is a preparatory stage before one gains explicit command of thinking. It is a stage of dawning realizations. It is a stage of developing willpower. It is not a stage of self-condemnation but, rather, of emerging consciousness. It is analogous to the stage in which an alcoholic person recognizes and fully accepts the fact that he or she is an alcoholic. Imagine an alcoholic saying, "I am an alcoholic, and only I can do something about it." Now imagine yourself saying, "I am a weak, undisciplined thinker, and only I can do something about it."

Once people recognize that they are "addicted" to poor thinking, they must begin to recognize the depth and nature of the problem. As beginning thinkers, we should recognize that our thinking is sometimes egocentric. For example, we may notice how little we consider the needs of others and how much we focus on getting what we personally want. We may notice how little we enter the point of view of others and how much we assume the "correctness" of our own. We may even sometimes catch ourselves trying to dominate others to get what we want, or alternatively, acting out the role of submitting to others (for the gains that submissive behavior brings). We may begin to notice the extent to which we are conformists in our thinking.

As thinkers thinking about thinking, we are merely beginning to:

- Analyze the logic of situations and problems;
- Express clear and precise questions;
- Check information for accuracy and relevance;
- Distinguish between raw information and someone's interpretation of it;
- Recognize assumptions guiding inferences;
- Identify prejudicial and biased beliefs, unjustifiable conclusions, misused words, and missed implications;
- Notice when our selfish interests bias our viewpoint.

Thus, as beginning thinkers we are becoming aware of how to deal with the structures at work in thinking (purposes, questions, information, interpretations, etc.). We are beginning to appreciate the value of thinking about our thinking in terms of its clarity, accuracy, relevance, precision, logicalness, justifiability, breadth, and depth. But we are still at a

Stage Four: The Practicing Thinker—Good Thinking Can Be Practiced Like Basketball, Tennis, or Ballet

Are you committed to regular practice? When people explicitly recognize that improvement in thinking requires regular practice, and adopt some regimen of practice, then, and only then, have they become what we call "practicing thinkers."

There is no one way to go about this process of designing a regimen of practice. There are many potential ways, some better, and some worse for you. For example, you might thumb through some of the other chapters of this book. Each provides some suggestions for improving your thinking. You can use any of these suggestions as a starting point.

You might review the "Test the Idea" activities. You might study the elements of thought, the standards for thought, and the traits of mind. You might analyze [Chapter 9](#), on making intelligent decisions, and [Chapters 15](#) and [16](#), on strategic thinking. Think of it this way: Everything you read in this book represents a resource for you to use in devising a systematic plan for improving your thinking. It's a good idea to read it with this orientation.

If you are like most people, you can discover some practical starting points. The problem will be in following through on any that you find. This is the problem in most areas of skill development: People do not usually follow through. They do not establish habits of regular practice. They are discouraged by the strain and awkwardness of early attempts to perform well.

You need to make decisions regarding a plan you think is do-able for you. This means a plan you can live with, one that will not burn you out or overwhelm you. Ultimately, success comes to those who are persistent and who figure out strategies for themselves.

Still, at this stage you probably don't know for sure what will work for you, only what seems like it might. You have to field-test your ideas. To be realistic, you should expect to experiment with a variety of plans before you find one that works well for you.

What you should guard against is discouragement. You can best avoid discouragement by recognizing from the outset that you are engaged in the field-testing of plans. You should prepare yourself for temporary failure. Success is to be understood as the willingness to work your way through a variety of relative failures. The logic is analogous to trying on clothes. Many that you try may not fit or look good on you, but you plod on anyway with the confidence that eventually you will find something that fits and looks good on you.

Consider another analogy. If you want to become skilled at tennis, you improve not by expecting yourself to begin as an expert player. You improve not by expecting to win every game you play or by mastering new strokes with little practice. Rather, you improve when you develop a plan that you can modify as you see what improves your "game." Today you may decide to work on keeping your eye on the ball. Tomorrow you may coordinate watching the ball with following through as you swing. Every day you rethink your strategies for improvement. Development of the human mind is quite parallel to the development of the human body. Good theory, good practice, and good feedback are essential.

A "Game Plan" for Improvement

As you begin to take your thinking seriously, you need to think about what you can do consistently every day to improve your thinking. Because excellence in thinking requires a variety of independent skills and traits that work together, you can choose to work on a range of critical thinking skills at any given point in time. The key is in focusing on fundamentals and on making sure that you don't try to do too much. Choose your point of attack, but limit it. If you overdo it, you will probably give up entirely. But if you don't focus on fundamentals, you will never have them as a foundation in your thought.

Start slowly, and emphasize fundamentals. The race is to the tortoise, not the hare. Be a good and wise tortoise. The solid, steady steps you take every day are what determine where you ultimately end up.

A Game Plan for Devising a Game Plan

There is nothing magical about the ideas we have put together to stimulate your thought about a game plan. No one of them is essential. Nevertheless, each represents a plausible point of attack, one way to begin to do something plausible to improve thinking in a regular way. Though you probably can't do all of these at the same time, we recommend an approach in which you experiment with all of these. You can add any others you find in this book or come up with yourself. We will explain how this works after you familiarize yourself with some of the options.

1.

Use "wasted" time. All humans waste some time. We all fail to use all of our time productively or even pleurably. Sometimes we jump from one diversion to another without enjoying any of them. Sometimes we make ourselves irritated about matters beyond our control. Sometimes we fail to plan well, causing us negative consequences that we easily could have avoided (for example, we spend time unnecessarily trapped in traffic—though we could have left a half hour earlier and avoided the rush). Sometimes we worry unproductively. Sometimes we spend time regretting what is past. Sometimes we just stare off blankly into space.

The key is that the time is "spent," and if we had thought about it and considered our options, we would not have deliberately spent our time in that way. So our idea is this: Why not take advantage of the time you normally waste, by practicing good thinking during that time. For example, instead of sitting in front of the TV at the end of the day flicking from channel to channel in a vain search for a program worth watching, you could spend that time, or at least part of it, thinking back over your day and evaluating your strengths and weaknesses. You might ask yourself questions like these:

○

When did I do my worst thinking today?

○

When did I do my best thinking?

○

What did I actually think about today?

○

Did I figure out anything?

○

Did I allow any negative thinking to frustrate me unnecessarily?

○

If I had to repeat today, what would I do differently? Why?

○

Did I do anything today to further my long-term goals?

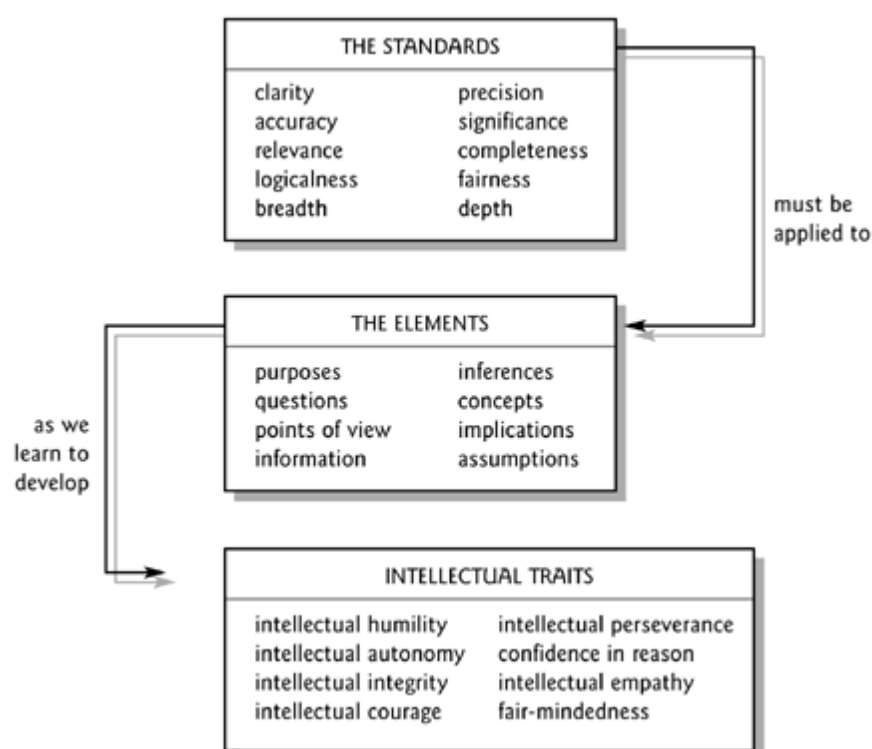
○

Chapter 6. The Parts of Thinking

One of the most important sets of skills in thinking develops through one's understanding of the parts of thinking. In other words, we are better able to find problems in our thinking when we are able to take our thinking apart. In this chapter, we focus on these parts. In the next chapter, we focus on intellectual standards, the key to the assessment of thinking.

Thus, as you work through this chapter and the next, you will begin to understand some of the most fundamental concepts critical thinkers use on a daily basis, for it is through the analysis and assessment of thinking that critical thinking occurs. To analyze thinking we must be able to take thinking apart and scrutinize how we are using each part. Once we have done so, we apply the standards for thinking to those parts (standards such as clarity, accuracy, relevance, logicalness, fairness, etc.). Once we have a clear understanding of the parts of thinking (or elements of reasoning) and the intellectual standards, and once we begin to use them in our thinking on a daily basis, we begin to see the quality of our lives significantly improve.

Figure 6.1. Critical thinkers routinely apply the intellectual standards to the elements of reasoning in order to develop intellectual traits.



Here we begin with a brief discussion of reasoning, the mental process the mind uses to make sense of whatever we seek to understand.

Reasoning Is Everywhere in Human Life

The words thinking and [reasoning](#) are used in everyday life as virtual synonyms. Reasoning, however, has a more formal flavor. This is because it highlights the intellectual dimension of thinking.

Reasoning occurs whenever the mind draws conclusions on the basis of reasons. We draw conclusions whenever we make sense of things. The result is that whenever we think, we reason. Usually we are not aware of the full scope of reasoning in our lives.

We begin to reason from the moment we wake up in the morning. We reason when we figure out what to eat for breakfast, what to wear, whether to stop at the store on the way to school, whether to go with this or that friend to lunch. We reason as we interpret the oncoming flow of traffic, when we react to the decisions of other drivers, when we speed up or slow down. We reason when we figure out solutions to problems. We reason when we formulate problems. We reason when we argue.

One can draw conclusions, then, about everyday events or, really, about anything at all: about strategic planning, newspaper articles, poems, microbes, people, numbers, historical events, social settings, psychological states, character traits, the past, the present, or the future.

To reason well, we must scrutinize the process we are using. What are we trying to figure out? What information do we need? Do we have that information? How could we check it for accuracy? The less conscious we are of how we are thinking, the easier it is to make some mistake or error.

Test the Idea

Becoming More Aware of the Role of Reasoning in Your Life

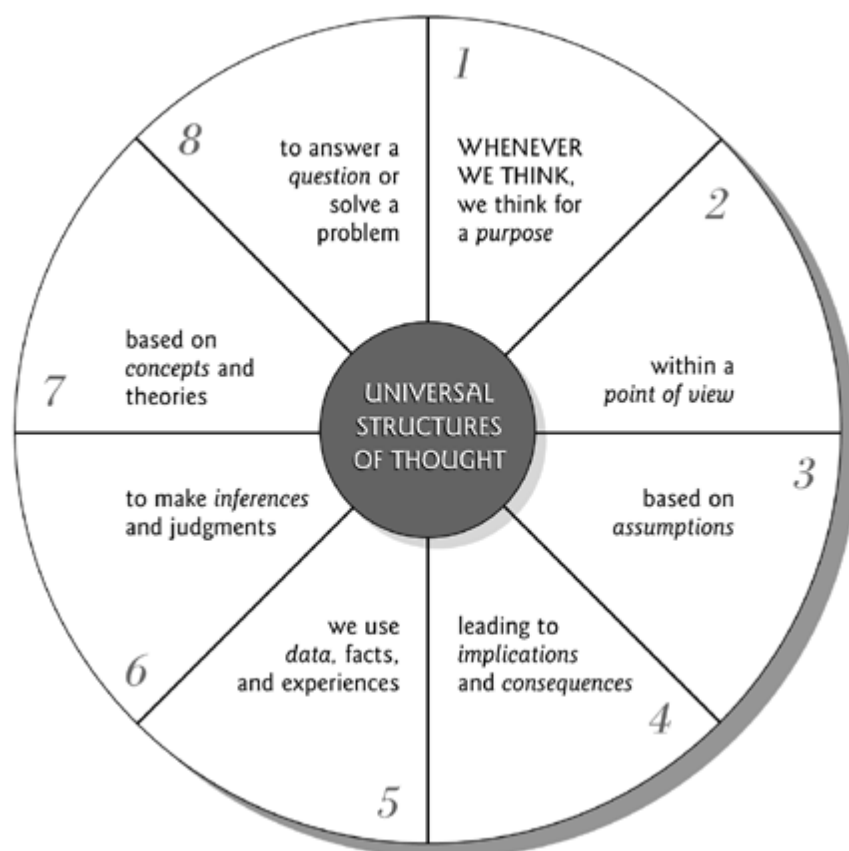
Make a list of all the things you did today. Then, for each act, figure out the thinking that led you to do, or guided you while doing, the act. (Remember that most of your thinking is unconscious.) For example, when you left your house this morning, you may have stopped at the store for food. This act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

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

Does Reasoning Have Parts?

The parts of thinking can also be called the elements of reasoning or the fundamental structures of thought. We will use these expressions interchangeably. The elements or parts of reasoning are those essential dimensions of reasoning that are present whenever and wherever reasoning occurs—independent of whether we are reasoning well or poorly ([Figure 6.2](#)). Working together, these elements shape reasoning and provide a general logic to the use of thought.

Figure 6.2. These parts or elements of reasoning are always present in human thinking.



When we become adept at identifying the elements of our reasoning ([Figure 6.3](#)), we are in a much better position to recognize flaws in our thinking, by locating problems in this or that part. We are in a much better position, in other words, to analyze the mistakes in our thinking (or mistakes in the thinking of others).

Figure 6.3. Critical thinkers understand the importance of taking thinking apart in order to analyze it for flaws.

Beginning to Think About Your Own Reasoning

Reasoning is a process whereby one draws conclusions on the basis of reasons. On the surface, reasoning seems somewhat simple, as if it has no component structures. Looked at more closely, however, it implies the ability to engage in a set of interrelated intellectual processes.

It is useful to practice making conscious what is subconscious in your thinking. Then you can better understand what's going on beneath the surface of your thought. In this chapter, we introduce you to important ideas you can use for this task.

The Elements of Thought: A First Look

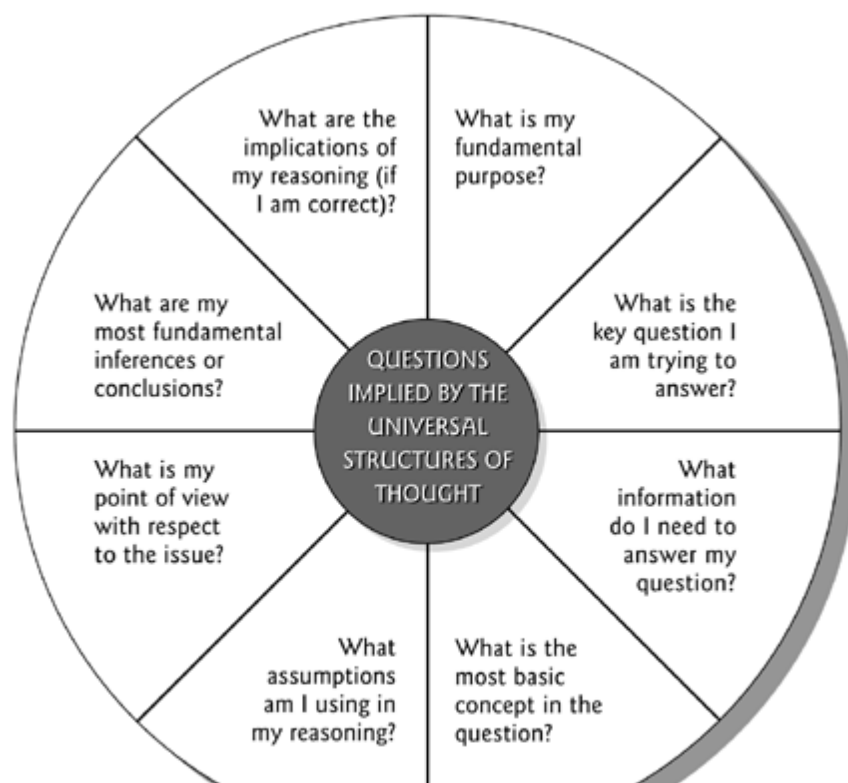
Let us begin by looking at the parts of thinking as they stand in an interrelated set. It is possible to name them in just one, somewhat complex, sentence:

Whenever you reason, you do so in some circumstances,
making some inferences (that have some implications and consequences)
based on some reasons or information (and assumptions)
using some concepts,
in trying to settle some question (or solve some problem)
for some purpose
within a point of view.

If you like, you can put it in two sentences (also see [Figure 6.4](#)):

Whenever you are reasoning,
you are trying to accomplish some purpose,
within a point of view,
using concepts or ideas.
You are focused on some issue or question, issue, or problem,
using information
to come to conclusions,
based on assumptions,
all of which have implications.

Figure 6.4. If you understand the parts of thinking, you can ask the crucial questions implied by those parts.



An Everyday Example: Jack and Jill

Let's now look at, and then analyze, a disagreement that might arise in everyday life—in this case, between lovers who come to different conclusions about a situation they both experienced.

Suppose Jack and Jill, who are in a romantic relationship, go to a party, during which Jack spends most of the evening talking with Susan. On their way back, Jack, sensing that Jill is upset, asks, "What's wrong?"

After some hesitation, Jill says, "I didn't appreciate your spending the whole night flirting with Susan!"

Jack: Flirting flirting, I was not flirting!

Jill: What would you call it?

Jack: Being friendly. I was being friendly.

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

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

Jill: Paranoid? How dare you call me that!

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

Jill: Don't act like this is the only time you flirted. I heard from your friends that you were quite a lady's man before we got together.

Jack: And I heard about your possessiveness and jealousy from your friends. I think you need to deal with your own problems before you cast stones at me. Perhaps you need counseling.

Analysis of the Example

Now let's analyze this exchange using the elements of thought:

- Purpose. Both Jack and Jill presumably seek a successful romantic relationship. That is their implied shared goal.
- Problem. They see a problem or issue standing in the way, a problem they conceptualize differently. To Jack, the problem is, "When is Jill going to deal with her paranoia?" To Jill, the problem is, "When is Jack going to take responsibility for his flirtatious behavior?"
- Conclusions. Both Jacks and Jill's inferences (conclusions) about the situation derive from the same behavior in the same circumstance, but they clearly see the behavior differently. To Jack, his behavior is to be understood as merely "friendly." To Jill, Jack's behavior can be understood only as "flirtation."
- Facts. The raw facts of the situation include everything Jack actually said and did at the party. Other relevant facts include Jack's behavior toward other women in his past. Additional facts include Jill's behavior toward former boyfriends and any other facts that bear on whether she is acting out of insecurity or "paranoia."
- Assumptions. Jack is assuming that he is not self-deceived in his motivation with respect to Susan and other women. Jack also is assuming that he is competent to identify paranoia in another person's behavior. Further, he is assuming that a woman could not behave in the way that Jill did without being paranoid. Jill is assuming that Jack's behavior is not compatible with ordinary friendliness. Both of them assume that what they have heard about the other from friends is accurate. Both assume themselves to be justified in their behavior in the situation.
- Concepts. There are four key concepts in the reasoning: flirtation, friendliness, paranoia, and male ego.
- Implications. Both Jack and Jill imply by their reasoning that the other person is entirely to blame for any differences between them regarding Jack's behavior at the party. Both seem to imply that the relationship is hopeless.
- Point of view. Both Jack and Jill may be seeing the other through the bias of a gender-based point of view.

Both see themselves as a victim of the other. Both see themselves as blameless.

The Elements of Thought in Relationship

The trick in learning the elements of thought is to express these ideas in a number of different ways until their nonlinear interrelationships begin to become intuitive to you. For example, you might think of the parts of reasoning as analogous to the essential parts of the human body. They are all present whether we are healthy or not. Like the parts of the body, the parts of thought function in an interdependent fashion. One way to express those interrelationships is that:

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

Test the Idea Thinking Through the Elements of Your Reasoning

Select an important conclusion that you have reasoned to—for example, a decision to purchase a house or car or take a new job, or even to get married. Identify the circumstances in which you made that decision, some of the inferences you made in the process (about the likely advantages and disadvantages). State the likely implications of your decision, the consequences it has had, and will have, in your life, the information you took into account in making this decision, the way you expressed the question to yourself, the way you looked at your life and your future (while reasoning through the question). See if you can grasp the interrelationship of all of these elements in your thinking. Don't be surprised if you find this to be a difficult task.

The Relationship Between the Elements

Because the elements do not exist in isolation but in relation to each other, it is important not to think of the distinctions between them as absolute. The distinctions are always a relative matter. For example, if our purpose is to figure out how to spend less money, the question we have to figure out is, "What can I do to ensure that I spend less money?" The question is a virtual reformulation of the purpose. What is more, the point of view might be expressed as "viewing my spending habits to determine how to decrease my expenditures." This seems a virtual reformulation of purpose and question. The point is that it is important to recognize an intimate overlap among all of the elements by virtue of their interrelationship. At times, formulating some of the elements explicitly may seem to be a redundancy. Don't give way to this feeling. With practice, you will come to recognize the analytic power of making the distinctions explicit.

Thinking to Some Purpose

A British scholar by the name of Susan Stebbing wrote a book (1939) on the importance of purpose in thinking. In it, she said: "To think logically is to think relevantly to the purpose that initiated the thinking: all effective thinking is directed to an end." We agree. All thinking pursues a purpose. We do not think without having something we are trying to accomplish, without having some aim in view, something we want. When humans think about the world, we do not do so randomly but, rather, in line with our goals, desires, needs, and values. Our thinking is an integral part of a patterned way of acting in the world, and we act, even in simple matters, with some set of ends in view. To understand someone's thinking—including one's own—we must understand the functions it serves, what it is about, the direction it is moving, and the ends that make sense of it.

Much of what we are after in our thinking is not obvious to us. Raising human goals and desires to the level of conscious realization is an important part of critical thinking. Though we always have a purpose in thinking, we are not always fully aware of that purpose. We may have some vague idea of it. Perhaps we have not clearly come to terms with our purpose. For example, you might call a meeting to discuss an important issue with your staff, but you may not know exactly what you are trying to accomplish in the meeting. As a result, the thinking during the meeting may diverge in many unhelpful directions. Without a clear sense of what you are about, the thinking you do may be very unproductive.

One problem with human thinking is that we sometimes pursue contradictory ends. We might want to become educated and also want to avoid doing any intellectual work. We might want others to love us, but not behave in loving ways toward them. We might want people to trust us, but behave in ways that undermine trust. The purpose we might explicitly state may be simply what we would like to believe of ourselves. Our real purpose, however, might be one that we would be ashamed to admit. We might think we want to pursue a medical career to help and care for people when our actual purpose may be to make a lot of money, gain prestige and status, and be admired by others. We must be careful, therefore, not to assume that our purposes are consistent with one another or that our announced purposes are our actual purposes.

