The Miniature Guide to Critical Thinking
Concepts and Tools
EIGHTH EDITION
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Introduction

This small but powerful book contains core critical thinking concepts and principles distilled into compact size. These principles are universally applicable to human reasoning in every legitimate academic field, discipline, and profession. They give rise to the skills, abilities, and characteristics of those who think critically; they illuminate innate barriers to criticality.

Throughout human history, the concept of critical thinking has been treated, on the whole, superficially. Within academic disciplines, critical reasoning is still largely misunderstood or ignored. Yet the only way to understand any subject is to reason through problems and issues within that subject using one’s own reasoning. When you develop skill in reasoning your way through questions within an academic discipline and begin formulating questions of your own, you are learning to think like a scholar.

Critical thinkers routinely clarify their purposes and the questions at issue in a given situation or context. They question information, conclusions, and points of view. They strive to be clear, accurate, precise, and relevant. They do not distort information or use false information in arguing for their position. They act in good faith in relation to others and in representing others’ views. They look beneath the surface; they are logical and reasonable. They apply critical reasoning skills to their reading and writing, as well as to their speaking and listening. They apply these skills in history, science, math, philosophy, the arts, and professional and personal life.

Developing as a critical thinker entails explicitly focusing on the naturally occurring processes in your reasoning and learning to intervene in your poor-quality reasoning. It means developing a keen interest in how your mind moves cognitively from one idea to another, in what causes these particular moves to occur rather than others, and in how to intervene in the process when flaws are uncovered in any of your thinking. Put another way, critical thinkers have an abiding interest in the problematic aspects of their own thinking, and they seek out these problem areas, target them, and change something about their thinking in order to reason more rationally, logically, and justifiably. Embracing critical thinking means learning to take command of the thoughts that control you, thereby experiencing a happier, more satisfied inner sense of self.
A Substantive Approach to Critical Thinking

A useful concept of critical thinking includes the disciplined analysis and assessment of reasoning as one cultivates intellectual virtues. This process entails concern for two primary barriers to criticality—egocentric and sociocentric thinking—which are prevalent and widespread in human thought and life.
Critical Thinkers Routinely Apply Intellectual Standards to the Elements of Reasoning

Those who adhere to relevant intellectual standards when reasoning through issues in the essential parts of human life develop intellectual virtues increasingly over time.
The Figuring Mind

There is a logic to figuring something out, to constructing a system of meanings which makes sense of something.

There are intellectual standards critical thinkers use to assess whether the logic in our mind mirrors the logic of the thing to be understood.

### The Elements of Thought Reveal the Logic:

<table>
<thead>
<tr>
<th></th>
<th>The Elements of Thought Reveal the Logic:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>An object to be figured out</td>
</tr>
<tr>
<td></td>
<td>some data or information, some experience of it (the Empirical Dimension)</td>
</tr>
<tr>
<td>2</td>
<td>Some reason for wanting to figure it out</td>
</tr>
<tr>
<td></td>
<td>our Purpose or Goal</td>
</tr>
<tr>
<td>3</td>
<td>Some question or problem we want solved</td>
</tr>
<tr>
<td></td>
<td>our Question at Issue</td>
</tr>
<tr>
<td>4</td>
<td>Some initial sense of the object (whatever we take for granted)</td>
</tr>
<tr>
<td></td>
<td>our Assumptions</td>
</tr>
<tr>
<td>5</td>
<td>Some ideas by which we are making sense of the object</td>
</tr>
<tr>
<td></td>
<td>the Conceptual Dimension</td>
</tr>
<tr>
<td>6</td>
<td>Some drawing of conclusions about the object</td>
</tr>
<tr>
<td></td>
<td>our Inferences or interpretations</td>
</tr>
<tr>
<td>7</td>
<td>What follows from our interpretation of the object</td>
</tr>
<tr>
<td></td>
<td>the Implications and Consequences</td>
</tr>
<tr>
<td>8</td>
<td>Some viewpoint from which we conceptualize the object</td>
</tr>
<tr>
<td></td>
<td>our Point of View or Frame of Reference</td>
</tr>
</tbody>
</table>

Intellectual Standards include:

- Clarity
- Precision
- Relevance
- Accuracy
- Depth
- Breadth
- Logic
- Fairness
- Sufficiency
Criteria for Evaluating Reasoning

1) **Purpose:** What is the purpose of the reasoner? Is the purpose clearly stated or clearly implied? Is it justifiable?

2) **Question:** Is the question at issue well stated? Is it clear and unbiased? Does the expression of the question do justice to the complexity of the matter at issue? Are the question and purpose directly relevant to each other?

3) **Information:** Does the writer cite relevant evidence, experiences, and/or information essential to the issue? Is the information accurate? Does the writer address the complexities of the issue? Does the writer distort any information or use false information to serve a given interest?

4) **Concepts:** Does the writer clarify key concepts when necessary? Are the concepts used justifiably? Is the writer aware of the concepts that s/he is using in reasoning through the issue?

5) **Assumptions:** Does the writer show a sensitivity to what s/he is taking for granted or assuming (insofar as those assumptions might reasonably be questioned)? Does the writer use questionable assumptions without addressing problems that might be inherent in those assumptions?

6) **Inferences:** Does the writer develop a logical line of reasoning, detailing how s/he arrived at the main conclusions?

7) **Point of View:** Does the writer show sensitivity to alternative relevant points of view or lines of reasoning? Does s/he consider and respond to objections framed from other relevant points of view?

8) **Implications:** Does the writer show a sensitivity to the implications and consequences of the position s/he is taking?