Also, the purposes we pursue influence and are influenced by our point of view, as well as by the way we see the world. Our purposes shape how we see things, and how we see things shapes what we seek. Each person formulates his or her purpose from a given point of view, determined by the context of his or her own experience. To understand our goals and objectives, then, we should consider the perspectives from which we see the world or some situation in it.

A hairdresser, for example, because of her perspective, might be more concerned than most janitors with personal appearance. Looking good and helping others to look good are more intimately connected with her view of herself and the world. An orthodontist would naturally think much more about teeth and their appearance than most other people would. Having straight teeth would naturally seem more significant to her than it might to, say, most professional football players. The orthodontist's purpose in fostering straight teeth arises out of her perspective or point of view

Test the Idea

Identifying Your Purposes: Understanding Your Thinking

Thinking with Concepts

Concepts are like the air we breathe. They are everywhere. They are essential to our life, but we rarely notice them. Yet only when we have conceptualized a thing in some way can we think about it. Nature does not give us instruction in how things are to be conceptualized. We must create that conceptualization, alone or with others. Once it is conceptualized, we integrate a thing into a network of ideas (as no concept stands alone).

Humans approach virtually everything in our experience as something that can be "decoded." Things are given meaning by the power of our mind to create a conceptualization and to make inferences on the basis of it—hence, we create further conceptualizations. We do this so routinely and automatically that we don't typically recognize ourselves as engaged in these processes. In our everyday life, we don't first experience the world in "concept-less" form and then deliberately place what we experience into categories so as to make sense of things. Rather, it is as if things are given to us with their name inherent in them. So we see trees, clouds, grass, roads, people, children, sunsets, and so on. We apply these concepts intuitively, as if the names belong to the things by nature, as if we had not created these concepts in our own minds.

If you want to develop as a thinker, you must come to terms with this human power of mind—to create concepts through which we see and experience the world—for it is precisely this capacity of which you must take charge in taking command of your thinking. You must become the master of your own conceptualizations. You must develop the ability to mentally "remove" this or that concept from the things named by the concept, and try out alternative ideas. As general semanticists often say: "The word is not the thing! The word is not the thing!" If you are trapped in one set of concepts (ideas, words), you can think of things in only one way. Word and thing become one and the same in your mind.

To figure out the proper use of words, the proper way to conceptualize things, events, situations, emotions, abstract ideas, it is important to first achieve a true command of the uses of words. For example, if you are proficient in the use of the English language, you recognize a significant difference in the language between needing and wanting, between having judgment and being judgmental, between having information and gaining knowledge, between being humble and being servile, between stubbornness and having the courage of your convictions. Command of distinctions such as these, and many others, in the language has a significant influence upon the way you interpret your experience. People who do not have this command confuse these important discriminations and distort the important realities they help us distinguish.

Test the Idea

Testing Your Understanding of Basic Concepts

To the extent that you have a sound command of the English language, you should be able to state the essential differences between related but distinguishably different realities that are marked by words or expressions in our language. To the extent that you can, you are conceptualizing the ideas labeled with these words in keeping with educated use.

In this activity, you will test your ability to do this. What follows is a set of related words, each pair illustrating an important distinction marked by our language. For each set, write down your

Thinking with Information

It is impossible to reason without using some set of facts, data, or experiences as a constituent part of one's thinking. Finding trustworthy sources of information and refining one's own experience critically are important goals of critical thinkers. We must be vigilant about the sources of information we use. We must be analytically critical of the use we make of our own experience. Experience may be the best teacher, but biased experience supports bias, distorted experience supports distortion, and self-deluded experience supports self-delusion. We, therefore, must not think of our experience as sacred in any way but, instead, as one important dimension of thought that must, like all others, be critically analyzed and assessed.

Numerous problems exist in human life because people fail to understand the important role that information plays in everything we do. People often, for example, fail to see that they are excluding important information from their thinking when reasoning through a complex problem. People often operate on automatic pilot when it comes to their use of information. But when they are explicitly aware of the importance of information, they are much more careful in the conclusions they come to. They seek information when others would ignore the need to do so. They question the information they have, as well as the information that others are using. They realize that their thinking can only be as good as the information they use to come to conclusions.

Distinguishing Between Inert Information, Activated Ignorance, and Activated Knowledge

The mind can take in information in three distinctive ways: 1) by internalizing inert information; 2) by forming activated ignorance; and 3) by achieving activated knowledge.

Inert Information

By inert information, we mean taking into the mind information that, though memorized, we do not understand—despite the fact that we think we do. For example, many people have taken in, during their schooling, a lot of information about democracy that leads them to believe they understand the concept. Often, a good part of the information they have internalized consists of empty verbal rituals. For example, many children learn in school that "democracy is government of the people, by the people, for the people." This catchy phrase often sticks in their mind. It leads them to think they understand what it means, though most of them do not translate it into any practical criteria for assessing the extent to which democracy does or does not exist in any given country. Most people, to be explicit, could not intelligibly answer any of the following questions:

1.

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

2.

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

3.

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

4.

What exactly is meant by "the people?"

Thus, people often do not sufficiently think about information they memorized in school to transform it into something truly meaningful in their mind. Much human information is, in the mind of the humans who possess it, merely empty words (inert or dead in the mind). Critical thinkers try to clear the mind of inert information by recognizing it as such and transforming it, through analysis, into something meaningful.

Test the Idea In Search of Inert Information

Review information you were taught in school or at home. Look for what you may have repeated often on command, to see if it qualifies for what we are calling inert information. Review, for example, the Pledge of Allegiance to the flag, slogans within subject fields, memorized bits and pieces of content, and sayings you have often heard, but probably have not made sense of. See how many candidates you can locate for inert information. Test each one with this criterion: If you cannot explain it or effectively use it,

Some Key Questions to Ask When Pursuing Information

One of the most important skills in critical thinking is that of evaluating information. This skill begins with the important recognition that information and fact, information and verification, are not the same thing. It requires also the important recognition that everything presented as fact or as true is not. A third important recognition is that the prestige or setting in which information is asserted, as well as the prestige of the person or group asserting it, are no guarantee of accuracy or reliability. Consider the following, very helpful, maxim: An educated person is one who has learned that information almost always turns out to be at best incomplete and very often false, misleading, fictitious, and mendacious—that is, information is often just dead wrong.

Careful professionals use a wide variety of safeguards in the disciplines in which they work. It is not possible to learn these safeguards separately from an actual study of the disciplines. However, it is possible to develop a healthy skepticism about information in general, especially about information presented in support of a belief that serves the vested interests of a person or group. This skepticism is given in the regular asking of key questions about information presented to us:

- To what extent could I test the truth of this claim by direct experience?
- To what extent is believing this consistent with what I know to be true or have justified confidence in?
- How does the person who advances this claim support it?
- Is there a definite system or procedure for assessing claims of this sort?
- Does the acceptance of this information advance the vested interest of the person or group asserting it?
- Is the person asserting this information made uncomfortable by having it questioned?

These questions, both singly and as a group, are no panacea. Everything depends on how we follow up on them. Used with good judgment, they help us to lower the number of mistakes we make in assessing information. They do not prevent us from making such mistakes. In later chapters, we will follow up on these concerns in a deeper way. You should begin now, however, to practice asking the above questions when information is presented to you as true and important.

Test the Idea Assessing Information

Distinguishing Between Inferences and Assumptions

As we have said, the elements of reasoning interrelate. They are continually influencing and being influenced by one another. We now will focus at length on the crucial relationship between two of the elements: inference and assumption. Learning to distinguish inferences from assumptions is an important skill in critical thinking. Many confuse the two elements. Let us begin with a review of the basic meanings:

1.

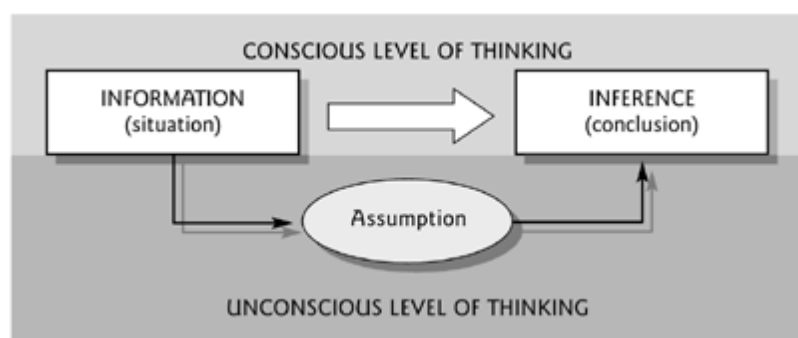
Inference: An inference is a step of the mind, an intellectual act by which one concludes that something is true in light of something else's being true, or seeming to be true. If you come at me with a knife in your hand, I probably would infer that you mean to do me harm. Inferences can be accurate or inaccurate, logical or illogical, justified or unjustified.

2.

Assumption: An assumption is something we take for granted or presuppose. Usually it is something we previously learned and do not question. It is part of our system of beliefs. We assume our beliefs to be true and use them to interpret the world about us. If you believe that it is dangerous to walk late at night in big cities and you are staying in Chicago, you will infer that it is dangerous to go for a walk late at night. You take for granted your belief that it is dangerous to walk late at night in big cities. If your belief is a sound one, your assumption is sound. If your belief is not sound, your assumption is not sound. Beliefs, and hence assumptions, can be unjustified or justified, depending upon whether we do or do not have good reasons for them. Consider this example: "I heard a scratch at the door. I got up to let the cat in." My inference was based on the assumption (my prior belief) that only the cat makes that noise, and that she makes it only when she wants to be let in.

We humans naturally and regularly use our beliefs as assumptions and make inferences based on those assumptions. We must do so to make sense of where we are, what we are about, and what is happening. Assumptions and inferences permeate our lives precisely because we cannot act without them. We make judgments, form interpretations, and come to conclusions based on the beliefs we have formed (see [Figure 6.5](#)).

Figure 6.5. Humans routinely draw conclusions in situations. Those conclusions are based on assumptions that usually operate at an unconscious level.



If you put humans in any situation, they start to give it some meaning or other. People automatically make inferences to gain a basis for understanding and action. So quickly and automatically do we make inferences that we do not, without training, notice them as such. We see dark clouds and infer rain. We hear the door slam and infer that someone has arrived. We see a frowning face and infer that the person is angry. If our friend is late, we infer that she is being inconsiderate. We meet a tall guy and infer that he is good at basketball, an Asian and infer that she will be good at math. We meet a well-dressed person and infer he or she is successful. We think of the business we would like to start and infer it will be successful—because we ourselves desire what it will sell.

Understanding Implications

Among the most important skills of critical thinking is the ability to distinguish between what a statement or situation actually implies and what people may merely (and wrongly) infer from it. An inference, again, is a step of the mind that results in a conclusion. For example, if the sun rises, we can infer that it is morning. Critical thinkers try to monitor their thinking so they infer only that which is implied in a situation—no more, no less. If I feel ill and go to the doctor for a diagnosis, I want the doctor to infer exactly what my symptoms imply. For example, I do not want her to infer that I simply have a cold requiring no medication when in fact I have a bacterial infection requiring antibiotics. My symptoms imply that I have a certain illness, which in turn implies a certain course of treatment. I want the doctor to accurately infer what my illness is, then accurately infer the proper treatment for it.

It is often the case that, in thinking, people fail to think successfully through the implications of a situation. They fail to think through the implications of a problem or decision. As a result, negative consequences often follow.

In any situation, three kinds of implications may be involved: possible ones, probable ones, and necessary ones. For example, every time you drive your car, one possible implication is that you may have an accident. If you drink heavily and drive very fast on a crowded roadway in the rain, one probable implication is that you will have an accident. If you are driving fast on a major highway and all the brake fluid drains out of your brake cylinders and another car immediately in front of you comes to a quick stop, one inescapable implication is that you will have an accident.

We reserve the word "consequences" for what actually happens in a given case. In short, a consequence is what in fact occurs in some situation. If we are good at identifying (making sound inferences about) possible, probable, and inevitable implications, we can take steps to maximize positive consequences and minimize negative ones. On the one hand, we do not want possible or probable negative implications to become real consequences. On the other hand, we do want to realize potential positive implications. We want to understand and take advantage of the real possibilities inherent in a situation.

We study the logic of things to become skilled in recognizing implications and acting accordingly. The art of doing this well is the art of making sound inferences about the implications of a situation by understanding exactly the logic of what is going on. As thinkers, then, we want to think through all of the implications (possible, probable, and inevitable) of a potential decision before we make a decision and act on it.

In addition to implications that follow from concrete situations are implications that follow from the words we use. These follow from meanings inherent in natural languages. There are always implications of the words we use in communicating with people. If, for example, I tell my daughter that she cannot go to a friend's house because she failed to clean up her room, I am implying that she knew she had a responsibility to clean up her room if she wanted to go to a friend's house. My statement to my daughter and my view that she should have consequences for failing to clean her room are reasonable if:

1.

I have previously communicated to her my desire for her to keep her room clean, and

2.

I have adequately explained my reasoning and the consequences that will follow if she fails to comply with my request.

Thinking Within and Across Points of View

Point of view is one of the most challenging elements to master. On the one hand, it is highly intuitive to most people that when we think, we think with a point of view. On the other hand, when we ask people, in the midst of reasoning something through, to identify or explain their point of view, they are likely to begin expressing anything and everything they are thinking about. Clearly, most people do not have a clear sense of how to identify someone's point of view, including their own.

Let us begin by recognizing that there are many potential sources for our point of view: time, culture, religion, gender, discipline, profession, peer group, economic interest, emotional state, social role, or age group—to name a few. For example, we can look at the world from:

- A point in time (16th, 17th, 18th, 19th century)
- A culture (Western, Eastern, South American, Japanese, Turkish, French)
- A religion (Buddhist, Christian, Muslim, Jewish)
- A gender (male, female)
- Sexual orientation (homosexual, heterosexual)
- A professional (lawyer, manager, psychologist, teacher)
- A discipline (biological, chemical, geological, astronomical, historical, sociological, philosophical, anthropological, literary, artistic, musical, dance, poetic, medical, nursing, sport)
- A social group
- A professional group
- An economical interest

Using Critical Thinking to Take Charge of How We See Things

As in the case of all the elements, one takes charge of their point of view by practicing bringing it out into the open. The more we recognize point of view at work in our thinking and in the thinking of others, the more points of view we learn to think within, the more effectively will we use point of view in our thinking.

Test the Idea Practice in Making Explicit Our Point of View

What follows is a list of possible objects of our thinking. Choose from this list seven possible ones to think about. Then identify how you would look at each, from your point of view. For example, you might decide, "When I look at people, I see a struggle to find happiness" or, "When I look at the future, I see myself as a lawyer taking cases that protect the environment" or, "When I look at the health care system, I see a system that does not provide adequately for the poor." Once you write your sentence, see if you can further characterize how what you said explains your point of view.

| | | |
|----------------|-----------------------------------|--------------------|
| life | my future | lifelong learning |
| men | the problems we face as a nation | the future |
| women | the problems we face as a species | welfare |
| human conflict | mass transportation | welfare recipients |
| learning | the environment | drug use |
| the past | people without health insurance | science |
| politics | our health care system | human values |
| power | modern lifestyle | abortions |
| | | |

The Point of View of the Critical Thinker

Critical thinkers share a common core of purposes with other critical thinkers, in keeping with the values of critical thinking. This fact has a variety of implications, one of the most important of which is that critical thinkers perceive explicit command of the thinking process as the key to command of behavior. Applied to the learning process, this entails that they see reading, writing, speaking, and listening as modes of skilled thinking.

When they read, they see the text as a verbal representation of the thinking of the author. They strive to enter the writer's point of view. They strive to reconstruct the author's thinking in their own mind. When they write, they think explicitly about the point of view of their intended audience. They use their insight into the thinking of the likely audience to present their thinking in the most accessible way. Their speaking reflects a parallel emphasis. They use the dialogue to find out specifically the point of view and concerns of those with whom they are talking. They do not try to force their ideas on others. They recognize that people must think their own way to ideas and beliefs. They, therefore, share experiences and information more than final conclusions. They listen attentively to the thinking of others. They ask more questions than they make assertions.

Critical thinkers have a distinctive point of view concerning themselves. They see themselves as competent learners. They have a "can do" vision of their own learning. They do not see opposing points of view as a threat to their own beliefs. They see all beliefs as subject to change in the face of new evidence or better reasoning. They see themselves as lifelong learners.

Conclusion

Just as the first step in learning basketball, tennis, soccer, or indeed any sport is to learn the most fundamental elements of the sport, the first step to learning critical thinking is to learn the most basic elements of thinking. These are the bread and butter of disciplined thinking, for if we cannot accurately analyze the parts of someone's thinking, we are in a poor position to assess it.

Analysis of the elements of thought is a necessary, but not a sufficient, condition of evaluation. To evaluate requires knowledge of the intellectual standards that highlight the qualities signaling strengths and weaknesses in thinking. For example, it is a strength in reasoning to be clear, a weakness to be unclear; a strength to be accurate, a weakness to be inaccurate. We shall focus on standards such as these in the next chapter, explaining and illustrating how they apply to the elements of thought.

Chapter 7. The Standards for Thinking

One 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

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

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](#)).

Figure 7.1. Critical thinkers routinely apply the intellectual standards to the elements of reasoning.

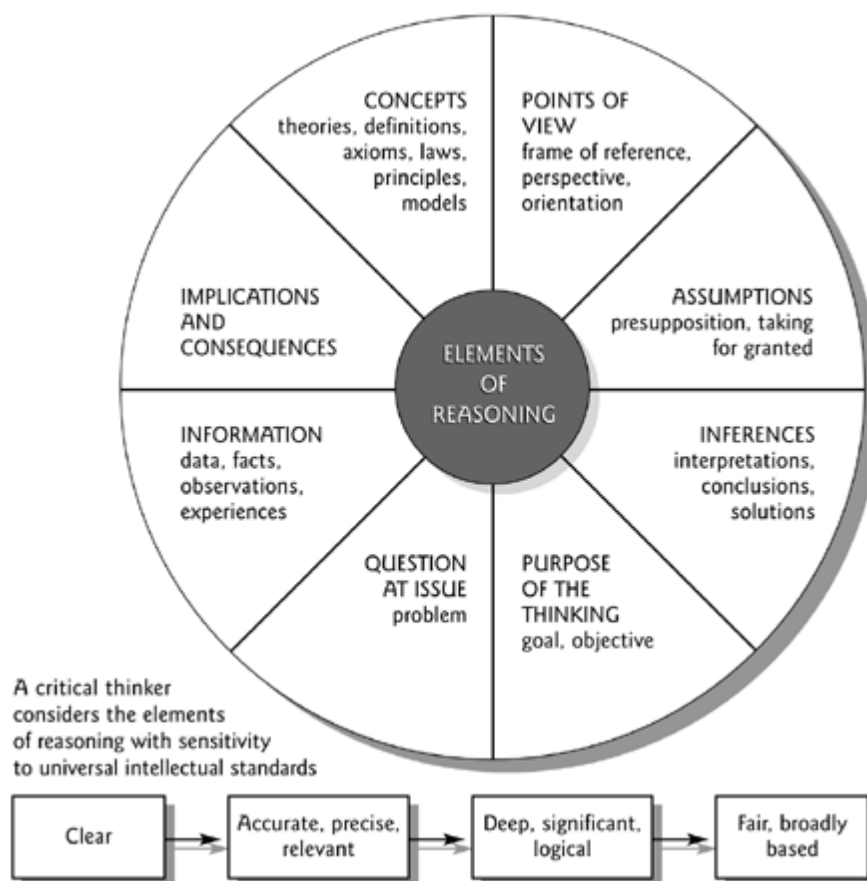


Table 7.1
Powerful questions are implied by the intellectual standards. Critical thinkers routinely ask them.

Clarity

Could you elaborate?

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.

○

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 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](#)).

Figure 8.1. Thinking is the key to all 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 intellectual 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 unanalyzed 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 quality and significance. This quality and significance depends on how much our analyses enable us to face our own inconsistencies and contradictions. What links the experiences, 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, delusions, 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?

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 Erasmus 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,

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.

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 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);
-

"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

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 "un-dealt-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.

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?

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

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;

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 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 in 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

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 short-circuit it in some way. The human mind can think irrationally in too many ways while masking itself within a facade of reasonability.

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.

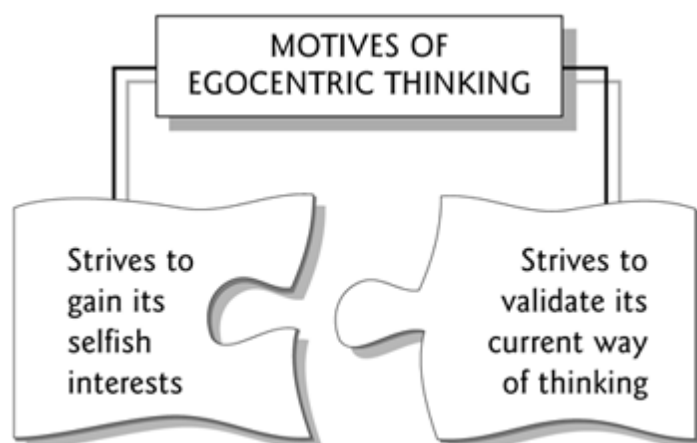
I now realize that I was close-minded because

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

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.

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



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.

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.

"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.

"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.

Figure 10.3. These are some of the many feelings that might accompany egocentric thinking. They often occur when egocentric thinking is "unsuccessful."



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.

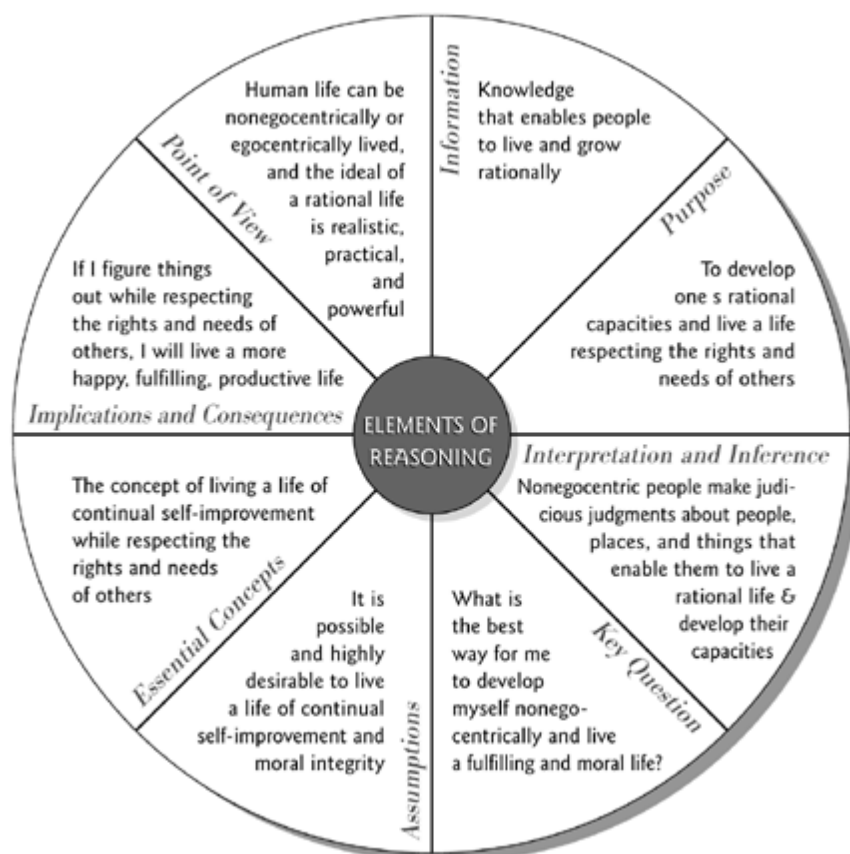
This is merely one pattern in a myriad of possible patterns of egocentric thinking leading to personal or social failure. Egocentric thinking and its social equivalent, sociocentric thinking, can lead to social prejudice, social conflict, warfare, genocide, and a variety of forms of dehumanization. Though 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

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 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](#)).

Figure 10.5. The logic of the nonegocentric mind.



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

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."

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 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.

Figure 10.8. The logic of the dominating ego.

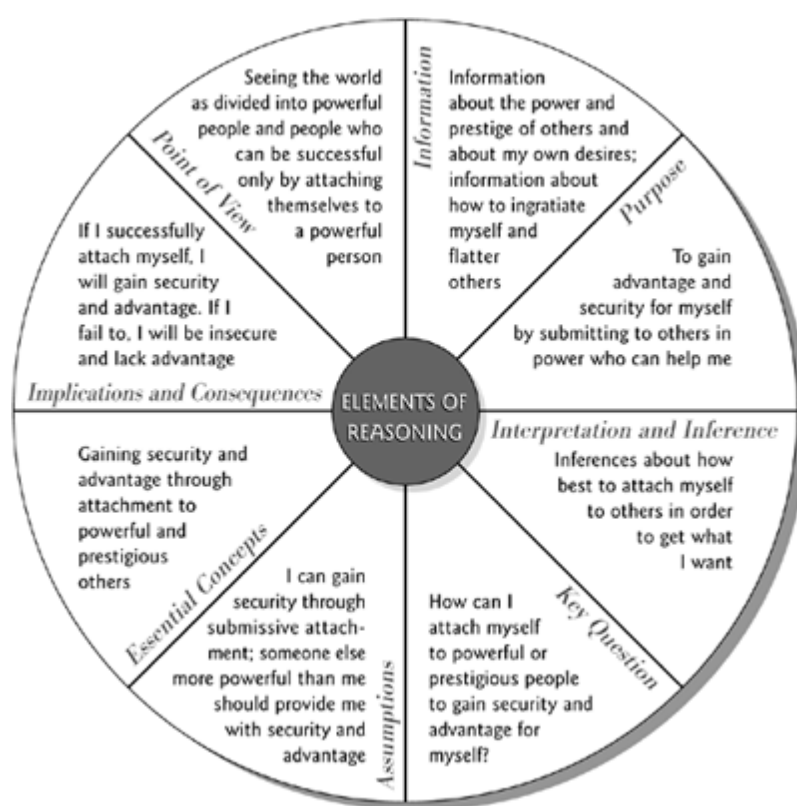


Given these mutually supporting mental structures, it is difficult for those who successfully dominate others to recognize any problems in their own behavior or reasoning. Why change when, in your mind, you are doing what ought to be done? Hence, as long as the dominating ego is "successful," it experiences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

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.

Figure 10.9. The logic of the submissive ego.



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 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.

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.

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 consistency. 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.

Chapter 11. Monitoring Your Sociocentric Tendencies

Living a human life entails membership in a variety of human groups. This typically includes groups such as nation, culture, profession, religion, family, and peer group. We find ourselves participating in groups before we are aware of ourselves as living beings. We find ourselves in groups in virtually every setting in which we function as persons. What is more, every group to which we belong has some social definition of itself and some usually unspoken "rules" that guide the behavior of all members. Each group to which we belong imposes some level of conformity on us as a condition of acceptance. This includes a set of beliefs, behaviors, and taboos.

The Nature of Sociocentrism

All of us, to varying degrees, uncritically accept as right and correct whatever ways of acting and believing are fostered in the social groups to which we belong (Figure 11.1). This becomes clear to us if we reflect on what happens when, say, an adolescent joins an urban street gang. With that act, adolescents are expected to identify themselves with:

-

A name that defines who and what they are;

-

A way of talking;

-

A set of friends and enemies;

-

Gang rituals in which they must participate;

-

Expected behaviors involving fellow gang members;

-

Expected behaviors when around the enemies of the gang;

-

A hierarchy of power within the gang;

-

A way of dressing and speaking;

-

Social requirements to which every gang member must conform;

-

A set of taboos—forbidden acts that every gang member must studiously avoid under threat of severe punishment.

Figure 11.1. The logic of sociology.



Sociocentric Thinking as Pathology

Sociocentric thinking, as we intend this expression, is egocentric thinking raised to the level of the group. It is as destructive as egocentric thinking, if not more so, as it carries with it the sanction of a social group. In both cases, we find a native and uncritical dogmatism implicit in its principles. And therein lies its pathology. Like egocentric thinking, it is absurd at the level of conscious expression. If sociocentric thinking is made explicit in the mind of the thinker, its unreasonableness will be obvious.

Note the parallels in [Table 11.1](#) for egocentric and sociocentric patterns of thought.

Table 11.1
Egocentric and Sociocentric Patterns of Thought

| Egocentric Standard | Related Sociocentric Standard |
|---|--|
| "It's true because I believe it." | "It's true because we believe it." |
| "It's true because I want to believe it." | "It's true because we want to believe it." |
| "It's true because it's in my vested interest to believe it." | "It's true because it's in our vested interest to believe it." |
| "It's true because I have always believed it." | "It's true because we have always believed it." |

Just as individuals deceive themselves through egocentric thinking, groups deceive themselves through sociocentric thinking. Just as egocentric thinking functions to serve one's selfish interest, sociocentric thinking functions to serve the selfish interests of the group. Just as egocentric thinking operates to validate the uncritical thinking of the individual, sociocentric thinking operates to validate the uncritical thinking of the group.

Test the Idea

Thinking About the Groups You Belong To

Make a list of the groups you belong to. Then, for each group, think of a few statements that are true for the group.

Social Stratification

Sociocentric systems are used in complex societies to justify differential treatment and injustices within a society, nation, or culture. This feature of complex social systems has been documented by sociologists who have specialized in the phenomenon of social stratification. As virtually all modern societies today are complex, the following characteristics of stratification presumably can be found in all of them. According to Plotnicov and Tuden ([1970](#)), Each has social groups that

1.
Are ranked hierarchically;
2.
Maintain relatively permanent positions in the hierarchy;
3.
Have differential control of the sources of power, primarily economic and political;
4.
Are separated by cultural and invidious distinctions that also serve to maintain the social distances between the groups; and
5.
Are articulated by an overarching ideology that provides a rationale for the established hierarchical arrangements. (pp. 4-5).

Given this phenomenon, we should be able to identify, for any given group in our society, where approximately it stands in the hierarchy of power, what the sources of power and control are, how the distinctions that indicate status are formulated, how social distances are maintained between the groups, and the overarching ideology that provides the rationale for the way things are.

Test the Idea

Identifying Social Stratification

Try to construct a hierarchy of the social groups within the culture with which you are most knowledgeable. First identify the groups with the most power and prestige. What characteristics do these groups have? Then identify the groups with less and less power until you reach the groups with the least amount of power. How do the groups with the most power keep their power? To what extent is it possible for groups with the least power to increase their power? To what extent do they seem to accept their limited power? To the extent that they accept their limited power, why do you think they do?

Sociocentric Thinking Is Unconscious and Potentially Dangerous

Sociocentric thinking, like egocentric thinking, appears in the mind of the person who thinks that way as reasonable and justified. Thus, although groups often distort the meaning of concepts to pursue their vested interests, they almost never see themselves as misusing language. Although groups almost always can find problems in the ideologies of other groups, they rarely are able to find flaws in their belief systems. Although groups usually can identify prejudices that other groups are using against them, they rarely are able to identify prejudices that they are using against other groups. In short, just as egocentric thinking is self-deceptive, so is sociocentric thinking.

Though the patterns of dysfunctional thinking are similar for egocentric and sociocentric thinking, there is at least one important distinction between the two. We pointed out in [Chapter 10](#) that egocentric thinking is potentially dangerous. Through self-deception, individuals can justify the most egregious actions, but individuals operating alone are usually more limited in the amount of harm they can do. Typically, groups engaging in sociocentric thinking can do greater harm to greater numbers of people.

Consider, for example, the Spanish Inquisition, wherein the state, controlled by the Catholic Church, executed thousands of reputed heretics. Or consider the Germans, who tortured and murdered millions of Jews, or the "founders" of the Americas, who enslaved, murdered, or tortured large numbers of Native Americans and Africans.

In short, throughout history and to the present day, sociocentric thinking has led directly to the pain and suffering of millions of innocent persons. This has been possible because groups, in their sociocentric mindset, use their power in a largely unreflective, abusive way. Once they have internalized a self-serving ideology, they are able to act in ways that flagrantly contradict their announced morality without noticing any contradictions or inconsistencies in the process.

Sociocentric Use of Language in Groups

Sociocentric thinking is fostered by the way groups use language. Groups justify unjust acts and ways of thinking through their use of concepts or ideas. For example, as Sumner points out, sociocentrism can be exemplified by the very names groups choose for themselves and the way they differentiate themselves from what they consider lesser groups:

When Caribs were asked whence they came, they answered, "We alone are people." The meaning of the name Kiowa is "real or principal people." The Lapps call themselves "men." Or "human beings." The Greenland Eskimo think that Europeans have been sent to Greenland to learn virtue and good manners from the Greenlanders. The Seri of Lower California observe an attitude of suspicion and hostility to all outsiders, and strictly forbid marriage with outsiders. (p. 14)

In the everyday life of sociocentric thinkers, we can find many self-serving uses of language that obscure unethical behavior. During the time when Europeans first inhabited the Americas, they forced Indians into slavery and tortured and murdered them in the name of progress and civilization. By thinking of the Indians as savages, they could justify their inhumane treatment. At the same time, by thinking of themselves as civilized, they could see themselves as bringing something precious to the savages, namely civilization.

The words progress, savagery, civilization, and true religion, were used as vehicles to exploit the American Indians to gain material wealth and property. The thinking of the Europeans, focused on these ideas, obscures the basic humanity of the peoples exploited as well as their rightful ownership of the land that they had occupied for thousands of years.

Sumner says that the language social groups use is often designed to ensure that they maintain a special, superior place:

The Jews divided all mankind into themselves and the Gentiles. They were "chosen people." The Greeks called outsiders "barbarians." The Arabs regarded themselves as the noblest nation and all others as more or less barbarous. In 1896, the Chinese minister of education and his counselors edited a manual in which this statement occurs: "How grand and glorious is the Empire of China, the middle Kingdom!" The grandest men in the world have come from the middle empire. In all the literature of all the states equivalent statements occur. In Russian books and newspapers the civilizing mission of Russia is talked about, just as, in the books and journals of France, Germany, and the United States, the civilizing mission of those countries is assumed and referred to as well understood. Each state now regards itself as the leader of civilization, the best, the freest and the wisest, and all others as their inferior. (p. 14)

Disclosing Sociocentric Thinking Through Conceptual Analysis

Concepts are one of the eight basic elements of human thinking. We cannot think without them. They form the classifications, and implicitly express the theories, through which we interpret what we see, taste, hear, smell, and touch. Our world is a conceptually constructed world. And sociocentric thinking, as argued above, is driven by the way groups use concepts.

If we had thought using the concepts of medieval European serfs, we would experience the world as they did. If we had thought using the concepts of an Ottoman Turk general, we would think and experience the world that he did.

In a similar way, if we were to bring an electrician, an architect, a carpet salesperson, a lighting specialist, and a plumber into the same building and ask each to describe what he or she sees, we would end up with a range of descriptions that, in all likelihood, reveal the special "bias" of the observer.

Or again, if we were to lead a discussion of world problems between representatives of different nations, cultures, and religions, we would discover a range of perspectives not only on potential solutions to the problems, but sometimes as to what a problem is in the first place.

It is hard to imagine a skilled critical thinker who is not also skilled in the analysis of concepts. Conceptual analysis is important in a variety of contexts:

1.

The ability to identify and accurately analyze the range of distinctions available to educated speakers of a language (being able to distinguish between meanings of words, given educated usage).

2.

The ability to identify the difference between ideological and nonideological uses of words and concepts (being able to figure out when people are giving special, unjustified meaning to words based on their ideology).

3.

The ability to accurately analyze the network of technical meanings of words that define the basic concepts within a discipline or domain of thinking (being able to analyze the meanings of words within disciplines and technical fields).

Many problems in thinking are traceable to a lack of command of words and their implicit concepts. For example, people have problems in their romantic relationships when they are unclear about three distinctions: 1) between egocentric attachment and genuine love; 2) between friendship and love; and (3) between misuse of the word love (as exemplified by many Hollywood movies) and the true meaning of the word love shared by educated speakers of the English language.

Revealing Ideology at Work Through Conceptual Analysis

People often have trouble differentiating ideological and nonideological uses of words. They are then unable to use the following words in a nonloaded way: capitalism, socialism, communism, democracy, oligarchy, plutocracy, patriotism, terrorism. Let's look at this case in greater detail.

When the above words are used ideologically, they are applied inconsistently and one-sidedly. The root meaning of the word is often lost, or highly distorted, while the word is used to put a positive or negative gloss on events, obscuring what is really going on. Hence, in countries in which the reigning ideology extols capitalism, the ideologies of socialism and communism are demonized, democracy is equated with capitalism, and plutocracy is ignored. In countries in which the reigning ideology is communism, the ideology of capitalism is demonized, democracy is equated with communism, and oligarchy is ignored. The groups called "terrorists" by some are called patriots by the others.

If we examine the core meanings of these words and use them in keeping with the core meanings they have in the English language, we can recognize contradictions, inconsistencies, and hypocrisy when any group misuses them to advance its agenda. Let us review the core meanings of these terms as defined by Webster's New World Dictionary:

- Capitalism: an economic system in which all or most of the means of production and distribution, as land, factories, railroads, etc, are privately owned and operated for profit, originally under fully competitive conditions; it has generally been characterized by a tendency toward concentration of wealth.
- Socialism: any of the various theories or systems of the ownership and operation of the means of production and distribution by society or the community rather than by private individuals, with all members of society or the community sharing in the work and the products.
- Communism: any economic theory or system based on the ownership of all property by the community as a whole.
- Democracy: government in which the people hold the ruling power either directly or through elected representatives; rule by the ruled.
- Oligarchy: a form of government in which the ruling power belongs to a few persons.
- Plutocracy: 1) government by the wealthy; 2) a group of wealthy people who control or influence a government.
- Patriotism: love and loyal or zealous support of one's own country.

The Mass Media Foster Sociocentric Thinking

The mass media and press in a country tend to present events in the world in descriptive terms that presuppose the correctness of the self-serving world view dominant in the country. As critical consumers of the mass media, we must learn to recognize when language is being used ideologically (and so violating the basic meanings of the terms themselves). We must learn how to recognize sociocentric bias wherever we find it.

Many examples of sociocentric thinking can be found in the mass media. This is true, in part, because the media are an inherent part of the culture within which they function. Because much of the thinking within any given culture is sociocentric in nature, we can expect the sociocentric thinking of the culture to be furthered through the mass media as vehicles of large-scale social communication.

For example, the mass media routinely validate the view that one's own country is "right" or ethical in its dealings in the world. This cultivates one-sided nationalistic thinking. The basic idea is that all of us egocentrically think of ourselves in largely favorable terms. As sociocentric thinkers, we think of our nation and the groups to which we belong in largely favorable terms. It follows, therefore, that the media will present in largely unfavorable terms those nations and groups that significantly oppose us.

For example, to most citizens of the United States, it seems naturally to be a leader of all that is right and good in the world. The mass media largely foster this view. When we look critically at the mainstream mass media of a country, it is easy to document the bias of its presentations of the important events in the world.

It follows that the mainstream news media are biased toward their country's allies, and prejudiced against its enemies. The media therefore present events that regard the countries of allies in as favorable a light as possible, highlighting positive events while downplaying negative events. As for its enemies, the opposite treatment can be expected. Thus, positive events in the countries of one's enemies are either ignored or given little attention while negative events are highlighted and distorted. The ability of a person to identify this bias in action and mentally rewrite the article or representation more objectively is an important critical thinking skill.

In the United States, for example, because Israel is our ally, our media usually ignore or give minor attention to mistreatment of the Palestinians by the Israelis. On the other hand, because Fidel Castro of Cuba is our enemy, mainstream news writers take advantage of every opportunity to present Castro and Cuba in a negative light, ignoring most achievements of the Cuban government (e.g., in the area of universal education and medical care).

Let's consider some examples from the news to exemplify this pattern of sociocentric bias in the news.

U.S. Releases Files on Abuses in Pinochet Era (from New York Times, [July 1, 1999](#), p. A11)

Historical background

In 1973 a group of military officers overthrew the government of the democratically elected president of Chile, Salvador Allende. Their announced justification was that Allende was trying to replace democracy with communism. At the time of the coup the U.S. government repeatedly denied any involvement in the coup and any knowledge of the torture and murder of people considered enemies of the coup leaders and the imposed political structure. Accordingly, the mainstream news media presented the official U.S. position (along with its official explanations) as the truth of the matter. The coup leaders were presented as a positive force against communism. The democratically

The Mass Media Play Down Information That Puts the Nation in a Negative Light

The media not only represents the news in terms favorable to the nation, it also plays down information that puts the nation in a negative light. The news media of the U.S. is a case in point.

When the UN General Assembly opposes the U.S. virtually unanimously, the U.S. media play that down, either by not reporting the vote at all or burying it in fine print or with an obscure notice. For example, most Americans are unaware of the extent to which the United States has stood alone, or virtually alone, in votes of the general assembly of the United Nations. According to the United Nations (2001), the U.S. was the only nation in the world voting against the following resolutions:

- Resolutions seeking to ban testing and development of chemical and biological weapons (1981, 1982, 1983, 1984);
- Resolutions seeking to prohibit the testing and development of nuclear weapons (1982, 1983, 1984);
- Resolutions seeking to prohibit the escalation of the arms race into space (1982, 1983);
- Resolutions condemning and calling for an end to apartheid in South Africa (five in 1981, four in 1982, four in 1983);
- Resolutions calling for education, health care, and nourishment as basic human rights (1981, 1982, 1983);
- Resolutions affirming the right of every nation to self determination of its economic and social systems free of outside intervention (1981, 1983).

In 1981, the U.S. and Israel were the only nations in the world voting against 11 otherwise unanimous resolutions condemning Israel for human rights abuses committed against the Palestinians. And on December 7, 1987, the U.S. was the only nation to abstain from supporting a unanimous resolution calling for a convention on the rights of the child (United Nations, 2001).

The view that the U.S. fosters about itself, both at home and abroad, is, of course, that of being the leader of the free world. This view would be largely shattered if it were widely reported in the U.S. that, in fact, no other nation is following its lead.

On the one hand, the U.S. media foster the view that the U.S. is the best place to live in the world. At the same time, "The U.S. now imprisons more people than any other country in the world—perhaps half a million more than

Freedom from Sociocentric Thought: The Beginnings of Genuine Conscience

The thesis of this chapter is that we are by nature sociocentric as well as egocentric. Without a clear understanding of our sociocentric tendencies, we become victims of the conformist thought dominant in social groups, and we become potential victimizers of others who disagree with our group's ideology. What is important is that we begin to identify sociocentrism in our thinking and our lives. Every group to which we belong is a possible place to begin to identify sociocentrism at work in ourselves and others. Once we see the many patterns of social conformity in our lives, we can begin question those patterns. As we become more rational, we neither conform to conform nor rebel to rebel. We act, rather, from a clear sense of values and beliefs we have rationally thought through, values and beliefs we deem worthy of our free commitment.

The Capacity to Recognize Unethical Acts

Only when we can distinguish sociocentric thinking from ethical thinking can we begin to develop a conscience that is not equivalent to those values into which we have been socially conditioned. Here are some categories of acts that are unethical in-and-of themselves:

- SLAVERY: Enslaving people, whether individually or in groups;
- GENOCIDE: Systematically killing large masses of people;
- TORTURE: Using torture to obtain a "confession";
- DENIAL OF DUE PROCESS: Putting persons in jail without telling them the charges against them or providing them with a reasonable opportunity to defend themselves;
- POLITICALLY MOTIVATED IMPRISONMENT: Putting persons in jail, or otherwise punishing them, solely for their political or religious views;
- SEXISM: Treating people unequally (and harmfully) in virtue of their gender;
- RACISM: Treating people unequally (and harmfully) in virtue of their race or ethnicity;
- MURDER: The pre-meditated killing of people for revenge, pleasure, or to gain advantage for oneself;
- ASSAULT: Attacking an innocent person with intent to cause grievous bodily harm;
- RAPE: Forcing an unwilling person to have intercourse;
- FRAUD: Intentional deception to cause someone to give up property or some right;
-

Conclusion

Inescapably, living a human life entails membership in a variety of human groups. And such membership almost always generates sociocentric thought. This holds independently of whether we are speaking of nation, culture, profession, religion, family, or peer group. We find ourselves participating in groups before we are aware of ourselves as living beings. We find ourselves in groups in virtually every setting in which we function as persons. Sociocentric thought is the natural by-product of uncritically internalizing social concepts and values. To the extent that we remain sociocentric, we cannot become independent thinkers, nor can we develop a genuine conscience. The tools of critical thinking enable us to achieve perspective upon the social and cultural bases of our day-to-day thinking. It enables us to judge those bases with standards and criteria that free us from the intellectual confinement of one-dimensional thought. It enables us to locate concepts, standards, and values that transcend our culture and society. It enables us to develop a genuine conscience. It enables us to think within and beyond the social groups to which we belong.

Chapter 12. Developing as an Ethical Reasoner

One of the most significant obstacles to fair-mindedness is the human tendency to reason in a self-serving or self-deluded manner. This tendency is increased by the extent to which people are confused about the nature of ethical concepts and principles. In understanding ethical reasoning, the following foundations are essential:

1.

Ethical principles are not a matter of subjective preference.

2.

All reasonable people are obligated to respect clear-cut ethical concepts and principles.

3.

To reason well through ethical issues, we must know how to apply ethical concepts and principles reasonably to those issues.

4.

Ethical concepts and principles should be distinguished from the norms and taboos of society and peer group, religious teachings, political ideologies, and the law.

5.

The most significant barriers to sound ethical reasoning are the egocentrism and socio-centrism of human beings.

First we will seek to clarify the problem that ethics poses in human life: what ethics is, what its basis is, what it is commonly confused with, what its pitfalls are, and how it is to be understood.

Following that discussion, we emphasize three essential components in sound ethical reasoning: 1) the principles upon which ethics are grounded; 2) the counterfeits to avoid; and 3) the pathology of the human mind.

Why People are Confused About Ethics

The ultimate basis for ethics is clear: Human behavior has consequences for the welfare of others. We are capable of acting toward others in such a way as to increase or decrease the quality of their lives. We are capable of helping or harming others. What is more, we are capable of understanding—at least in many cases—when we are doing the one and when we are doing the other. This is so because we have the raw capacity to put ourselves imaginatively in the place of others and recognize how we would feel if someone were to act toward us in the manner in which we are acting toward them.

Even young children have some idea of what it is to help or harm others. Children make inferences and judgments on the basis of that ethical awareness, and develop an outlook on life that has ethical significance for good or ill. But children tend to have a much clearer awareness of the harm done to them than they have of the harm they do to others:

- "That's not fair! He got more than me!"
- "She won't let me have any of the toys!"
- "He hit me and I didn't do anything to him. He's mean!"
- "She promised me. Now she won't give me my doll back!"
- "Cheater! Cheater!"
- "It's my turn now. You had your turn. That's not fair."

Through example and encouragement, we can cultivate fair-mindedness in children. Children can learn to respect the rights of others and not simply focus on their own. The main problem is not so much the difficulty of deciding what is helpful and harmful but, instead, our natural propensity to be egocentric. Few humans think at a deep level about the consequences to others of their selfish pursuit of money, power, prestige, and possessions. The result is that, though most people, independent of their society, ethnicity, and religion, give at least lip service to a common core of general ethical principles, few act consistently upon these principles. Few will argue that it is ethically justified to cheat, deceive, exploit, abuse, harm, or steal from others, nor hold that we have no ethical responsibility to respect the rights of others, including their freedom and well being. But few dedicate their lives to helping those most in need of help, to seeking the common good and not merely their own self-interest and egocentric pleasures.

As we pointed out in the last chapter, there are acts that rational persons recognize are in-and-of themselves harmful to people. They include slavery, genocide, torture, denial of due process, politically motivated imprisonment, sexism, racism, murder, assault, rape, fraud, deceit, and intimidation.

The Fundamentals of Ethical Reasoning

To become skilled in any domain of reasoning, we must understand the principles that define that domain. To be skilled in mathematical reasoning, we must understand fundamental mathematical principles. To be skilled in scientific reasoning, we must understand fundamental scientific principles (principles of physics, of chemistry, of astronomy, and so on). In like manner, to be skilled in ethical reasoning, we must understand fundamental ethical principles. Good-heartedness is not enough. We must be well-grounded in fundamental ethical concepts and principles. Principles are at the heart of ethical reasoning.

People thinking through an ethical issue must be able to identify the ethical principles relevant to the specific ethical situation. They must also muster the intellectual skills required to apply those principles fairly to the relevant case or situation. Ethical principles alone, however, do not settle ethical questions. For example, ethical principles sometimes can be applied differently in cases that are ethically complex.

Consider for instance, the question: Should the United States maintain relations with countries that violate human rights? The most important ethical concepts relevant to this question are justice and integrity, yet matters of practicality and effectiveness clearly must be considered as well. Justice and integrity would seem to require cutting off relations with any country that violates fundamental human rights. But is isolating and confronting these countries the most effective way to achieve these high ethical ends? What is more, history reminds us that nearly all countries violate human rights in one form or another—the United States not excluded. To what extent do we have the right to demand that others live up to standards that we ourselves often fail to meet? These are the kinds of challenging ethical issues often ignored by the naive and the good-hearted on the one hand, and the self-deceived cynical on the other.

Because ethical reasoning is often complex, we must learn strategies to deal with those complexities. The three intellectual tasks we believe to be the most important to ethical reasoning are:

1.
Mastering the most basic ethical concepts and the principles inherent in ethical issues.
2.
Learning to distinguish between ethics and other domains of thinking with which ethics is commonly confused.
3.
Learning to identify when native human egocentrism and socio-centrism are impeding one's ethical judgments (probably the most challenging task of the three).

If any of these three foundations is missing in a person's ethical reasoning, that reasoning will likely be flawed. Let's consider these abilities in turn.

Ethical Concepts and Principles

For every ethical question, some ethical concept or set of concepts directly relevant to the question must be identified. One cannot reason well with regard to ethical issues if one does not clearly understand the force of ethical terms and distinctions. Some of the most basic ethical concepts include honesty, integrity, justice, equality, and respect. In many cases, application of the principles implied by these concepts is simple. In some cases it is difficult.

Consider some simple cases. Lying about, misrepresenting, or distorting the facts to gain a material advantage over others is clearly a violation of the basic principle inherent in the concept of honesty. Expecting others to live up to standards that we ourselves routinely violate is clearly a violation of the basic principle inherent in the concept of integrity. Treating others as if they were worth less than we take ourselves to be worth is a violation of the principles inherent in the concepts of integrity, justice, and equality. Every day human life is filled with clear-cut violations of basic ethical principles. No one would deny that it is ethically repugnant for a person to microwave cats for the fun of it. Nor is it ethically acceptable to kill people to get their money or to torture people because we think they are guilty and ought to confess.

Nevertheless, in addition to the clear-cut cases are also complicated cases, requiring us to enter into an ethical dialogue, considering counter-arguments from different points of view. Consider, for example, the question: Is euthanasia ever ethically justifiable? Certainly there are any number of instances when euthanasia is not justified. To consider the question of whether it is ever justified, however, we must consider the various conditions under which euthanasia seems plausible. For example, what about cases involving people who are suffering unrelenting pain from terminal diseases? Within this group are some who plead with us to end their suffering by helping them end their lives (since, though in torment, they cannot end their lives without the assistance of another person).

Given the fact, then, that a person so circumstanced is experiencing intense terminal suffering, one significant ethical concept relevant to this question is the concept of cruelty. Cruelty is defined by Webster's New World Dictionary as "causing, or of a kind to cause, pain, distress, etc; cruel implies indifference to the suffering of others or a disposition to inflict it on others." Cruelty, in this case, means "of a kind to cause" unnecessary pain. It means allowing an innocent person to experience unnecessary pain and suffering when you have the power to alleviate it—without sacrificing something of equal value.

Once cruelty is identified as a relevant concept, one ethical injunction becomes clear: "Strive to act so as to reduce or end the unnecessary pain and suffering of innocent persons and creatures." With this ethical principle in mind, we can seek to determine in what sense, in any given situation, refusing to assist a suffering person should be considered cruel and in what sense it shouldn't.

Another ethical concept that may be relevant to this issue is, "Life is good in itself." The principle that emerges from this concept is, "Life should be respected." Some would argue that, given this principle, life should not be terminated by humans under any circumstances.

As a person capable of reasoning, you should come to your own conclusions. At the same time, you must be prepared to state your reasoning in detail, explaining what ethical concepts and issues seem to you to be relevant, and why. You must be prepared to demonstrate that you have given serious consideration to alternative perspectives on the issue, that you are not ignoring other reasonable ways to think through the question at issue. You must be ready to present what you take to be the most relevant and important facts in the case. You must be prepared to do what any good thinker would do in attempting to support reasoning on any issue in any domain of thought. The fact that an issue is ethical does not mean that you can abandon your commitment to disciplined, rational thought.

The Universal Nature of Ethical Principles

For every ethical issue, there are ethical concepts and principles to be identified and used in thinking through the issue. Included in the principles implied by these concepts are the rights articulated in the Universal Declaration of Human Rights. This set of rights, established on December 10, 1948, by the General Assembly of the United Nations, holds that the:

recognition of inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice, and peace in the world . Disregard and contempt for human rights have resulted in barbarous acts which have outraged the conscience of mankind, and the advent of a world in which human beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people.

The Universal Declaration of Humans Rights was conceived as "a common standard of achievement for all peoples and all nations." It is a good example of an explicit statement of important ethical principles. It is significant, we believe, that every nation on earth has signed the declaration.

Here are a few of the principles laid out in the 30 articles of the declaration:

- All humans are born free and equal in dignity and rights.
- Everyone has the right to life, liberty, and security of person.
- No one shall be held in slavery or servitude.
- No one shall be subjected to torture or to cruel, inhuman, or degrading treatment or punishment.
- Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family.
- Everyone has the right to education.
- Everyone has the right to freedom of peaceful assembly and association.
- Everyone is entitled to all the rights and freedoms set forth in this declaration, without distinction of any kinds,

Distinguishing Ethics from Other Domains of Thinking

In addition to understanding how to identify ethical concepts and principles relevant to ethical issues, skilled ethical reasoners must be able to distinguish between ethics and other domains of thinking such as social conventions, religion, and the law. Too often, ethics is confused with these other modes of thinking. It is not uncommon, for example, for social values and taboos to be treated as if they define ethical principles.

Thus, religious ideologies, social "rules," and laws are often mistakenly taken to be inherently ethical in nature. If we are to accept this amalgamation of domains, by implication every practice within any religious system is necessarily ethical, every social rule is ethically obligatory, and every law is ethically justified. We could not judge, then, any religious practices—such as torturing unbelievers—as unethical.

In the same way, if ethics and social conventions were one and the same, every social practice within any culture would necessarily be ethical—including social conventions in Nazi Germany. We could not, then, ethically condemn any social traditions, norms, mores, and taboos—however ethically bankrupt we think them to be. What's more, if ethics and the law were inextricable, by implication every law within any legal system would be ethical by definition—including laws that blatantly violate human rights.

It is essential, then, to learn to routinely differentiate ethics and other modes of thinking commonly confused with ethics. This will enable us to criticize commonly accepted, yet unethical, social conventions, religious practices, political ideas, and laws. No one lacking in this ability can truly live a life of integrity.

Ethics and Religion

To exemplify some of the problems in confusing ethics with other disciplines, let us return for a moment, to the question: Are there any conditions under which euthanasia is ethically justifiable? Rather than understanding this as an ethical question, some take it to be a religious question. Therefore, they think through the question using religious principles. They see some religious principles, namely, the ones in which they believe, as fundamental to ethics.

They argue, for example, that euthanasia is not ethically justifiable because "the Bible says it is wrong to commit suicide." Because they do not distinguish the theological from the ethical, they are likely to miss the relevance of the concept of cruelty. They are not likely to struggle with the problem. This may mean that they find it difficult to feel any force behind the argument for euthanasia in this case or to appreciate what it is to experience hopeless torment without end.

A commitment to some set of religious beliefs may prevent them from recognizing that ethical concepts take priority over religious beliefs when they conflict, as the former are universal and the latter are inherently controversial. Reasonable persons give priority allegiance to ethical concepts and principles, whether these concepts and principles are or are not explicitly acknowledged by a given religious group. Religious beliefs are, at best, supplementary to ethical principles but cannot overrule them.

Consider this example: If a religious group were to believe that the firstborn male of every family must be killed as a sacrifice and failed to exercise any countervailing ethical judgment, every person in that group would think themselves to be ethically obligated to kill their firstborn male. Their religious beliefs would lead them to unethical behavior and lessen their capacity to appreciate the cruel nature of their behavior.

The genuinely ethical thing to do in a society that propagates the above religious belief would be to rebel and resist what others consider to be obligatory. In short, theological beliefs do not properly override ethical principles, for we must use ethical principles to judge religious practices. We have no other reasonable choice.

Religious Beliefs Are Socially or Culturally Relative

Religious relativity derives from the fact that there are an unlimited number of alternative ways for people to conceive and account for the nature of the "spiritual." The Encyclopedia Americana, for example, lists over 300 different religious belief systems. These traditional ways of believing adopted by social groups or cultures take on the force of habit and custom. They are handed down from one generation to another. To the individuals in a given group, despite the large number of possibilities, their particular beliefs often seem to be the ONLY way, or the only REASONABLE way, to conceive of the "divine." For most people these religious beliefs influence their behavior from cradle to grave. Religions answer questions like this:

- What is the origin of all things? Is there a God? Is there more than one God? If there is a God, what is his/her nature? Are there ordained laws that exist to guide our life and behavior? What are these laws? How are they communicated to us? How should we treat transgressions of these laws? What must we do to live in keeping with the will of the divine?

Religious beliefs bear upon many aspects of a person's life—with rules, requirements, taboos, and rituals. Many of these regulations are neither right nor wrong, but simply represent social preferences and subjective choices. However, sometimes, without knowing it, social practices, including religious beliefs or practices, violate basic human rights. Then, they must be criticized. For example, if a society accepts among its social practices any form of slavery, torture, sexism, racism, persecution, murder, assault, rape, fraud, deceit, or intimidation, it should be ethically criticized. For example, in religious warfare ethical atrocities are often committed. The question, then, ceases to be one of social preference and relativity. No religious belief can legitimately be used to justify violations of basic human rights.

Test the Idea

Distinguishing Between Ethics and Religion

Focus on one religious belief system (as commonly held) to identify possible confusions between theological beliefs and ethical principles. See if you can identify any practices within the religion that might be critiqued as unethical. See also if you can identify any practices that the religion considers unethical that are in fact unrelated to ethics. Select any religion about which you are sufficiently knowledgeable to find possible problems of the sort we are considering. As an example remember the case of those religious believers who think that a woman who commits adultery should be stoned to death.

Ethics and Social Conventions

Let us return to the relationship of ethics and social conventions. For more than a hundred years in the United States, most people considered slavery to be justified and desirable. It was part of social custom. There can be no question that, all along, this practice was unethical. Moreover, throughout history, many groups of people, including people of various nationalities and skin colors, as well as females, children, and individuals with disabilities, have been victims of discrimination as the result of social convention treated as ethical obligation. Yet, all social practices that violate ethical principles deserve to be rejected by ethically sensitive, reasonable persons no matter how many people support those practices.

Unless we learn to soundly critique the social mores and taboos that have been imposed upon us from birth, we will accept those traditions as "right." All of us are deeply socially conditioned. Therefore, we do not naturally develop the ability to effectively critique social norms and taboos.

Practices That Are Socially or Culturally Relative

Cultural relativity derives from the fact that there are an unlimited number of alternative ways for people in social groups to go about satisfying their needs and fulfilling their desires. Those traditional ways of living within a social group or culture take on the force of habit and custom. They are handed down from one generation to another. To the individuals in a given group they seem to be the ONLY way, or the only REASONABLE way, to do things. For most people these practices guide their behavior from cradle to grave. They answer questions like this:

- How should marriage take place? Who should be allowed to marry, under what conditions, and with what ritual or ceremony? Once married what role should the male play? What role should the female play? Are multiple marriage partners possible? Is divorce possible? Under what conditions?
- Who should care for the children? What should they teach the children as to proper and improper ways to act? When children do not act as they are expected to act, how should they be treated?
- When should children be accepted as adults? When should they be considered old enough to be married? Who should they be allowed to marry?
- When children develop sensual and sexual desires, how should they be allowed to act? With whom, if anyone, should they be allowed to engage in sexual exploration and discovery? What sexual acts are considered acceptable and wholesome? What sexual acts are considered perverted or sinful?
- How should men and women dress? To what degree should their body be exposed in public? How is nudity treated? How are those who violate these codes treated?
- How should food be obtained and how should it be prepared? Who is responsible for the obtaining of food? Who for its preparation? How should it be served? How eaten?
- How is the society "stratified" (into levels of power)? How is the society controlled? What belief system is used to justify the distribution of scarce goods and services and the way rituals and practices are carried out?
- If the society develops enemies or is threatened from without, who will defend it? How will they engage in war?
- What sorts of games, sports, or amusements will be practiced in the society? Who is allowed to engage in them?

Ethics and the Law

As persons interested in developing your ethical reasoning abilities, you should be able to differentiate not only ethics and social conventions but also ethics and the law. What is illegal may be ethically justified. What is ethically obligatory may be illegal. What is unethical may be legal.

Laws often emerge out of social conventions. Whatever is acceptable and expected in social groups becomes the foundation for many laws. But, because we cannot assume that social conventions are ethical, we cannot assume that human laws are ethical. What is more, laws are ultimately made by politicians whose primary motivation is often power, vested interest, or expediency. One should not be surprised, then, when politicians are not sensitive to ethical principles or confuse ethical principles with social values or taboos.

Ethics and Sexual Taboos

The problem here is that social taboos are often matters of strong emotions. People are often disgusted by someone's violating a taboo. Their disgust signals to them that the behavior is unethical. They forget that what is socially unacceptable may not violate any ethical principle but, instead, be a violation of a social convention of one kind or other.

One obvious area to think through, based on this common confusion, is the area of human sexuality. Social groups often establish strong sanctions for unconventional behavior involving the human body. Some social groups inflict strong punishments on women who do no more than appear in public without being completely veiled, an act socially considered indecent and sexually provocative. The question for us, then, is when is human behavior that is considered illicitly sexual by some society a matter for ethical condemnation, and when is it properly considered a matter of social nonconformity?

Our overall goal—which we hope this chapter will inspire readers to pursue—is to become so proficient in ethical reasoning and so skilled in distinguishing matters of ethical principle from matters of social taboo, legal fact, and theological belief that you will rarely confuse these domains in your experience and, rather, render to each of them their due consideration and weight in specific cases as they might arise in your life. In the Test the Idea activities that follow, you can gain some practice in developing these important skills.

Test the Idea

Ethics, Social Taboos, and Criminal Law

In this exercise, we will briefly describe the substance of two news articles. Both articles depict examples of cases in which a given social group has established a law with a significant punishment attendant on its violation, regarding behavior judged by that group to be highly unethical. Think through how you would analyze and assess the act in question using the distinctions discussed in this chapter.

Here are some questions to think about as you read summaries of these articles:

- Would you conclude that the social group in question has properly or improperly treated the sexual behaviors in each case as matters worthy of ethical condemnation?
- To what extent should these behaviors be considered serious crimes?
- Ethically and rationally speaking, how in your judgment should the two cases be treated?

Read each article summary, and answer the questions above for each one. Explain your reasoning. In each case, you may have to make explicit some of your assumptions about important details of the case.

Understanding Our Native Selfishness

In addition to the above, ethical reasoning requires command over our native tendency to see the world from a self-serving perspective. [Chapter 10](#), on human irrational tendencies, focuses on the problem of human self-centeredness at length. Here we apply some of the major points of that chapter to problems in ethical reasoning.

Humans naturally develop a narrow-minded, self-centered point of view. We feel our own pain; we don't feel the pain of others. We think our own thoughts; we do not think the thoughts of others. And as we age, we do not naturally develop the ability to empathize with others, to consider points of view that conflict with our own. For this reason, we are often unable to reason from a genuinely ethical perspective. Empathy with the thinking of others, then, is not natural to humans. Nevertheless, it is possible to learn to critically think through ethical issues. With the right practice, we can acquire the skill of considering situations from opposing ethical perspectives.

As we have argued in previous chapters, the human tendency to judge the world from a narrow, self-serving perspective is powerful. Humans are typically masterful at self-deception and rationalization. We often maintain beliefs that fly in the face of the evidence right before our eyes and engage in acts that blatantly violate ethical principles. What is more, we feel perfectly justified in doing so.

At the root of every unethical act lies some form and degree of self-delusion. And at the root of every self-delusion lies some flaw in thinking. For instance, Hitler confidently believed he was doing the right thing in carrying out egregious acts against the Jews. His actions were a product of the erroneous beliefs that Jews were inferior to the Aryan race, and that they were the cause of Germany's problems. In ridding Germany of the Jews, he believed himself to be doing what was in the best interest of his Germany. He therefore considered his actions to be completely justified. His unethical ethical reasoning resulted in untold human harm and suffering for millions of people.

To become skilled at ethical reasoning, we must understand that ethical reasoning means doing what is right even in the face of powerful selfish desires. To live an ethical life is to develop command over our native egocentric tendencies. It is not enough to espouse the importance of living an ethical life. It is not enough to be able to do the right thing when we ourselves have nothing to lose. We must be willing to fulfill our ethical obligations at the expense of our selfish desires. Thus, having insight into our irrational drives is essential to living an ethical life.

Test the Idea

Identifying Your Unethical Behavior

Each of us engages in unethical behavior, but few of us recognize that we do. To become highly skilled at ethical reasoning, we must become everyday observers of our own thoughts and actions. Over the next week, closely observe your behavior to "catch" yourself doing something unethical (like being selfish, or hurting someone unjustifiably).

Complete the following statements for five "unethical acts":

1.

This situation in which I behaved unethically is as follows:

Chapter 13. Analyzing and Evaluating Thinking in Corporate and Organizational Life

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[Critical Thinking and Incremental Improvement](#)

[An Obstacle to Critical Thinking Within Organizations: The Covert Struggle for Power](#)

[Another Obstacle: Group Definitions of Reality](#)

[A Third Obstacle: The Problem of Bureaucracy](#)

[The Problem of Misleading Success](#)

[Competition, Sound Thinking, and Success](#)

[Stagnating Organizations and Industries](#)

[Questioning Organizational Realities](#)

[Assessing Irrational Thinking in Organizational Life](#)

[The Power of Sound Thinking](#)

[Some Personal Implications](#)

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Introduction

Living a human life, as we have seen, entails a variety of relationships and membership in a variety of human groups. Both the relationships and the groups to which we belong typically have a profound influence on our thinking, our emotions, and our desires. In [Chapter 11](#), we considered the broadest implications of this fact, especially the implications of sociocentrism, a term that highlights group-dominated thinking in human life. In this chapter, we will focus somewhat more narrowly, on the problem of thinking effectively and working for change in corporate and other organizational structures.

To think effectively in corporate and organizational settings, it is helpful to consider the logic of these structures and explicitly face the questions one should ask when operating within them. The more we understand the logic of our circumstances, the more effectively we can act.

Here is our plan. We will deal with the logic of organizational structures in some detail first, approaching their potential transformation from a number of different standpoints, including that of three predictable obstacles: the struggle for power, group definitions of reality, and bureaucracy. We will also look at the problem of "misleading success" as well as the relation between competition, sound thinking, and success. We will spell out some essential questions each of us should ask when working within a corporate or organizational setting. Following that, toward the end of the chapter, we will analyze six hypothetical cases illustrating some of the ways critical thinking might be applied to decision-making in a corporate or organizational setting. We will close the chapter with a list of conditions essential for success in facilitating a culture of critical thinking. The conditions we list suggest ways that an organization or corporation can begin to organize itself for long-range success through the use of critical thinking.

There are a number of factors we must take into account in thinking our way through organizational and corporate structures, factors that interact in different ways in different settings. Often we lack some of the vital facts we need to make sound decisions and must therefore judge in terms of probabilities rather than certainties. Often we cannot answer all the questions we would like to answer. In any case, critical thinking does not guarantee us the truth—rather, it affords us a way to maximize our best chance for it.

Critical Thinking and Incremental Improvement

The success of any organization is largely a function of the quality of the thinking done within it. But success is usually partial rather than complete. Doing one thing well, we may do another thing poorly. Thinking well in one context, we may think poorly in another. We may achieve our goals in the short-run at the expense of achieving them in the long-run. We may succeed simply because we perform at a somewhat higher level than the competition. We rarely have absolute success in human life. The spirit of critical thinking is an organized and disciplined way of achieving continual improvement in thinking and therefore of attaining fuller and more complete success over time. It consists in thinking at progressively higher levels in virtue of a deliberate and practical commitment to quality of thinking.

Test the Idea Self-Assessment

Name one domain or context (for example, the professional domain) in which you believe that you think reasonably well and compare it to another in which you believe your thinking to be of lower quality (for example, in intimate relationships). Explain the "evidence" you have that convinces you of this.

An Obstacle to Critical Thinking Within Organizations: The Covert Struggle for Power

To what extent are organizations and institutions capable of making a commitment to critical thinking? For one, every organization, every institutional structure, consists not only of a multiplicity of individuals, but a hierarchy of power among those individuals. No matter how noble the ultimate goals of an organization are, there is often a struggle for power beneath the surface. In this struggle, the thinking motivating the behavior of individuals may be highly complex as well as obscure. Personal strategies in use may be tacit, that is, not apparent even to those who are using them. Some strategies in the struggle for power are particularly deceptive.

For example, in a best selling book *The 48 Laws of Power*, Robert Greene ([1998](#)) puts into blatant language, 48 strategies that he claims are effectively used by those who seek and gain power. A short sampling of them is revealing:

- "Never outshine the Master."
- "Never put too much trust in Friends; learn how to use enemies."
- "Conceal your intentions."
- "Always say less than necessary."
- "Get others to do the work for you, but always take the credit."
- "Make other people come to you—use bait if necessary."
- "Learn to keep people dependent on you."
- "Use selective honesty and generosity to disarm your victim."
- "When asking for help, appeal to people's self-interest "
- "Pose as a friend, work as a spy."

Another Obstacle: Group Definitions of Reality

Within all organizations, there is a natural generation of "favorable self-description" or "self-serving representation." This involves an image the organization fosters of itself, both inwardly and outwardly. How explicitly and openly these representations are stated varies from organization to organization, as does the degree of contradiction between presentation and fact. By their very nature groups have a vested interest in presenting the most favorable picture of themselves to those outside. Typically, therefore, a rosier picture than is actually the case is created for external consumption. Even within an organization there are usually some truths that remain unspoken and taboo. Being an "insider" does not mean you can say anything you want to other insiders.

For example, some doctors are aware of more medical malpractice than they are willing to publicly discuss. Lawyers sometimes play down the fact that some lawyers routinely bill clients for more time than they spend on their clients' cases and that judges sometimes decide a case as a result of their personal beliefs and reaction to the appearance and demeanor of the accused, rather than by the relevant facts of the case and the meaning and intent of the law. Sociologists study this phenomenon under the categories of "in-group and out-group" behavior. Social psychologists study it under the category of social self-deception.

Test the Idea

Group Definitions of Reality

When we experience people we do not first see the person as a set of independent characteristics and then synthesize the parts into a whole. Rather, we typically see people as "instant" wholes. We interpret the "parts" accordingly. Behind these judgments, that often occur in a fraction of a second, are often an organized set of "definitions" of how things are. Hence, a person in management will often approach a "union" man with as many preconceptions as the union man approaches him. Select some job or professional situation in which you had a role. Review it in your mind and see if you can isolate any of the implicit (biased) "definitions" that guide behavior and perceptions on the job. How were you supposed to behave? How were others supposed to behave? Can you think of any situation in which you "opposed" some definition implicit in the established view of things? Do you remember how that opposition was received?

These realities must be taken into account in seeking to establish a culture of critical thinking within any organization or institution. This does not mean that it is unrealistic to attempt to foster that culture. But it does mean that the advantages of critical thinking may not be apparent to all concerned. In the short run, critical thinking may expose short-comings in the status quo. Those who personally gain from the status quo may be threatened by such an exposure of weaknesses. Individuals may confuse critical thinking with negative thinking or mistakenly assume that critical thinking is equivalent to whatever they personally happen to think. Individuals may also feel personally threatened by discussions that may suggest potential problems associated with them and their work. One must proceed with great caution in these circumstances.

A Third Obstacle: The Problem of Bureaucracy

No matter how successful any organization may be at the present, there is no guarantee of future success. The challenge is to break-through the natural assumption that future success is somehow guaranteed. In companies and organizations transitioning from small to large, for example, one must explicitly face the difficulty of emerging bureaucracy. Bureaucratization is a state in which employees work increasingly by fixed routine rather than through the exercise of intelligent judgment. With bureaucracy, narrowness in thinking emerges. There is a proliferation of hard-and-fast rules and fixed procedures—wrongly thought to contribute to efficiency and quality control. With bureaucracy in place, the original goal of an organization fades into the background. Individuals within the organization begin building small bastions of power and devising ways of warding off any potential threats to their power. Change is usually interpreted as a threat.

The problem of bureaucracy exists in virtually all large organizations—for example, in legal systems that sacrifice justice to power and expediency; in public health systems that poorly serve the health of the citizens; in schools that fail to educate; in governmental structures that serve the vested interests of those in power rather than the public. Large bureaucracies generate a vast network of regulations and tacit "strategies" that define "appropriate" rules of conduct. They stifle creativity and innovation. Important questions are coldly received. Thinking that challenges the status quo is stifled. Innovative thinking is dismissed as irresponsible, absurd, unreasonable, or impractical. Rules and regulations become ends in themselves rather than vehicles for reasonable decisions.

All organizations, even small ones, have a natural tendency toward stagnation. This includes a tendency to lose sight of their original goals, a tendency to begin to serve those who operate it rather than those it purports to serve. But largeness presents special problems. And large organizations that do not have to face any real competition are doubly at risk of becoming bureaucratic. Governmental bureaucracies, for example, are notorious for serving the vested interest of those who operate them, rather than the interests of those they were originally designed to serve. They typically respond only to public scandal or to the few with the external power to put political pressure on them. Rigidity and a lost sense of mission are their normal state.

Test the Idea Bureaucratic Thinking

Can you think of any situation in which you experienced problems that resulted from "bureaucratic thinking?" Can you identify how, in this situation, attachment to fixed routine prevented someone from exercising intelligent judgment? Do you see a relationship between a "letter-of-the-law mentality" and bureaucratic thinking? In your experience how widespread is the problem of bureaucratic thinking in your culture?

The Problem of Misleading Success

Poor thinking does not necessarily reveal itself immediately as such. The fact is that even thinking of the most absurd kind may prove successful for a time, if it caters to the egocentrism and prejudices of people and fits into an established logic of power. We can see this clearly in a historical context if we examine some of the Fascist thinking which, though deeply flawed, was accepted by highly intelligent people, including leaders of German industry, in the 1930's and 40's.

Winston Churchill ([1948](#)) summarizes the thinking of Adolf Hitler in *Mein Kampf*:

Man is a fighting animal; therefore the nation, being a community of fighters, is a fighting unit. Any living organism which ceases to fight for its existence is doomed to extinction. A country or race which ceases to fight is equally doomed. The fighting capacity of a race depends on its purity. Hence the need for ridding it of foreign defilements. The Jewish race, owing to its universality, is of necessity pacifist and internationalist. Pacifism is the deadliest sin; it means the surrender of the race in the fight for existence. The first duty of every country is therefore to nationalize the masses; intelligence in the case of the individual is not of first importance: will and determination are the prime qualities. The individual who is born to command is more valuable than countless thousands of subordinate natures. Only brute force can ensure the survival of the race; hence the necessity for military forms. The race must fight; a race that rests must rust and perish. Had the German race been united in good time, it would have been already master of the globe. The new Reich must gather within its fold all the scattered German elements in Europe. A race which has suffered defeat can be rescued by restoring its self-confidence. Above all things the Army must be taught to believe in its own invincibility. To restore the German nation, the people must be convinced that the recovery of freedom by force of arms is possible. The aristocratic principle is fundamentally sound. Intellectualism is undesirable. The ultimate aim of education is to produce a German who can be converted with a minimum of training into a soldier (pp. 55–56)

Despite the absurdity of this thinking, the vast majority of Germans came to accept it, including, we should emphasize, the heads of German industry. German industrial leaders were quite willing to work within the confines of (absurd) Nazi ideology—as long as it brought profits. For almost five years, this thinking seemed to produce economic and military success. German industry thrived. German aggression triumphed. Fascist ideology flourished.

History provides us with many examples of successful, but poor, thinking based on the Immediate-Gain-Above-All-Else mentality—i.e., the plantation system based on slavery; the factory system based on child labor; Stalin's system of forced labor; and more recently, the asbestos industry, the tobacco industry, and the nuclear power industry. More pointedly, of special note are the American Oil industry's success in taking advantage of the monopolistic practices of OPEC to achieve windfall profits or the global emphasis on short-term economic gain over environmental health. Short-term thinking that sacrifices the public good may bring immense short-term profits. The long-term costs of their thinking are enormous, and often go far beyond the strictly economic dimensions of life.

For example, historians generally agree that Hitler could not have succeeded without the support of the heads of industry. The cost of their thinking—along with that of their fellow Germans—included upward of 50,000,000 lives lost and untold human suffering. We should never assume that individuals will automatically think critically, not even people of high position or high intelligence.

The problem of short-term vested interest thinking can be found both on a large scale and in everyday "mundane" business practices. In one case, a United States District Court Judge in Norfolk, Virginia found that the nation's largest income-tax preparation company had engaged in false advertisement in using the phrase "rapid refund" and other terms "deliberately intended to disguise expensive loans that Block arranges for people anticipating refunds on

Competition, Sound Thinking, and Success

Businesses, in contrast to governmental agencies, have the "advantage" of needing to make a profit to survive. Unlike governmental bureaucracies, which become largely a world unto themselves, businesses must continually pass the muster of competition. Only a few, like large oil companies colluding on a world-wide basis to fix prices, are able to force everyone else to conform to their demands. Most businesses face genuine competition they must meet to survive.

For example, out of new (small) businesses, 3 out of 4 fail in the first year; 9 out of 10 over a ten year period. Failure is much more common in business than success. The market is a stern task master. This forces companies to do some critical thinking, at least enough to survive the competition.

Nevertheless, large-scale success in business, even over 20 or 30 years, is no guarantee of success in the future. When businesses become large they become bureaucratized. When they become bureaucratized, they verge toward organizational stagnation. Their thinking is paralyzed by red tape and policies and procedures that prevent growth and adjustment to changing circumstances and realities.

When bureaucratic thinking rules an organization, it tends to lose market strength and growth potential. It's earnings decline; it becomes less competitive, and rigidity becomes the order of the day. Examples include the American auto industry (from 1960-1980), Woolworth, Motown Records, the Sears catalog division, and Rolls-Royce. All significantly declined despite holding a previously strong place in the market. Each lost the spirit of innovation. Sears began to significantly decline when it failed to successfully participate in the mail-order boom and General Motors when it ignored the small-car revolution until it had lost major market share to Japanese auto makers.

Stagnating Organizations and Industries

In the vast majority of stagnating organizations or industries, thinking is used to justify not changing, to defend the status quo, not to transform it. Defective thinking becomes an internal obstruction: justifying a refusal to seriously consider evidence that indicates flaws. Weak earnings, low morale, obsolete product lines, are rationalized. Poor thinking is denied. The evidence that should precipitate a change in thinking is set aside or denied. It is very difficult for a critical thinker to work effectively in an organization trapped in poor thinking. This is one of the many reasons that excellent thinkers tend to gravitate toward organizations which are smaller, less committed to a party line, more open to innovation and new lines of thought.

Poor corporate thinking produces poor policies, rigid bureaucratic procedures, resistance to change, complacency, and internal conflict—though not necessarily all at once, and certainly not all from the beginning. Only when critical thinking is a corporate value will an organization remain dynamic in the long-run. Critical thinking as an organizational value serves as a motivator to routinely "re-think" policies, procedures, and ideas. Change becomes a given, but of course not change for change sake. Rather, change becomes the product of new thinking that has effectively analyzed and assessed more established thinking, retaining what is well-grounded and relevant, replacing what is out of touch or inaccurate. With critical thinking as the instrument, one never jumps off the deep end. One learns to read the relevant evidence from multiple standpoints.

Questioning Organizational Realities

In light of the analysis developed thus far in the chapter, there are a set of fundamental questions we should ask in reflecting on the limiting conditions within which we work:

- To what extent is there a struggle for power underway in the organization?
- To what extent must we deal with "power hungry" individuals?
- What is the hierarchy of power in the organization? To what extent are those at the top easily threatened by thinking that diverges from their own?
- How does the organization present itself both within and without? Are there any important contradictions or inconsistencies between the two? To what extent do inconsistencies exist between how the organization represents itself and how it actually functions?
- To what extent is short-range thinking dominant in the organization?
- To what extent is there a problem of bureaucratic inefficiency within the organization?
- To what extent is there a problematic "ideology" that stands in the way of change?
- To what extent is the organization forced to compete meaningfully with other organizations?
- To what extent is the organization suffering from stagnation?
- To what extent is bad short-term thinking misleading the leadership of the organization?
- To what extent are ethical considerations ignored or denied in favor of vested interest within the organization?



Assessing Irrational Thinking in Organizational Life

We all participate in life in a multi-dimensional way. We play many roles. We become involved in many groups, organizations, and institutions. For the most part, we act in settings in which critical thinking is not a basic value on the part of others. Often, we are dealing with people who are egocentric or irrational in various dimensions of their lives. Often, we are dealing with people who are striving for more power and are willing to sacrifice basic values to their short-term vested interest. Often, we are dealing with people who are easily threatened by thinking that differs from their own or with bureaucracies enveloped in red tape and dysfunctional regulations or with people who are significantly self-deceived. Sometimes we are dealing with people who use critical thinking skills to obscure rather than reveal the truth and are principally focused on their own selfish advantage. Sometimes we may find ourselves working within an industry that has a negative effect on the quality of life in the community—e.g., the tobacco industry.

Nevertheless, it is in our long-term interest to develop as thinkers, to apply our best thinking in our lives, and to become lifelong learners. It is in all our interests that critical thinking becomes part of the culture of the organizational structures in society. The question is: "how can we use our thinking to best advantage in settings that often do not reward the best thinking and may at times punish it?"

There is no simple answer to this question. Becoming skilled in analyzing and assessing our personal circumstances in organizational structures takes insight and practice. We must ask the right questions, but we must also discover the essential facts. In the end, our judgments will still often be no more than probabilities. Let us look at some hypothetical cases and consider some elementary thinking about the logic of the decisions they offer. The thinking we propose is merely illustrative. We do not consider it definitive. A great deal would depend on the precise facts of the situation. We present our analysis as merely plausible and reasonable (as far as it goes). You might disagree with us in one or more cases. Your analysis might be better than ours—or at least a plausible alternative.

Case # 1: An American Auto Maker Executive or Manager during the 1970s or '80s

You recognize that your company (and other American companies) is losing market share to Japanese automobile manufacturers. This trend is not denied by the company, but is explained as a product of the "fact" that Japanese workers work harder and more efficiently than American workers (with their union protections). Within the received view of management, the solution to the problem is that Japanese imports should be restricted since the competition is "unfair." It seems to you that emerging data gathered from auto plants operated by Japanese companies in America (using American labor) support the conclusion that the problem is not that of American worker laziness but rather of poor (American) management. You recognize that your view will not be well received by upper management and that your future with the company may be jeopardized by pressing this viewpoint. What are your options?

Analysis of Case # 1: The options in a case like this will vary in accordance with the specific facts in the situation and must be determined in context. Some facts may be hard to obtain. For example, it is often difficult to predict what individuals may do in circumstances in which you have not observed them. What is more, how individuals respond is dependent on how they interpret the situation. How they interpret the situation, in turn, depends in part on how the situation is presented to them and what their interests are. You may not be well positioned to make accurate predictions regarding the probable response of a number of people.

Clearly, your overall choice is to stay or go. If you stay, you must decide whether to try to influence present company policy or simply do your best within it. If you decide to influence company policy you must decide how to present your views in the least challenging way, and to whom and under what circumstances. If you decide to go, you must decide your timing and your transition to another job situation. As part of this thinking, you should make sure you are not simply trading one inflexible environment for another.

The Power of Sound Thinking

Any company or industry that makes critical thinking a company-wide or industry-wide value acquires the ability to anticipate and effect constructive change, for only critical thinking can provide the impetus for continual re-thinking and evaluation of all present ideas, policies, and strategies. Without critical thinking built into the culture of an organization, short-range thinking is likely to predominate. Of course, short-range thinking may work for a time. For a time, it may be new. It may represent essential change. But if novel thinking is not eventually subject to critique, to adjustment, to refinement, to transformation, then, sooner or later, it becomes problematic and rigid.

One challenge we face in bringing critical thinking into any organizational structure is that, upon being questioned, most people think they already think critically and therefore that there is nothing significant for them to learn. If you ask all of those present in a room full of people: "Would all those who think uncritically please raise your hand?" you are likely to have no takers. There is a natural illusion fostered by the human mind that leads all of us to think that our own thinking is well-tuned to reality—even when it is not, in fact especially when it is not. Only as people begin to develop as thinkers do they commonly recognize that their own thinking is often flawed and in need of transformation.

The result is that any really new corporate leadership must break-through the mundane self-deception characteristic of human thinking itself. It must overcome what might be called "the natural attitude." Hence, corporate leadership based on critical thinking must not only define a purpose and communicate that purpose, but an intrinsic part of that purpose must be commitment to critical thinking on the job at all levels. It is not enough that an organization have and communicate a purpose, it must be a well-thought-through purpose. It is not enough to energize workers, there must be a mechanism in place that helps ensure that the energy is intelligently used and effectively applied. Achieving, for example, a balance between control and empowerment is something that must be carefully thought through, for only quality of thought and analysis will generate the right balance.

The same holds for the balance between policy and autonomy. The employees and the managers must exercise judgment regarding both. Poor judgment regarding either will not effect a release from paralysis. By the same token, "listening to employees and customers" should be listening to them critically. In short, the notion of dynamic change and growth presupposes that the change and the growth are the right change and the right growth, and those judgments require nothing less than critical thinking. Unfortunately, critical thinking cannot be presupposed. It must be systematically fostered. Once a balance is achieved between policy and autonomy, between control and empowerment, and critical thinking is systematically fostered, it releases the collective energy of all parties in an organization.

When rigid thinking becomes pronounced, and the individuals in an organization no longer feel part of a vital purpose, or connected to the company's activities as a whole, a negative atmosphere emerges. Employees become estranged from the company, though part of it. They may or may not verbalize that estrangement. They will perceive their superiors as irresponsive to them and to their needs. Policies will seem to lack sense or be connected to the facts of their workaday world. They may hide their perceptions, believing that their perceptions would be rejected or ridiculed. Their only connection with their work becomes their paycheck, and perhaps a few friends who share their views.

Some Personal Implications

Use the following list of recommendations to assess your internalization of the main points of this chapter and your willingness to put the ideas into action:

1.

Establish the personal habit of routinely evaluating your thinking on the job. This includes answering and up-dating your answers to the following questions: What is your central goal in light of the job you have or role you play on the job? What are the obstacles or difficulties you face in accomplishing your job or fulfilling your role? What are you best at? What evidence do you have to support your conclusions? What do you do least well? What evidence do you have to document your conclusions? What strategies are you using to improve your job performance?

2.

Determine your level of power. What power do you have in virtue of your position? What additional power do you have, in comparison to others, in virtue of your willingness to think critically and face unpleasant realities?

3.

Determine the level and quality of thinking of those with whom you work. How would you assess the strengths and weaknesses of the thinking of your fellow workers? How does their thinking impact you?

4.

Determine the "in-house" definitions of reality. What "party-lines" or "propaganda" are generated on the job which you recognize to be both self-serving and, of course, false? To what extent must you verbally honor that propaganda as a condition of being taken seriously?

5.

Assess the level of bureaucratic thinking at your company. This will tie into "in-house" definitions of reality and favored "myths." Remember that bureaucracy is a state in which employees work increasingly by fixed routine rather than through the exercise of intelligent judgment. With bureaucratization, narrowness in thinking emerges. There is a proliferation of hard-and-fast rules and fixed procedures that make change difficult (when not impossible).

6.

Assess the level of short-term thinking at your company.

7.

Assess the level of stagnation in your company (or in your industry).

8.

Assess the level of egocentric thinking among those you work with (this ties in with # 3 in this list).

9.

Assess your own involvement, as a thinker, in "in-house" definitions of reality, party-lines, propaganda, as

Conclusion

Membership in human groups is a blessing and a curse. The pressure to conform to the dominant thinking in a group is an inescapable problem. It is hard to improve one's thinking when forced to work with others who routinely assume that their unsound thinking is sound. What is more, we should never forget that within corporate and other organizational structures the full range of human emotions, motivations, and interests play themselves out. The flaws of the group and the flaws of the individuals in the group interact in a multitude of ways. In all of this, there is commonly a struggle for power taking place. Both group self-deception and the negative personal characteristics of the individuals (in the group) have an impact on corporate and organizational life.

To think effectively in corporate and organizational settings, we must understand, therefore, not only the general logic of these structures, but also the specific logic of the particular organizations in which we are living and working. In the privacy of our minds we must learn to ask the right questions. We must focus on essential facts. We must decide on our personal priorities. We must take the long view. We must be realistic and practical. We must be comfortable with probabilities, and we must be willing to test our ideas and change them in the light of our critically analyzed experience.

If we can successfully persuade organizational leadership to work toward a culture of critical thinking, both we and the organization can benefit in a lifelong way. Here are some important conditions for success:

1.

The leadership must consist in essentially rational persons with an abiding recognition that they, and everyone else in the organization, are capable of thinking and performing at a higher level than they are at present.

2.

The leadership must be intellectually humble, and hence, recognize mistakes they have made in the past, the limitations of their own present knowledge, and have a desire to grow and develop as thinkers.

3.

The leadership must take a long-term view of building a culture of critical thinking within the organization. Short-term thinking must be used only as a stopgap measure and should not be typical of the thinking of the organization.

4.

The leadership must be willing to release those persons who will actively resist making critical thinking an essential element in the organization's mission.

5.

All key personnel must, over an extended period of time, become proficient in analyzing and evaluating thinking.

6.

All key personnel must strive to be explicit as to the thinking (especially the assumptions) they are using in making key decisions. They must also be willing to fair-mindedly consider the pro's and con's of alternative possible decisions.

Chapter 14. The Power and Limits of Professional Knowledge (And of the Disciplines that Underlie Them)

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Professional Fallibility and the Glut of Information

The sheer quantity of information we are exposed to grows exponentially. So immense is it that no one person can acquire anything but a tiny and diminishing percentage of it. To add to our burden, much of the information generated is disseminated with a "spin," an agenda, a vested interest defining and interpreting it. Much information comes to us from professionals, persons officially certified as possessors of important knowledge. Yet the quality of what we are offered is very uneven. Our welfare depends upon our ability to do a good job assessing it. Doctors, lawyers, accountants, economists, media pundits, and many, many others tell us what we should and should not do, what is required for, and what will threaten, our welfare.

In this chapter, we suggest some ways to gain critical leverage on the information and advice given to us by professionals and by the disciplines that underlie professional learning and practice. We shall build on the insights of previous chapters. We shall therefore assume that you are now keenly aware that all humans are fallible, in predictable ways:

- Subject to a tendency to egocentric thinking— which leads a person to assume that his concerns are more important than those of others;
- Subject to a tendency to sociocentric thinking— which leads a person to assume that the groups to which he belongs are superior to others;
- Subject to a tendency to self-deception— which leads a person to twist the facts to achieve immediate self-justification (at the expense of an honest owning of mistakes and mis-deeds);
- Subject to a lack of intellectual "virtues"— which leads a person to blind himself to the extent of his ignorance, his inconsistencies, his failure to enter sympathetically into views that disagree with his own, his tendency to avoid complexity, and his fear of disagreeing with members of groups whose approval he seeks;
- Subject to a tendency to violate basic intellectual standards— which leads a person to think in ways that are often unclear, inaccurate, imprecise, irrelevant, superficial, narrow-minded, illogical, and unfair;
- Subject to the influence of vested interest— which leads a person to focus on power, money, and prestige (usually at the expense of the rights or well being of others).

These facts alone should make us wary of the pronouncements of any human being, "professional" or otherwise. Yet we need to be more than wary. We must know where to look for probable weaknesses and how to recognize likely strengths.

All information is not created equal. All professions are not on the same level of credibility. We should distinguish

The Ideal of Professional Knowledge

Professional knowledge is, among other things, a form of power. It gives advantages to those who have it and disadvantages to those who lack it. For example, it can be used to minimize or maximize suffering. It can serve selfish human desires or meet basic human needs. It can be used to create conditions for conflict or those that contribute to peace and understanding. It can be used to destroy or preserve the environment and the lifeforms that inhabit it. It can contribute to a less just or a more just world. It can advance irrational or rational ends.

To the extent that we are committed to fair-mindedness, we are committed to professional knowledge being acquired and used to minimize human suffering, to meet basic human needs, to preserve rather than destroy the environment, to contribute to a more just world, and to serve rational rather than irrational ends. In providing justification for the public funding of instruction in the various professions, spokespersons argue that their professions serve ends in the public interest.

Ideally, professionals acquire knowledge not to benefit a selected few but, rather, to distribute benefits in the broadest and most just way. Even those who argue that the pursuit of professional knowledge should be free and untrammelled support that argument with the view that the free-wheeling search for professional knowledge will confer, in the long run, the greatest benefit on the largest number. But to what extent are professions serving these higher ends? To what extent are they fulfilling the promises made on their behalf when they seek funding for public instruction and for research? How can we learn to think about professions, and within our own, in the most powerful and rational way? These are the questions that lie behind the critique of professional thinking.

Who Should We Believe?

This chapter presents a plausible argument for suspecting a significant gap between the promised benefits of the various professions and the actual effects of them. It makes no further claim. How large that gap is in any professional field is a matter for systematic study. In the next chapter, this general argument is followed up with a more detailed argument for the field of psychology and mental health. In both cases, we would expect numerous qualifications and corrections to emerge from further inquiry.

In any case, as consumers of professional knowledge and advice, we need to think critically in deciding who to believe and what to do with such advice. Consider the following excerpt from an article in the New York Times ([November 21, 2000](#)):

N.A.S.D Accuses Dean Witter of Fraud in Sale of 3 Funds

Legal troubles continued to mount yesterday for Morgan Stanley Dean Witter & Co. when securities regulators accused the investment bank's brokerage unit of misleading thousands of investors into buying mutual funds that resulted in losses of \$65 million.

In a rare case of litigation between a major Wall Street firm and the National Association of Securities Dealers, the securities industry's self-regulatory organization, Dean Witter Reynolds is being accused of fraud for the way it sold three bond funds in 1992 and 1993. Dean Witter sold more than \$2 Billion of shares in the funds to more than 100,000 investors, many of them beyond retirement age and some of them elderly, the association's regulatory arm said in a complaint filed yesterday.

Dean Witter told its brokers to promote the funds as safe but high-yielding alternatives to certificates of deposit without adequately disclosing how much riskier the funds were, the complaint said.

In this case, some 100,000 investors did not use good thinking in trusting the recommendations of professionals at Dean Witter. As consumers we must develop our ability to evaluate the thinking of the professionals we hire to support our interests. Otherwise we can too easily become victims of those more concerned with serving their interests than ours. We cannot assume, in other words, that professionals necessarily have our best interests in mind. As critical thinkers, we learn to look beyond the rhetoric of professionals to the actions in which they engage. We then analyze that behavior in terms of the thinking behind it.

This chapter and the next are included in the book because, to become a critical consumer of information, it is essential that one gain some sense of how to avoid or deal with the possible problem of bad advice, or worse, malpractice, on the part of professionals. By malpractice we mean any wrongful use of professional knowledge or information that leads to needless waste, unnecessary suffering, gratuitous harm, or injustice.

Of course, the problem is not always confined to the acts of an isolated group of individuals, as in the case of the Dean Witter scandal. Consider the great U.S. Savings and Loan debacle. In this case, a whole industry (through their lobbyists) persuaded the U.S. Congress to remove regulatory restrictions that prevented them from lending money without a specified level of collateral. The slogan of "de-regulation!" substituted for sound thinking. In essence, lobbyists asked the public to guarantee the solvency of Savings and Loan institutions while allowing them to make questionable loans. The result of the collapses that followed was an additional debt burden of approximately \$9,000 for every man, woman, and child in the United States.

True and False Loyalty to a Profession

True loyalty to a profession is a product of the commitment to ensure that the profession, both in general and in particular cases, serves the public interest. False loyalty to a profession is formed either by an uncritical acceptance of the "ideology" every group engenders, or arises as a product of a fear of being disapproved or punished by other members of the profession—if one deviates from expected behavior. In being socialized into a profession—and socialization is part of being trained in a profession—one learns how to present oneself to outsiders, how to express one's authority as a professional, and how to protect fellow professionals from criticism—except in group-approved ways.

True loyalty to a profession is born of recognition of the profession's potential power for good in the world. It is not blind commitment to practices in the profession as they stand. It is not given by the intensity with which one defends the profession. The fact is that ethically sensitive persons who are also astute thinkers find themselves, from time to time, in dilemmas in which they are torn between their consciences, on the one hand, and the in-group pressure not to publicly criticize the profession, on the other.

Consider the legal profession. True loyalty to the profession of the law, for example, derives from a commitment to the creation of a society in which just laws are applied justly to individuals and institutions, irrespective of the power, wealth, and social status of those individuals and institutions. Such loyalty recognizes that all the legal professions are to be judged by the degree to which they enhance personal and social justice. Such loyalty begins with a recognition that the law as applied in society is far from the law as it should be applied, and that justice is not always served by the established legal system.

False loyalty to the legal profession takes the form of a defense of those dimensions of the law that fail to serve the end of justice—sometimes out of fear, sometimes out of ignorance, and sometimes out of vested interest. When persons are socialized into a profession so as to become uncritical defenders of the present practices of the profession; both the profession and the potential good of the profession suffer. To put this another way, a person retards the development of a profession by uncritically defending it. This defensiveness engenders a false sense of loyalty. Conversely, when practitioners recognize weaknesses in a profession, they are well on their way to contributing to its strengths. It is a strength, an important strength, to recognize one's weakness. Unfortunately, we have not yet reached the phase of development of human professional knowledge wherein each profession, as taught, routinely discloses publicly its most salient weaknesses and failures.

We should all come to recognize the limitations of those professions, with which we must deal, beginning with the problem of false loyalty.

The Gap Between Fact and Ideal

Two objective phenomena—human fallibility and vested interest—account for why few, if any, professions are close to approximating the ideal of professional knowledge and practice. These two phenomena are at the root of much of the misuse of professional knowledge in the world:

1.

Human fallibility: All professional knowledge is acquired, analyzed, and put to use in the world by individuals subject to the pitfalls of human weakness, self-deception, and a variety of pathological states of mind (e.g., prejudice, egocentrism, or sociocentrism).

2.

Vested interest: Human professional knowledge exists in a world of power, status, and wealth. The struggle over all three significantly influences what information is acquired within any profession, how it is interpreted, and how it is used.

It follows that we should be skeptical of any description of a human professional knowledge-constructing enterprise that characterizes itself as an approximation of an ideal. Rather, we should approach human professions as in some state of contradiction between an announced ideal and actual reality. In this way, we can realistically take into account the weaknesses as well as the strengths of the profession and thereby contribute to the higher state of development of the profession.

If we begin with the hypothesis that there is some gap between the ideal of any profession and its actual practice, we are much more likely to identify the misuses of information and professional knowledge on the part of human professions. We will come to see that, to some extent and in some discoverable ways, the phenomena of human fallibility and vested interest are operating. No profession has isolated, or could isolate, itself from the irrational dimensions of the human mind in action in human affairs. And, as always, we deal with irrationality best by raising it to the level of conscious recognition, not by sweeping it under the rug or denying it. All illusions about present practice become blinders rendering us incapable of protecting our interest and impeding full development of the profession. Both those who use information disseminated by professionals and those who generate that information should have a realistic conception of the profession.

So we begin with two premises:

1.

Every profession has great potential for contributing to human welfare in the world.

2.

Nevertheless, the information and professional knowledge that professions generate are subject to mistakes, distortion, and misuse by fallible, self-interested humans at every stage of collection, construction, and use.

We should not assume, then, that professional associations, schools, or universities—even official ethics committees set up by professions—are exempt from irrational influences. We should not assume that professions are now, or at any previous time in history were, motivated to disclose their weaknesses. We should not assume that any profession is willing to put us on guard against self-deception or vested interest in the profession's present practices. For example, only rarely do professions document weaknesses in the professional preparation of those certified in the

Assessing A Profession or a Professional Conclusion: Matters of Fact, Matters of Opinion, Matters of Judgment

To effectively assess thinking within a discipline, it is important to become proficient in distinguishing three kinds of questions:

1.

Those for which it is possible to achieve a definite, verifiable answer;

2.

Those for which all answers are matters of personal preference;

3.

Those for which reasoned judgment is essential and wherein proposed, conflicting, and reasonable answers must be evaluated to determine which are stronger and which weaker, as responses to the question.

The first and third kinds of questions—matters of fact and matters of judgment—are most important to distinguish in evaluating professions and the questions they take up.

This being so, it is very important, when assessing professionals, to have some sense of the nature of the "discipline" underlying the profession and the manner in which that discipline is typically used as well as the way it is being used in a given case. For example, there are many questions answered by engineers—chemical, electrical, hydraulic, marine, and mechanical—which have definitive answers obtained by inserting objective data into established formulas based on mathematics or physics. For example, if a mechanical engineer needs to figure out the power developed in the cylinder of a reciprocating engine, he simply divides the foot pounds of work performed by the piston in one minute by 33,000. His data include the mean effective pressure (in pounds per square inch), the length of stroke of the piston (in feet), the area of the piston (in square inches), and the number of working strokes per minute. There are literally hundreds of thousands of questions engineers are called upon to answer which have definite answers. These answers can be calculated by established procedures based on physical science and mathematics. The probability of error in such questions is low. There is an established method for verifying the accuracy of the answer.

Of course, we should recognize and remember that not everyone working on an engineering project is an engineer, not every engineer is doing engineering, and not every question raised in engineering is a question with a definite answer. We should be alert to the misuse of the term "engineering" in such expressions as management engineering, sales engineering, and business engineering—where the authoritative sound of the word is used to hide practices lacking the scientific and mathematical basis of 'engineering' in its proper use.

Let us take the example of engineering a little further. Even though engineering is based on science and mathematics, it does not follow that all of its questions have definite answers. There are many engineering questions that for best settlement, require wit, ingenuity, judgment, and practical experience. For example, most engineering projects involve a sequence of planning, design, creation, and economical operation of a process that entails building a structure. This process as a whole commonly involves many questions of judgment, in addition to many questions of fact. The answers to questions become most definite the more specialized and limited they are. So when specifications are set for a particular part required, and those specifications are fulfilled by the production of that part, there is typically a high degree of scientific accuracy and precision delivered by the engineer or engineers in question. This does not mean a mistake cannot happen, but it does mean that a mistake is rare and can be verified as such.

The Ideal Compared to the Real

Another way to approach professions is through an analysis of the disciplines underlying them and the manner in which those disciplines are represented and taught. We of course recognize that every profession is a powerful mode of thinking that can make a significant contribution to human welfare. However, we must be cautious not to assume that ideal conceptions of the disciplines are equivalent to their actual practices. Rather, reasonability requires that we hypothesize some gap between expressed ideals and actual practice.

Let us therefore experiment with the process of comparing and contrasting the relationship between the ideals that are implied in the way disciplines represent themselves publicly (at the universities and colleges) with the actual consequences of their instruction.

We shall examine some initial elements of this critique. Our examples are not advanced as flawless examples of critical thinking in action but, rather, as illustrations of how we might begin to put the above insights into action in our mode of thinking. We will begin by looking at a variety of academic disciplines from this perspective, followed by some initial reflections in each case.

In this chapter, we will begin with mathematics and then consider the so-called hard sciences of physics, chemistry, and biology. We will then reflect upon the human sciences, the so-called soft sciences, and finally, literature, the arts, and philosophy.

Each case is guided by two important insights:

1.

All professional knowledge in use in the world is based in academic disciplines and is subject to the pitfalls of human fallibility on the part of individuals using it.

2.

The teaching of all professions occurs within a culture, and is thus influenced by the pursuit of power and vested interest within the culture.

Professions Based on the Ideal of Mathematics and Abstract Quantification

If there are professions free from human fallibility and vested interest, it is those based in mathematics, for presumably the study of abstract quantification favors no group over any other and, therefore, seems least likely to encourage or engender self-deception in its practitioners. But even a cursory examination of the topic suggests a gap between ideal and reality even here.

Let us briefly review the promise of math instruction itself, a promise used to justify the large sums of money necessary to maintain math instruction at all levels of schooling. That promise can be stated in the following terms:

We live today in a world in which mathematics proficiency is increasingly important to success in life. Our world is complex and technological, and mathematics is crucial to both understanding its complexity and operating within its technological dimensions. Our investment in mathematics is sensible because, through it, we are providing society with the mathematicians, engineers, and technical experts necessary to meet worldwide competition. What is more, mathematics proficiency is important to everyone. Many problems and issues of daily personal and public life have an important quantitative dimension. Large-scale math instruction provides the citizenry with the quantitative concepts, principles, and tools by means of which they are able to perform successfully in both their personal and public life. Through it, persons learn to transfer logical thinking to other domains of professional knowledge and thought.

To what extent is the ideal realized? How far are we from it? What are some of the hidden consequences deriving from large-scale math instruction that the promise of the ideal does not take into account? What alternatives do we have to our present practice? To what extent are we getting what we are paying for? To what extent is our social investment in mathematics having the promised effect? To what extent are we realistic in our conception of the value and real consequences of large-scale math instruction at every level of schooling?

In our view, there is a large gap between the promised social gain from math instruction and the actual result. The gap is twofold. The first problem is inherent in the negative consequences for persons unable to perform at some minimal level at school—those who fail at school math. The second problem is the failure of citizens who are certified by schools as competent in math who do not use mathematics successfully in dealing with public and social issues. We are alleging, then, that both the persons who fail officially and those who pass officially constitute evidence of a major problem in math instruction.

The Pain and Suffering of Those Who Fail

Let us begin with the manner in which mathematics is taught and the high stakes associated with success or failure in it. Success in mathematics is given high status in the schools. Some level of mathematical proficiency is required to be certified as having successfully completed elementary school, then middle school, high school, and college. Persons who find themselves unable to perform at the level taken to be essential experience a great deal of mental distress and anguish. Some proficiency in math is a college-entrance requirement. What is more, persons who fail in math, except in rare circumstances, are not allowed to graduate from high school or college. Some level of proficiency in math is enforced as a precondition for graduation.

Loss of Self-Esteem and Opportunity to Receive Higher Education

We rarely talk about, or attempt to assess, the damage resulting from loss of self-esteem and loss of opportunity to advance in school on the part of the many persons who perform poorly in mathematics. Isn't it possible that many of those who do not perform well in math might yet perform at high levels in other domains of learning? Aren't we wrongfully denying those who fail in math an opportunity to succeed in other areas, especially because many disciplines involve virtually no math?

If we look at the everyday problems of our professional and personal lives, how many require the levels of proficiency in mathematics that testing and certification require? A case can easily be made for simple arithmetic, no doubt, but what about algebra and geometry? How often does the average person face a problem that requires the use of concepts and principles of algebra and geometry—beyond, perhaps, simple percentages? It is not obvious that mathematical proficiencies beyond that of basic arithmetic should be required of all persons. Might we be better off making math optional beyond elementary arithmetic and the simplest algebra? Might we not be better off merely providing incentives to motivated persons to study and excel at math? What is the point of lifelong penalties for those who do poorly in math?

Low Level of Math Competency of Those Who Pass School Examinations

There is a second gap between ideal and real regarding mathematics instruction. Supposedly a society in which all citizens are taught to think mathematically will be able to use math successfully in dealing with public issues involving a quantitative dimension. For example, assessing the national budget involves comprehending large sums and their significance in a variety of budgetary issues. Assessing the significance of damage to the environment from pollution, assessing the loss of natural resources, assessing public health issues, and many other public issues require people to make judgments involving large figures. But it seems reasonable to question how many citizens are actually able to make these judgments reasonably, even when simple math is involved. And consider the many people who cannot seem to manage a personal budget. Many who have passed the school exams in math are failing the real task of using math successfully in their lives.

Test the Idea Math and You

Think about your education and answer the following questions:

1.

To what extent would you say that, while in school or college, you mastered fundamental concepts in math and, as a result, are able to effectively use that professional knowledge in coming to informed conclusions about public issues with a mathematical dimension? To what extent would you say that you memorized definitions and procedures sufficient to pass tests but insufficient to understand the basic concepts underlying the math you were doing? Now, see if you can give examples of when you last used math in your daily life. What level of math was it?

2.

To what extent would you say that the math requirements you had to meet were appropriate measures to require of all persons? What reasoning would you use to justify your conclusions?

3.

In your view, should persons be prevented from being accepted by a college on the basis of low math scores alone?

4.

How often have you faced a problem in your life that required the use of concepts and principles of algebra and geometry?

The Ideal of Science: Physics, Chemistry, Astronomy, Geology, and Biology

Historically, the idea of science was based on the notion that it was important to ask questions about, and consequently think about, the world in a new way—a way that emphasized a carefully controlled empirical study of the world. The idea of science is based on the notion that, instead of thinking about what the world must be like, given our basic assumptions and preconceptions about it, we should discover, through empirical thinking and inquiry, what it is actually like. We must assume that the fundamental ideas through which we think traditionally about the world may be incorrect or misleading. We must be willing to question our seemingly self-evident beliefs about the world and entertain the assumption that they might be false. The idea of empirical thinking and carefully controlled experimentation was taken to be the key to gaining sound professional knowledge of the world.

This ideal of science emerged as a critical response to previous human inquiry in which the reasoning of important thinkers appeared to be inappropriately influenced by beliefs of a highly egocentric and sociocentric nature. Among those great thinkers were Plato, Aristotle, Augustine, and Aquinas—whose qualities of reflection and reasoning were taken at one time to be self-evident guarantors of professional knowledge. Their views of the physical and natural world were rarely questioned. With the emergence of science, however, such wide-ranging thinkers were increasingly recognized to be biased by questionable assumptions at the root of their thought. Most obviously, it appeared that pre-scientific thinkers often uncritically assumed metaphysical or religious concepts at the foundations of their thought about the world. What is more, the traditional questions asked seemed rarely to focus on testable characteristics in the world.

In the "new" view, which emerged during the Renaissance (1400–1650), one became a scientist when one committed oneself to modes of inquiry based on controlled experimentation. The fields of physical and natural sciences, then, separated themselves from the field of philosophy and became fields of their own. Many of the early scientists set up their own laboratories for this purpose. This commitment, it was assumed, would maximize discovery of the actual laws and principles that operating in the physical and natural worlds and minimize the influence of human preconceptions about the world. There can be no doubt that this notion of science represented a real advance in the pursuit of professional knowledge about the physical and natural worlds.

Physics, chemistry, astronomy, geology, and biology are among the best cases one can choose for professions in which human self-deception and vested interest have been minimized. It does not follow, however, that these factors are not present. So let us now turn briefly to an expression of the promise of instruction in the physical and natural sciences. That ideal is formulated in ways that parallel the justification and argument for social investment in instruction in mathematics:

We live today in a world in which scientific understanding and proficiency are increasingly important to success in life. Our world is complex, and technological and scientific thinking is crucial to understanding both its physical and natural complexity and its technological dimensions. Our investment in science instruction is well spent because, through it, we are providing society with the scientific and technological experts it requires to be competitive. What is more, scientific understanding and proficiency are important to everyone. Many problems and issues, not only in daily personal life but also in public life, have an important scientific dimension. Large-scale science instruction provides the citizenry with the scientific concepts, principles, and tools by means of which they are able to perform successfully in both personal and public ways.

To what extent is this ideal being fulfilled by science instruction as it exists today? It can be argued that the reality is a long distance from the ideal. Consider the following:

The Ideal of Social Science: History, Sociology, Anthropology, Economics, and Psychology

In light of the success of the physical and natural sciences, it was predictable that those interested in the study of human life and behavior would look to the paradigm of scientific methodology as a means by which questions about the nature of human behavior could be as definitively settled as those about gravity, chemical reactions, plants, and animal life. Many scholars in the professions focused on humans expected a revolution within their professions as a result of a commitment to the application of controlled experiment. By this rigorous process, it was thought, hypotheses about human life could be confirmed or falsified. Foundational truths about human life and behavior could be discovered and built upon.

There is one major problem with this conception of the study of human behavior. Briefly, it might be expressed as follows: Human behavior is the result of the meaning-creating capacity of the human mind and is much more a product of human thinking than human instinct. Furthermore, a variety of influences have an impact on how humans think (and therefore on how they feel and what they want). Humans are highly complex, multidimensional creatures, which makes the study of human behavior through the scientific method subject to many limiting qualifications at best.

For example, as humans we are born into a culture at some point in time in some place, and reared by parents with particular beliefs. We form a variety of associations with other humans who are equally variously influenced. Our minds are influenced in all of the following dimensions, but not to the same extent or in the same way:

- sociologically: our mind is influenced by the social groups to which we belong;
- philosophically: our mind is influenced by our personal philosophy;
- ethically: our mind is influenced by our character;
- intellectually: our mind is influenced by the ideas we hold, by the manner in which we reason and deal with abstractions and abstract systems;
- anthropologically: our mind is influenced by cultural practices, mores, and taboos;
- ideologically and politically: our mind is influenced by the structure of power and its use by interest groups around us;
- economically: our mind is influenced by the economic conditions under which we live;
-

History as an Ideal

If we as humans do not study the mistakes of the past, we are bound to repeat them. History enables us to grasp the nature of our own past, how we have come to be the way we are, the problems we have had to overcome, the forces that have acted, and are acting, upon us. Such study and such an understanding are essential to our well-being. In this way, we can appreciate our heritage, what we have lived and died for, and the evolution of our culture as a people. Without it, we make our decisions in the dark.

Sociology as an Ideal

We humans are social animals. It is in our nature to live and function within groups. To be free creatures, we need to understand the social conditions under which we live and act. All human groups define themselves in predictable ways. These groups create social requirements and social taboos. They devise ways to identify the "in-group" and the "out-group." They create a collective ideology that justifies the way power is divided and the manner in which wealth is distributed. If we understand ourselves as social beings, we can maximize the quality of our lives and the conditions under which we better ourselves. Insight into social reality is an important, if not crucial, need for freedom and social justice to emerge and thrive.

Anthropology as an Ideal

Professional historians trace human history back some 30,000 to 40,000 years. Anthropologists trace human history back one or two million years and link that history seamlessly with the history of other creatures on our planet. Instruction in anthropology provides the perspective and insight into human reality that no other profession can provide. It gives us a much wider breadth of human reality than most other social professions. It helps remind us how variable human culture is and how hard it is to judge one culture from the perspective of another. Many of the world's problems are traceable to an ethnocentrism that the study of anthropology serves to correct.

Economics as an Ideal

Much of human life is concerned with the striving of humans to meet our needs and fulfill our desires. The study of the conditions and systems in which and through which humans seek to satisfy their needs and fulfill their desires is economics. Most social institutions can be understood much more deeply if we understand them in relationship to economic forces. Much of what happens in human life is a product of economic forces. Wars and depressions often result from economic conditions. Starvation and plenty result from economic conditions. Many, if not most, of the large decisions made by human groups are based on their perception of economic realities. Many of the cruelties and atrocities in the world are highly influenced by economic realities. Money, and all of those goods into which money can be transformed, are crucial determinants of human life. If we do not study and understand economic reality, we are likely to suffer as a result.

Psychology as an Ideal

The nature and operations of the human mind are a central determinant in human life. The scientific study of the mind, therefore, can enable us to maximize our control over our own mental health. We can identify the pathologies of the mind in a way parallel to the way we identify the pathologies of the body. We can study causes and consequences of human mental health and disease. We can train practitioners to use the professional knowledge that psychological research collects in counseling and therapy, thereby helping individuals who are in need of mental assistance. With our professional knowledge, we can assist the courts in determining what prisoners are mentally safe to parole, which persons are of sound mind, and which parents are fit or unfit to rear children. We can advise lawmakers on which deviant social practices are mentally healthy and which are not. In general, psychology contributes to the mental health and optimal mental functioning of humans.

Test the Idea The Social Sciences and You

Choose one of the social professions you have studied (history, sociology, anthropology, economics, or psychology). Read the above description of the promised aim of the profession. Then assess the extent to which your learning approached that ideal. What is your reasoning is based on?

The Social Sciences as Taught and Practiced

Though the social professions have promised much, clearly the promise falls far short of the ideal. What is more, serious questions can be raised as to whether it is even appropriate to use the word "science" to characterize the status of the social professions. Typically, the social professions are highly "multilogical." Many divergent points of view and frames of reference compete within the social professions. Often it is possible to get contradictory judgments from different practitioners in the social fields.

On the instructional level, we are clearly far from delivering the benefits that have been promised by those who argue for that instruction. To put it one way, few persons learn, as a result of instruction in history, to think historically, or, as a result of instruction in the other social fields, to think sociologically, anthropologically, economically, or psychologically. Instruction is often designed so that persons are certified as professionally knowledgeable in the content of a course when they have done no more than successfully cram for a true/false or a multiple-choice exam.

It is not clear that the study of history, sociology, anthropology, economics, and psychology has led to a better world (that is, with less war, cruelty, human suffering, and injustice). Actually, our belief that we have been educated as a result of the instruction we have received may render us more self-deceived than we would be without that instruction. This might lead us to believe that we know more than we do within a discipline.

The social studies could, and should, make a significant contribution to a better world. Insights into historical, anthropological, and economic thinking are relevant to critical thinking. These professions, however, are rarely taught in such a way as to contribute to the development of critical thought. For example, though sociology as taught emphasizes that humans tend to behave in keeping with the mores and taboos of social groups, rarely are persons given assignments in which they must make explicit and critically assess the mores and taboos of any of the groups to which they belong. The result is that the persons usually leave sociology classes with little insight into the nature of their own social indoctrination. They do not seem to gain in autonomy as a result of instruction. The mores and taboos of their social groups and of the broader society rule them as much at the end of their instruction, as far as we can see, as they did at the beginning. Persons begin and end as consummate conformists in language, dress, values, and behavior. They have not, on the whole, begun to think historically, anthropologically, sociologically, or economically.

The Ideal of the Arts and Humanities: Music, Painting, Sculpture, Architecture, Dance, Literature, and Philosophy

The professions that exist within the arts and humanities typically have a twofold dimension:

1.

A dimension of appreciation and cultivation;

2.

A dimension of performance.

The first dimension is much more questionable as an area of professional knowledge, and its contribution to the quality of life is a likely domain for debate. The second dimension is much more objective and demonstrable.

The Promise of the Fine Arts and Literature

The ideal of instruction in the fine arts and literature could briefly be put as follows: There are two consequences that follow from the study of the fine arts and literature with regard to appreciation and cultivation: esthetic appreciation and (high) culture. The fine arts and literature introduce the person to the study of what is beautiful in painting, sculpture, architecture, dance, music, drama, and literature. This study elevates the person's taste and provides insight into objects and experiences not available to those who have not come to appreciate fine art. Without this study, few will see beauty in fine painting, sculpture, dance, music, drama, and literature. Without it, many will prefer the superficial, the trivial, the vulgar, and the stereotyped to that which is truly unique and beautiful. Those who fail to achieve an appreciation of fine arts and literature are denied an important dimension of human experience and fulfillment.

The Reality of Instruction in the Fine Arts and Literature

The real results of instruction in literature and the fine arts seem distant from the above ideal. Consider the following:

- Though virtually all citizens are given years of instruction in some dimensions of at least some of the fine arts and literature (usually literature), is there not abundant evidence to suggest that most people do not think esthetically or artistically as a result? Attempts to elevate the taste of most people seem to be a failure. Most people, even after a college education, seem to prefer the products of the popular media to the products of the artistic community. What is more, it is hard to determine what percentage of those whose supposed preference for the products of the artistic community is in truth a pretense born of self-delusion, enabling them to feel superior to the common herd.
- What accounts for the fact that most of us cannot give an intelligible explanation for our judgments about what we consider beautiful in painting, sculpture, architecture, dance, music, drama, or literature?
- Isn't it true that most people have not thought about the role of beauty and art in our lives and are not interested in doing so?
- Isn't it true that most people cannot explain how to distinguish an artistic question or issue from any other kind of questions and issues and tend to respond to such questions in superficial and uninterested ways?
- Isn't it true that most people cannot accurately explain any basic concepts or principles of any of the fine arts or literature and do not use those concepts or principles in accounting for the world they experience?
- Finally, isn't it true that few people change their reading habits as a result of instruction in literature and, consequently, are just as unlikely to read important literature at the end of instruction as they were at the beginning?

It seems likely that some exception must be granted to the judgments implied above in the domain of trained performance in the fine arts and literature. The most successful form of instruction in the fine arts and literature is in the area of skill development: basic painting, sculpting, dancing, singing, acting, and writing skills, as well as performing on a musical instrument. It is questionable, however, to what degree most of the performances made possible by this training rise to the level of esthetic or artistic excellence. In any case, only a small minority of persons develops a level of excellence in the performing arts.

The Promise of Philosophy

The profession of philosophy makes an interesting case. On the one hand, it makes some of the most sweeping claims for itself and on the other hand seems to deliver so little. Let us look at the traditional case made for the value of instruction in philosophy.

We as humans are capable of living two kinds of lives: an unreflective or a reflective life. When we live unreflectively, we live as a conformist, trapped in the world of our own unanalyzed desires and social conditioning. We do not live as free agents. We do not choose our basic and ultimate values. We do not understand the actual options implicit in a human life. We behave in ways that are contradictory to the values we say we believe. We do not understand the forces at work in our lives, nor do we understand what is valuable and wasteful in them. Often, as unreflective persons, our lives are shot-through with irrationality, prejudice, and self-delusion.

Conversely, when we live reflectively, we become the agents of our own destiny. We begin to act as genuinely independent persons. We see a world beyond the world of our personal egocentrism and social ethnocentrism. We come to terms with our own basic and ultimate values. We make decisions based on the actual options available to us. We begin to understand the forces at work in our lives and act consciously with respect to them. We discover the power of rationality and use that power to minimize our prejudices as well as our involvement in self-delusion. The study of philosophy lays the foundation for living a reflective life.

The Reality of Philosophy

Clearly, the promise of philosophy is rarely fulfilled. The most likely reason for this discrepancy is that living a reflective life is not the usual focus of the coursework offered in philosophy. Instead, the coursework focuses on highly abstract issues (What is being? What is reality? What is time? What is knowledge? What is beauty? What is freedom?) through the reading of arguments and counter-arguments of a highly abstract sort. The arguments themselves are typically the products of professional philosophers who make their way in the profession by addressing themselves successfully to others who are trained in the "moves" considered appropriate by philosophers in their traditions of abstract argumentation. Philosophers write, except for rare occasions, for a specialized audience (of philosophers) already familiar with a specialized terminology, a range of technical distinctions, and a way of talking, thinking, and arguing uncommon in everyday life. If it is reflective, it is reflective in a special, narrow, and technical sense, in the sense of specialists talking to other specialists in an esoteric language.

Philosophical issues are so posed by professional philosophers, typically, that neither an actual case, nor any possible evidence could settle them. The findings of other professions are often ruled out of the discussion by definition:

"You are turning the question into a sociological (psychological, historical, or biological) one. Let us stick to the philosophical one!" The result is that the issues that philosophers argue about are not really subject to being settled by the discovery of any empirical evidence. The various positions are ones that can be argued for and against without end. Positions in the field are not refuted. They are abandoned when they become professionally unfashionable.

As a result, few persons understand the significance to philosophers of any of the positions taken. The predominant response of an outsider is "Who cares?" A small—typically exceedingly small—minority of persons become philosophy majors who, after some years of graduate study, learn how to argue about a range of philosophical questions and philosophical positions (usually the ones treated as significant in their seminar classes) to the satisfaction of some group of professional philosophers.

The result is that few persons develop the skills of argumentation that would qualify them as plausible contributors to the argumentation in which professional philosophers engage. Few persons see any connection between traditional philosophical argumentation and the conditions of their own lives. Few persons are more reflective about their own lives as a result of taking courses in philosophy. Actually, persons often develop a positive dislike of the subject as a result of their classroom experience and carefully avoid taking additional courses in the subject or doing further reading in it.

Finally, the most ironic fact about the field of philosophy is that it is far from clear that professional philosophers are any more reflective about the manner in which they are living their own lives than are members of any other profession. One of the reasons for this is that, rhetoric to the contrary, philosophers themselves have little or no training in, or professional incentive to engage in, self-reflection. Rather, they are limited by their training to the development and submission of abstract argumentation about abstract issues to professional journals (read then by a small number of professional philosophers). Neither students of, nor professors in, philosophy are expected to come to terms with the concepts, values, or principles implicit in their personal life or behavior. Learning how to think reflectively about one's life seems to be an art rarely focused upon and, therefore, rarely mastered.

Test the Idea

The Ideal and the Real

Conclusion

As critical thinkers, we must be careful not to assume that things are actually the way they are represented in human life. The human mind has a strong predisposition to fallibility and is highly susceptible to vested interest. Human nature and vested interest are to be found at work in all professions and disciplines, and in all domains of human life. To understand a field of knowledge, including professional knowledge, we must understand it realistically. To contribute to it productively, we must view it as an imperfect construction. To use it effectively in our daily life, we must internalize the mode of thinking integral to the profession, and be aware that when we or others think, we do so with fallible human minds operating in a world of power struggles and vested interest.

This is not an argument for cynicism but, rather, for healthy skepticism. This chapter presented one possible set of beginning points from the perspective of which we can begin to appreciate the limitations of human professional knowledge and of the conditions under which human professional knowledge is constructed and applied.

To the extent that we are committed to the development of fair-mindedness, we are committed to professional knowledge being acquired and used to minimize human suffering, to meet basic human needs, to preserve rather than destroy the environment, to contribute to a more just world, and to serve rational rather than irrational ends.

We are historically far from accomplishing the ideal, and far less consideration is being given to narrowing this large gap than is deserved. We need to grant full credit to the powerful modes of thinking implicit in the best practices of professions, but we also must recognize that, for those modes of thinking to flourish, they must develop out of a realistic critique of present practice.

Chapter 15. Strategic Thinking Part One

There are two phases to strategic thinking. The first involves the understanding of an important principle of mental functioning. The second involves using that understanding strategically to produce a mental change in ourselves. In this chapter and the next, we move back and forth between important understandings and strategies based on them. Strategic thinking is the regularization of this practice. From understanding to strategy—and from strategy to self-improvement—is the pattern we are looking for. Using critical thinking strategies systematically to improve our lives is characteristic of the "practicing" thinker.

Understanding and Using Strategic Thinking

If I understand that the mind has three functions—thinking, feeling, and wanting—and that these functions are interdependent—by implication, I realize that any change in one of them is going to produce a parallel shift in the other two. It follows, then, that if I change my thinking, there should be some shift at the level of feeling and desire. For example, if I think you are insulting me, I will feel some resentment and a desire to respond to that insult.

By the same token, if I feel some emotion (say, sadness), my thinking will be influenced. It follows, then, that if I experience an irrational negative emotion or an irrational desire, I should, in principle, be able to identify the irrational thinking that is creating that feeling and desire.

Once I discover irrational thinking, I should be able to modify that thinking by more reasonable thinking. Finding the thinking to be irrational, I should be able to construct a more reasonable substitute. I can then work to replace the irrational with the rational thinking. As the new, reasonable thinking takes root, I should experience some shift in my emotions and desires. More reasonable emotions and desires should emerge from more reasonable thinking.

Now to a specific case. Suppose you are in competition for a promotion with a colleague that you do not like. Suppose also that this colleague is given the promotion and he is now supervising you and criticizing your work. Your interpretation of him and the situation will naturally lead to feelings of resentment on your part and a desire to see your colleague fail. Given your thinking and resultant feelings, it will be very hard for you to be "objective" about events. Part of your negative thinking and feelings may be subconscious and, in any case, you will lack the motivation to be fair.

Much human thinking is subconsciously suppressed. Through active work, however, you can bring it to the surface of your conscious mind. You can do this by first recognizing that underlying every irrational feeling is based in an irrational thought process. By figuring out exactly what feeling you are experiencing, you can begin to trace the feeling to the thinking that is leading to it. Hence, as in the case above, you should be able to spell out the probable unconscious thoughts that are fueling your irrational jealousy of, and anger toward, your colleague.

You will usually find that suppressed thoughts are highly egocentric and infantile. These covert thoughts are what often cause negative emotions. If you can determine the irrational thinking that is driving your emotions and behavior, you have a better chance of changing the emotions and behavior by working on the unreasonable thinking that is causing them.

Whenever you feel your irrational jealousy emerging, you deliberately think through the egocentric logic of jealousy. You do it again and again until you find productive, rational feelings and desires emerging. Since many of the most powerful thoughts, feelings, and desires, though, are unconscious and primitive, we should not expect ourselves to be able to completely displace all irrationality. Yet, by making our irrational thoughts explicit, we can better attack them with reason and good sense. We can be better persons with healthier emotions and desires if we learn how to undermine, and thereby diminish, our irrational emotions and desires.

Now let's look at how we proceeded from understanding to strategy and from strategy to improvement in the example above:

The understanding

Components of Strategic Thinking

Before proceeding to examples of strategic thinking, please note that strategic thinking has two additional components. You will have these to add to your intellectual repertoire as you seek to implement any of the strategies outlined in this chapter:

1.

An identifying component. You must be able to figure out when your thinking is irrational or flawed.

2.

An intellectual action component. You must actively engage and challenge the acts of your own mind.

In the intellectual action component, you must figure out four things:

1.

What is actually going on in the situation as it stands.

2.

Your options for action.

3.

A justifiable rationale for choosing one of the options.

4.

Ways of reasoning with yourself when you are being unreasonable, or ways of reducing the power of your irrational state of mind.

Test the Idea

An Introduction to Strategic Thinking

Identify an area of your personal or professional life in which you use thinking that is possibly irrational. If you are having trouble, think of a situation in which you felt a powerful negative emotion and had difficulty dealing with it. Write out the answers to these questions:

1.

What is actually going on in the situation as it stands? Elaborate on the details.

2.

What are your options for action?

The Beginnings of Strategic Thinking

Let us now consider some basic concepts, principles, and theories of critical thinking, providing examples of strategic thought as implied by those principles. In each case, we will start with a key idea. We then will explore strategies for improving thinking based on that idea. We will begin with a more formal approach to the example given at the beginning of this chapter.

Key Idea #1: Thoughts, Feelings, and Desires are Interdependent

As noted already, it is important to recognize that the mind is composed of three functions: thinking, feeling, and desiring (or wanting). Wherever one of these functions is present, the other two are present as well. And these three functions are continually influencing and being influenced by one another. Our thinking influences our feelings and desires. Our feelings influence our thinking and desires. Our desires influence our thinking and feeling. We cannot immediately change our desires or feelings. It is only thinking that we have direct access to. It makes no sense for someone to order you to feel what you do not feel or to desire what you do not desire. We do not change feelings by substituting other feelings, or desires by substituting other desires. But someone can suggest that we consider a new way to think. We can role-play new thoughts, but not new emotions or desires. It is possible to reason within a point of view with which we do not agree. By rethinking our thinking, we may change our thinking. And when our thinking changes, our feelings and desires will shift in accordance with our thinking.

Strategic Idea

With a basic understanding of the interrelation among thoughts, feelings, and desires, we should be able to routinely notice and evaluate our feelings. If, for example, I experience a degree of anger that I sense may be unreasonable, I should be able to determine whether the anger is or is not rational. I should be able to evaluate the rationality of my anger by evaluating the thinking that gave rise to it. Has someone truly wronged me, or am I misreading the situation? Was this wrong intentional or unintentional? Are there ways to view the situation other than the way I am viewing it? Am I giving a fair hearing to these other ways? By pursuing these questions, I can come closer to a rational view of the situation.

Even if my way of viewing the situation is justified, and I do have good reason to feel some anger, it does not follow that I have acted reasonably, given the full facts of the situation. I may have good reason to feel angry, but not to act irrationally as a result of that anger.

This strategy might be roughly outlined as follows:

1.

Identify a feeling you have experienced that you suspect might be irrational (a feeling such as irritability, resentment, arrogance, or depression).

2.

What thinking would account for the feeling? There may be more than one possibility here. If so, figure out which possibility is most likely.

3.

Determine the extent to which the thinking is reasonable. Pay close attention to the reasons you give to justify the thinking. Is it possible that these are not your actual reasons? Can you think of any other motives you might have? Consider alternative interpretations of the situation.

4.

If you conclude that the feeling is irrational, express precisely why you think so.

5.

Key Idea #2: There is a Logic to This, and You Can Figure It Out

As a critical thinker, you approach every dimension of learning as requiring the construction of a system of meanings in your mind that makes sense and enables you to make logical inferences about the subject of your focus. We use the expression "the logic of " to designate such a system. As a critical thinker, you recognize that there is a logic to academic subjects (a logic to chemistry, physics, mathematics, and sociology). There is also a logic to questions, problems, and issues (a logic to economic questions, social problems, controversial issues, and personal problems). There is a logic to situations. There is a logic to personal behavior. There are explicit and implicit logics, admitted and hidden logics. There is a logic to warfare and a logic to peace, a logic to offense and a logic to defense. There are political logics, social logics, institutional logics, and cultural logics.

There is a logic to the way the human mind works, a logic to power, a logic to domination, to mass persuasion, to propaganda, to manipulation. There is a logic to social conventions and a logic to ethical concepts and principles. There is theo-logic, bio-logic, and psycho-logic. There is even patho-logic (the logic of disease and malfunctioning). Each can be figured out by the disciplined, critical mind.

Using the elements of thought to figure out the basic logic of something is a practice to which we hope you are becoming accustomed. It is a powerful strategy for achieving perspective and gaining leverage or command. In this section, we confine ourselves largely to the logic of personal life.

In every human situation or context, multiple systems of meaning are usually present. As a critical thinker, you engage in a process of figuring out why your associates, friends, clients, children, spouses, and employers relate to you in the way they do. This is true because everyone makes sense of the situations of their own life in some way. To do this, they must, at least implicitly, make use of the eight elements of thought. If you can identify the elements of others' thinking, you can better understand where they are coming from.

You can assume all of the following:

- Everyone you interact with has purposes or objectives they are trying to achieve.
- Everyone has problems that relate to those purposes.
- They are basing their reasoning on some information.
- They come to conclusions based on that information, conclusions that may or may not be logical in the circumstance.
- They take certain things for granted, or make certain assumptions.
-

Key Idea #3: For Thinking to Be of High Quality, We Must Routinely Assess it

Consistently high-quality thinking routinely assesses itself for flaws and then improves itself by replacing low-quality thinking with higher-quality thinking. As rational persons strongly motivated to improve our thinking, we not only think, but we think about our thinking from a critical vantage point. We routinely apply universal intellectual standards to our thought. That is, we continually strive to think in a clear, precise, accurate, relevant, logical, broad, deep, significant, and defensible ways. We learn how to check our thinking regularly using these criteria.

Strategic Idea

As disciplined thinkers, we routinely apply intellectual standards to our thinking so as to assess and improve its quality. Consider the voice of a thinker focused on applying intellectual standards:

- Focusing on clarity in thinking. Am I clear about my thinking? Can I state it precisely? Can I elaborate on it in detail? Can I give an example from my experience? Can I illustrate it with an analogy or a metaphor? What about the thinking being expressed to me? Should I ask for the main point? Do I need an elaboration? Do I need an example? An illustration?
- Focusing on precision in thinking. Am I providing enough details for the other person to fully comprehend my meaning? Do I need more detail and specifics on the thinking of so-and-so?
- Focusing on accuracy in thinking. Am I certain that the information I am using is accurate? If not, how can I check to see whether it is? How can I check on the accuracy of the information in this book?
- Focusing on relevance in thinking. How does my point bear on the issue at hand? Or does it? How does my statement relate to what he just said? How is his question related to the question we are discussing?
- Focusing on logicalness in thinking. Given the information I have gathered, what is the most logical conclusion I can come to in this situation? Or what is one of several logical conclusions? I'm not sure whether what he is saying is logical. What is another feasible conclusion? What is another conclusion that makes more sense? What are the logical consequences that might follow from this decision?
- Focusing on breadth in thinking. I wonder whether I need to consider another viewpoint, or other relevant viewpoints, before coming to a conclusion? In thinking-through the issue at hand, what are the points of view that I am obligated to consider if I am reasoning in a disciplined manner?
- Focusing on depth in thinking. What are the complexities inherent in this issue? Am I inadvertently dealing with a complex issue in a superficial way? How can I dig beneath the surface of the situation and deal with

Chapter 16. Strategic Thinking Part Two

As we learned in the previous chapter, strategic thinking is based on a two-part process that involves understanding a key idea and developing a strategy for action based on that idea.

This chapter is devoted to egocentrism—the most significant barrier to development of critical thinking. [Chapter 15](#) covered the first three key ideas, so we begin with key idea #4.

Key Idea #4: Our Native Egocentrism Is a Default Mechanism

To understand the human mind, we must recognize its essential duality. On the one hand, the human mind has an instinctive tendency toward irrationality. On the other hand, it has a native capacity for rationality. To effectively take command of our mind, we must develop the ability to (1) monitor the mind's tendency toward egocentric or irrational thinking, and (2) attack it with corrective rational thought.

Our irrational mind is not concerned with the rights or needs of others. It has no ethical dimension to it. Our rational mind, properly developed, is both intellectual and ethical. It has intellectual command of itself and ethical sensitivity as well. Intellectual skill and fair-mindedness are joined into one integrated mode of thinking. When our rational mind is underdeveloped or not engaged, however, our native egocentrism functions as a default mechanism. If we don't control it, it controls us!

Strategic Idea

It is possible for us to use our knowledge of egocentric thought to combat it. The more we know about human egocentrism, the more we can recognize it in ourselves, and thus the more we can attack or overrule it. One of the ways to achieve this end is to develop the habit of analyzing the logic of our own thinking. We model the inner voice of the critical thinker using this strategy and the following questions:

1.

We can analyze our goals and purposes. What am I really after in this situation? Are my goals reasonable? Am I acting in good faith? Do I have any hidden agenda?

2.

We can question the way we define problems and issues. Is this a reasonable way to put the question at issue? Am I biasing or loading the question by the way I am putting it? Am I framing the question in a self-serving way? Am I asking a question simply to pursue my selfish interests?

3.

We can assess the information base of our thinking. What information am I basing my thinking on? Is that a legitimate source of information? Is there another source of information I need to consider? Am I considering all the relevant information, or only the relevant information that supports my view? Am I distorting the weight of the information in a self-serving way, blowing some of the information out of proportion while diminishing the value of other relevant information? Am I egocentrically refusing to check on the accuracy of some information because, if I find out it is not accurate, I will be forced to change my view?

4.

We can rethink our conclusion or interpretation. Am I coming to an illogical conclusion because it is in my interest to do so? Am I refusing to look at this situation more logically because I simply don't want to, because if I do, I will have to behave differently?

5.

We can analyze the ideas or concepts we are using in our thinking. How am I using the ideas most basic to my thinking? Am I using words in keeping with educated usage, or am I slanting or misusing some words to serve my vested interest?

Key Idea #5: We Must Become Sensitive to the Egocentrism of Those Around Us

Because human beings are, by nature, egocentric and few are aware of how to exercise control over their egocentric thinking, it is important that we develop the ability to recognize egocentrism in the thinking of those around us. We must recognize, though, that even highly egocentric people sometimes act rationally, so we must be careful not to stereotype. Nevertheless, it is reasonable to expect that everyone will behave irrationally sometimes, so we must learn to evaluate behavior in an open-minded, yet realistic, way. When we understand the logic of egocentrism, when we become adept at identifying its self-serving patterns, we can begin to master it.

We draw a distinction between attacking our own irrationality and attacking that of others. Often with others we must bite our tongue, as it were, and distance ourselves from people who are fundamentally irrational. Or, at least, we must learn to deal with their egocentrism indirectly. Few people will thank us for pointing out egocentrism in their thinking. The more egocentric people are, the more resistant they are to owning it. The more power egocentric people have, the more dangerous they are. As rational persons, then, we learn to better deal with the irrationality of others rather than be controlled or manipulated by it.

When thinking irrationally, people find it difficult to think within the perspective of another. We unconsciously refuse to consider information that contradicts our ego-centered views. We unconsciously pursue purposes and goals that are not justifiable. We use assumptions in our thinking that are based in our own prejudices and biases. Unknowingly, we are systematically engaging in self-deception to avoid recognizing our egocentrism in operation.

Another problem relevant to dealing with the egocentric reactions of others is our own egocentric tendency. When we interact with others who are relating to us egocentrically, our own irrational nature is easily stimulated into action or, to put it more bluntly, "our buttons are easily pushed." When others relate to us in an ego-centered way, violating our rights and or ignoring our legitimate needs, our own native egocentrism will likely assert itself. Ego will meet ego in a struggle for power. When this happens, everyone loses. We therefore must anticipate our own egocentric reactions and come up with the appropriate rational thinking to deal with it.

Strategic Idea

Once we are aware that humans are naturally egocentric, and that most people are unaware of their native egocentrism, we can conclude that, in any given situation, we may well be interacting with the egocentric rather than the rational dimensions of those persons' minds. We therefore can question whether they are presenting rational ideas and pursuing rational purposes, or whether they are operating with irrational motives of which they are unaware. We will not take for granted that others are relating to us in good faith. Rather, we will observe their behavior carefully to determine what their behavior actually implies.

Moreover, because we know that our irrational nature is easily activated by irrationality in others, we can carefully observe and assess our own thinking to ensure that we do not become irrational in dealing with others who are egocentric. We will be on the lookout for our own ego-centered thinking, and when we recognize it, we will take steps to "wrestle it down" and refuse to be drawn into irrational games—whether initiated by others or by our own egocentric tendencies. When we realize we are dealing with an irrational person, we will not let that person's irrationality summon our irrational nature. We will refuse to be controlled by the unreasonable behavior of others.

Strategically, the best thing to do is to avoid contact with highly egocentric people whenever possible. When we find ourselves deeply involved with that sort of person, we should seek a way to disengage ourselves when possible.

When disengagement is not possible, we should minimize contact or act in such a way as to minimize stimulating their

Key Idea #6: The Mind Tends to Generalize Beyond the Original Experience

One of the important truths that Jean Piaget, the noted child psychologist, discovered about children is that they overgeneralize their immediate feelings. If something good happens to them, the whole world looks good to them. If something bad happens to them, the whole world looks bad to them. He called this phenomenon egocentric immediacy. What Piaget did not emphasize, however, is that the same reaction patterns are found in much adult thinking. It is fair to say that everyone has some difficulty putting the ups and downs of daily life into a long-range perspective. It is not easy to keep things in proper perspective, given the strength of our immediate (emotional) reactions.

Once we begin to interpret situations or events in our life as negative, we also tend to generalize that negativity and even, on occasion, to allow it to cast a gloom over our whole life. A broad-based pessimism or a foolish optimism can come to permeate our thinking when negative or positive events happen to us. We move rapidly from thinking of one or two events in our lives as negative (or positive) to thinking of everything in our lives as negative (or positive). Egocentric negative thinking easily leads to indulgent self-pity. And egocentric positive thinking easily leads to an unrealistic state of complacent comfort.

Even a whole nation can be stampeded into an unrealistic state of complacent comfort by the reporting of one positive event. Hence, in England in 1938, after Neville Chamberlain returned to England from Munich holding an agreement with Hitler in his hand, he declared, "Peace in our times!" Most of the people in England rejoiced triumphantly over the success of having obtained Hitler's agreement, without factoring into their thinking Hitler's consistent record of broken promises. The entire nation was transformed into a state of national euphoria brought on by egocentric immediacy.

Rational voices like that of Winston Churchill, expressing skepticism that Hitler would be satisfied with this concession, were thrust aside as alarmist and without foundation. But Churchill had looked at the events at hand using a long-term, realistic perspective.

Consider an everyday problem for many people who tend to see the world in largely negative terms. They wake up in the morning and have to deal with a few unexpected minor problems. As the day progresses, and as they deal with more "problems," everything in their lives appears negative. The snowball of bad things happening gets bigger and bigger as the day passes. By the end of the day, they are unable to see any positive things in their lives. Their thinking (usually tacit of course) is something like this:

Everything looks bad. Life isn't fair. Nothing good ever happens to me. I always have to deal with problems. Why does everything bad happen to me?

Controlled by these thoughts, they lack the ability to counteract unbridled negativity with rational thoughts. They can't see the many good things in their lives. Their egocentric mind is shielding them from the full range of facts that would change their way of thinking so they could see things in a more realistic and, in this case, a more positive light.

Strategic Idea

If we intervene with rational thoughts at the point at which egocentric negativity begins, before it completely pervades the mind's functioning, we have a better chance of reducing or overthrowing it. The first step requires that we become intimately familiar with the phenomenon of egocentric immediacy. Then we should begin to identify instances of it in

Key Idea #7: Egocentric Thinking Appears to the Mind as Rational

One of the primary reasons human beings have difficulty recognizing egocentric thinking is that it appears to the mind as perfectly reasonable. No person says to himself or herself, "I shall think irrationally for a while." When we are most under the sway of irrational states (for example, in a state of irrational rage), we typically feel quite indignant and unfairly put-upon. Egocentric thinking blinds us in a variety of ways. We deceive ourselves.

When we are irrational, we feel rational. Our perceptions seem perfectly justified. And, not recognizing any flaws in our thinking, we see no reason to question those thoughts. We see no reason to behave differently. The result is that there is little or no chance of overriding the dysfunctional behavior that is dominating us. This is especially true when our egocentric thinking is working to get us what we want.

Strategic Idea

Once we recognize that egocentric thinking appears in the human mind as rational thinking, and can exemplify this truth with specific examples from our own life, we are potentially in a position to do something. We can learn to anticipate egocentric self-deception. For one thing, we can educate ourselves about the signs of it. We look for signs of shutting down—not really listening to those who disagree with us, stereotyping those who disagree with us, ignoring relevant evidence, reacting in an emotional manner, and rationalizing our irrational behavior (thinking of justifications for our behavior that have little to do with our actual motivation).

Consider the following examples:

Situation 1

You are driving to work. You fail to notice that the off-ramp of your exit is near. You recognize it at the last moment. You cut off someone to get to the off-ramp. He blows his horn at you and shouts. You shout back. You then are cut off by yet another car in a few minutes, and you blow your horn and shout at him.

During these events you feel an inner sense of "rightness." After all, you had to get to work on time. You didn't mean to cut anyone off, but the other guy clearly had no right to cut you off. We often use this kind of simplistic thinking when we deceive ourselves. We ignore evidence against our view. We highlight evidence for our view. We experience negative emotions accordingly. And we easily feel an acute sense of righteousness about how we think, feel, and act.

Situation 2

You come home after a bad day at work. Your teenage son is playing music loudly and singing in the kitchen. You say, "Could we please have some peace and quiet around here for once!" Your son says, "What's bugging you?" You stomp out of the room, go to your room and slam the door. You stay there for an hour, feeling depressed and angry. You come out and your children and spouse are chatting in the kitchen. They ignore you. You say, "Well, I can see that no one needs me around here!" You walk out, slamming the door.

Sometimes in cases like this we recover from our egocentric immediacy after we cool off. But during the actual events that set us off, we feel righteous in our anger and justified in our depression. We have no trouble thinking of reasons to feed our righteousness or intensify our anger. We can dig up grievances from the past. We can go over them in our mind, blowing them up as much as we care to. We do this with no sense of our own self-deception.

Key Idea #8: The Egocentric Mind Is Automatic in Nature

Egocentric thinking, unlike rational thought, operates in a highly automatic, unconscious, and impulsive manner. Based in primitive, often "childish," thought patterns, it reacts to situations in programmed and mechanistic ways. We must recognize, therefore, that it often will spring into action before we have a chance to sidestep or prevent it. It fights. It flees. It denies. It represses. It rationalizes. It distorts. It negates. It scapegoats. And it does all of these in the blink of an eye with no conscious awareness of its deceptive tricks.

Strategic Idea

Because we know that the irrational mind operates in predictable, preprogrammed, automated ways, we become interested observers of the egocentric mechanisms of our own mind. We begin to observe the mechanistic moves our mind makes. Rather than allowing thoughts to operate strictly at the unconscious level, we can actively strive to raise them to conscious realization, as Piaget put it. We can work to bring them into full consciousness. This typically will be after the fact—especially in the beginning of our development as critical thinkers. After a time, when we become keenly aware of how our personal ego functions, we can often forestall egocentric reactions by the prior activity of rational thought.

For instance, as presented in key idea #7, we can begin to recognize when our mind rationalizes in patterned ways. We also can become familiar with the kinds of rationalization our mind tends to use. For example, "I don't have time to do this!" may be a favorite rationalization. We could limit its use by remembering the insight, "People always have time for the things most important to them." We then are forced to face the truth about what we are doing: "I don't want to make room in my priorities for this," or "Since I continually say this is important to me, I'm only deceiving myself by saying, 'but I don't have time for it.'"

Over time and with practice, we can begin to notice when we are denying some important truth about ourselves. We can begin to see when we are refusing to face some reality rather than dealing with it openly and directly. We can begin to recognize when we are automatically thinking in a dishonest way, in attempting to avoid working on a solution to a problem.

In principle, then, we can study the tricks and stratagems of our mind to determine its automated patterns. Furthermore, and most important, we can learn to intervene to disengage irrational thought processes—if necessary after they have begun to operate. In short, we can refuse to be controlled by primitive desires and modes of thinking. We can actively work to replace automatic egocentric thinking with reflective rational thinking.

Test the Idea

Focusing on Denial as a Mechanism of Irrationality

Although the egocentric dimension of the mind uses many defense mechanisms to maintain its self-centered view, we will single out just one for this activity: denial. Think of a relationship you are in now in which you have a selfish interest in seeing things a certain way though the facts probably don't support your view. Let's say you want to believe that your spouse really loves you, even though his or

Key Idea #9: We Often Pursue Power Through Dominating or Submissive Behavior

When thinking irrationally or egocentrically, the human mind often seeks to achieve its goals by either dominating or submissive behavior. Put another way, when under the sway of egocentrism, we try to get our way either by dominating others or by gaining their support through outward submission to them. Bullying (dominating) and groveling (submitting) are often subtle in nature, but they are nonetheless common in human life.

Power is not bad in itself. We all need some power to rationally fulfill our needs. But in human life it is common for power to be sought as an end in itself, or used for unethical purposes. One of the most common ways for egocentric people and socio-centric groups to gain power is by dominating weaker persons or groups. Another way is by playing a subservient role toward a more powerful other to get what they want. Much of human history could be told in terms of the use of these two egocentric functions of individuals and groups. Much individual behavior can be understood by seeing the presence of these two patterns in the behavior of individuals.

Though everyone tends to use one of these behavior patterns more than the other, everyone uses both of them to some extent. Some children, for example, play a role of subservience toward their parents while abusively bullying other children. Of course, when a bigger and tougher bully comes along, the weaker bully often becomes subservient to the stronger one.

When we are egocentrically dominating or submitting, we do not readily recognize we are doing so. For example, people presumably attend rock concerts to enjoy the music. But members of the audience often act in a highly submissive (adoring, idolizing) way toward the musicians. Many people literally throw themselves at the feet of celebrities or take their own definition of significance from distantly attaching themselves to a celebrity, if only in their imagination. In like manner, sports fans often idolize and idealize their heroes, who appear bigger than life to them. If their team or their hero is successful, they vicariously feel successful and more powerful. "We really whipped them!" translates as, "I am important and successful just as my hero is."

Rational people may admire other people, but do not idolize or idealize them. Rational people may form alliances, but not ones in which they are dominated by others. They expect no one to submit to them blindly. They blindly submit to no one. Although none of us fully embodies this rational ideal, critical thinkers continually work toward it in all their relationships.

By the way, traditional male and female sex-role conditioning entails the man dominating the woman and the woman playing a submissive role toward her man. Women were to gain power by attaching themselves to powerful men. Men displayed power in achieving domination over women. These traditional roles are far from dead in present male/female relationships. For example, in many ways the media still portray men and women in traditional gender roles. Because of these and other societal influences, men tend to be more dominating than submissive. Conversely, women tend to be more submissive, especially in intimate relationships.

Strategic Idea

If we realize the prominent role that egocentric domination and submission play in human life, we can begin to observe our own behavior to determine when we are irrationally dominating or submitting to others. When we understand that the mind naturally uses numerous methods for hiding its egocentrism, we recognize that we must scrutinize our own mental functioning carefully to locate dominating and submissive patterns. With practice, we can begin to identify our own patterns of domination and submission. At the same time, we can observe others' behavior, looking for similar patterns. We can look closely at the behavior of our supervisors, our friends, our spouses, our

Key Idea #10: Humans Are Naturally Sociocentric Animals

Not only are humans naturally egocentric but we are also easily drawn into sociocentric thinking and behavior. Groups offer us security to the extent that we internalize and unthinkingly conform to their rules, imperatives, and taboos. Growing up, we learn to conform to many groups. Peer groups especially tend to dominate our life. Our unconscious acceptance of the values of the group leads to the unconscious standard: "It's true if we believe it." There seems to be no belief so absurd but that some group of humans irrationally accepts it as rational.

Not only do we accept the belief systems of the groups to which we belong, but also most important, we act on those belief systems. For example, many groups are anti-intellectual in nature. Groups may expect its members to adhere to any number of dysfunctional behaviors. For example, some youth groups expect members to abuse outsiders verbally and physically (as proof of power or courage). And some groups who share lunch together during the workweek engage in malicious gossip about others in the same work place.

In addition to face-to-face groups we are in, we are influenced indirectly by large-scale social forces that reflect our membership in society at large. For example, in capitalist societies, the dominant thinking is that people should strive to make as much money as possible, though this form of thinking, it might be argued, encourages people to accept a large gap between the haves and have-nots as right and normal.

Or consider this: Within mass societies the nature and solution to most public issues and problems are presented in sensationalized sound-bites by the news media. As a result, people often come to think about complex problems in terms of simplistic media-fostered solutions. Many people are led to believe that expressions such as "Get tough with criminals!" and "Three strikes and you're out!" represent plausible ways to deal with complex social problems.

What is more, the portrayal of life in Hollywood movies exerts a significant influence on how we conceptualize our problems, our lives, and ourselves. Sociocentric influences are at work at every level of social life in both subtle and blatant ways. There are many socio-centric forces in society.

Strategic Idea

Humans are naturally sociocentric. We must take possession of the idea that, because we are all members of social groups, our behavior reflects the imperatives and taboos of the groups to which we belong. We all, to a greater or lesser degree, uncritically conform to the rules and expectations of the groups of which we are members. When we recognize this, we can begin to analyze and assess that to which we conform. We can actively analyze the rules and taboos of our peer groups and those we are aligned with. We can rationally think through the groups' expectations to determine the extent to which they are reasonable.

When we identify irrational expectations, we can refuse to adhere to those requirements. We can shift our group memberships from those that are flagrantly irrational to those that are more rational. Indeed, we can actively create new groups, groups that emphasize the importance of integrity and fair-mindedness, groups that encourage their members to develop independence of thought and work together in that pursuit.

Test the Idea

Recognizing Problems in Sociocentric

Key Idea #11: Developing Rationality Requires Work

Significant development of one's rational capacities takes many years. The "gotta have it now" attitude prevalent in our culture creates a significant barrier to the development of higher-order human capacity. If we want to reap the benefits of a developed mind, there are no easy shortcuts. If we want to become better at reasoning through the complex issues we inevitably will face, we must be committed to that end. Just as baseball players must practice the moves of baseball again and again to be highly skilled at the game, so must committed thinkers.

Strategic Idea

Because we understand that daily practice is crucial to the development of our rational capacity, we can develop the habit of asking ourselves what we are doing today to further our intellectual growth. We realize that we must make it a habit to identify our selfish interests—and correct for their influence over our thinking. When we discover that our selfish nature is often driving the decisions we are making, we can intervene through good-faith empathy with alternative points of view.

We can develop the habit of assessing the extent to which we use the intellectual standards of clarity, accuracy, logical, significance, breadth, depth, and justifiability to assess and improve our thinking. For example, to develop the habit of checking our thoughts for clarity, we can regularly elaborate, and give examples and illustrations when we are presenting our views to others. We also can regularly ask others to elaborate, illustrate, and exemplify their ideas when they are expressing them to us. We can aim to develop similar habits with respect to using the other standards, and periodically assess ourselves to determine whether and to what extent those habits are developing. We can, and should, practice developing an inner voice that leads to routine questioning of others and ourselves.

Test the Idea

Getting in the Habit of Daily Critical Thinking

During the next seven days, document something you do every day that develops your ability to think well. Complete the following statements for each day:

1.

Today I engaged in the following thinking/behavior that demonstrates my commitment to becoming a critical thinker

2.

Before I started learning about critical thinking, in similar situations I would have behaved in the following way, rather than in the way described in number 1

3.

My new way of thinking/behaving is better because

Conclusion

To develop a disciplined mind—a mind that takes responsibility for the quality of its inner workings and continually seeks to upgrade its abilities—presupposes two overlapping yet distinct principles. First, we must develop a deep understanding of how our mind functions. Concepts, principles, and theories serving this end are the focus of this book. It is not enough to read about these concepts, principles, and theories, though. We must internalize them to the point that we can use them routinely to develop unique strategies for targeting and improving the quality of our thinking. When we haven't internalized them well enough to effectively improve our thinking, they are of little or no use to us.

Authentic strategic thinking is thinking that takes a principle or an idea from the theoretical plane and, following its implications on the practical plane, develops a course of action designed to improve what we think, feel, and act. As you think through your behavior, and the patterns of thought that now rule your life, the important question is: How are you going to take important ideas and work them into your thinking so your behavior and emotional life changes for the better? How will you move from abstract understanding to concrete improvements? Only when you are doing strategic thinking regularly—the strategic thinking outlined in this chapter—can you begin to significantly improve as a thinker.

Glossary: Guide to Critical Thinking Terms and Concepts

accurate:

Free from errors, mistakes, or distortion. Correct connotes little more than absence of error; accurate implies a positive exercise of one to obtain conformity with fact or truth; exact stresses perfect conformity to fact, truth, or some standard; precise suggests minute accuracy of detail. Accuracy is an important goal in critical thinking, though it is almost always a matter of degree. It is also important to recognize that making mistakes is an essential part of learning.

See also [[perfections of thought](#)]

ambiguous:

A sentence, concept, or thought having two or more possible meanings. Sensitivity to ambiguity and vagueness in writing and speech is essential to good thinking. A continual effort to be clear and precise in language usage is fundamental to skilled thinking. Ambiguity is a problem more of sentences than of individual words. Many sentences are clearly intended one way; any other construal is obviously absurd and not meant. For example, the phrase "make me a sandwich" is never seriously intended to request metamorphic change. For an example of a problematic ambiguity, consider the statement, "Welfare is corrupt." Among the possible meanings of this sentence are the following: 1) Those who administer welfare programs take bribes to administer welfare policy unfairly; 2) welfare policies are written in such a way that much of the money goes to people who don't deserve it rather than to those who do; 3) a government that gives money to people who haven't earned it corrupts both the giver and the recipient. If two people are arguing about whether or not welfare is corrupt, but interpret the claim differently, they can make little or no progress; they aren't arguing about the same point. Evidence and considerations relevant to one interpretation may be irrelevant to others. Therefore, before taking a position on an issue or arguing a point, it is essential to be clear about the issue at hand.

See also [[clarify](#)]

analyze:

To break up a whole into its parts, to examine in detail so as to determine the nature of, to look more deeply into, an issue or situation. All learning presupposes some analysis of what we are learning, if only by categorizing or labeling things in one way rather than another.

See also [[elements of thought](#)]

argue:

There are two meanings of this word that need to be distinguished: 1) to engage in a quarrel, bicker; and 2) to persuade by giving reasons. As developing critical thinkers, we strive to move from the first sense of the word to the second; that is, we try to focus on giving reasons to support our views without becoming egocentrically involved in the discussion. This is a fundamental problem in human life. To argue in the critical thinking sense is to use logic and reason, and to bring forth facts to support or refute a point. It is done in a spirit of cooperation and good will.

argument:

A reason or reasons offered for or against something, the offering of such reasons. This term refers to a discussion in which there is disagreement and suggests the use of logic and bringing forth of facts to support or refute a point.

See also [[argue](#)]

to assume:

To take for granted or to presuppose. Critical thinkers can and do make their assumptions explicit, assess them, and

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